



**Commonwealth Edison**  
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January 12, 1988

Mr. A. Bert Davis  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Subject: Response to NRC Bulletin No. 87-02  
Dresden Station Units 2 & 3  
Quad Cities Station Units 1 & 2  
Zion Station Units 1 & 2  
LaSalle County Station Units 1 & 2  
Byron Station Units 1 & 2  
Braidwood Station Units 1 & 2  
NRC Docket No.s 50-237/249, 50-254/265, 50-295/304,  
50-373/374, 50-454/455 and 50-456/457

Reference: NRC Bulletin No. 87-02 dated November 6, 1987

Dear Mr. Davis:

The above referenced NRC Bulletin requested that licensees 1) review their receipt inspection requirements and internal controls for fasteners and 2) independently determine through testing, whether fasteners (studs, bolts, cap screws and nuts) in stores at their facilities meet required mechanical and chemical specification requirements.

Commonwealth Edison has completed its review pursuant to the request outlined in NRC Bulletin 87-02 for Dresden, Quad Cities, Zion, LaSalle, Byron and Braidwood Nuclear Power Stations. The information is attached in Enclosures 1 through 4 respectively.

To the best of my knowledge and belief, the statements contained above are true and correct. In some respect these statements are not based on my personal knowledge, but obtained information furnished by other Commonwealth Edison employees, contractor employees, and consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

Please address any questions that you or your staff may have concerning this response to this office.

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PDR ADOCK 05000237  
Q DCD

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One signed original with enclosures is being sent directly to the U. S. Nuclear Regulatory Commission Document Control Desk in Washington for reproduction and distribution as requested in the bulletin.

Respectfully,

*Wayne E Morgan*

Wayne E. Morgan  
Nuclear Licensing Administrator

cc: U.S. NRC Document Control Desk  
Washington D. C. 20555

Resident Inspector - Dresden  
Resident Inspector - Quad Cities  
Resident Inspector - Zion  
Resident Inspector - LaSalle  
Resident Inspector - Byron  
Resident Inspector - Braidwood

SUBSCRIBED and SWORN to  
before me this 15<sup>th</sup> day  
of January, 1988

*Helia J. Mayo*  
Notary Public

50-237

RESPONSE TO ITEM #1 of NRC  
BULLETIN 87-02

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Docket # 50-237

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**REGULATORY DOCKET FILE**

RECORDS FACILITY BRANCH

ENCLOSURE 1

Response to Item #1 of NRC Bulletin 87-02

Item #1

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

Response

1a. The receipt inspection process is described and controlled by the Commonwealth Edison Company Quality Assurance Program and procedures. Each location has implementing procedures which further describe the receipt inspection process.

When Safety Related, ASME and Regulatory Related material is received, the station stockman gathers all documentation received with the order, adds a copy of the purchase order, and transmits the document package to Quality Control. Quality Control performs a review of all associated documentation assuring that all purchase order requirements has been met. Vendors providing Safety Related fasteners are verified to be listed on Commonwealth Edison's Quality Approved Bidders List. Vendors providing commercial grade fasteners are verified to be listed on Commonwealth Edison's Purchasing Approved Bidders List. Vendor documentation such as certification of conformance, certification of compliance, or CMTR's is verified to be accurate and traceable to Commonwealth Edison's purchase order and item description. It is verified that the vendor certified the items supplied were provided in accordance with the current edition of the Quality Assurance program accepted by Commonwealth Edison. Quality Control's review assures that the documentation complies with technical requirements identified on the purchase order such as applicable codes, specifications and standards (i.e., ASME, ASTM, ANSI, etc.) Quality Control develops a Quality Receipt Inspection Checklist, completes the applicable sections and forwards the package to Quality Assurance for review.

After QA's review and approval, a physical inspection of the items is performed by QC. In part, this inspection consists of checks for the following attributes:

1. Identification - visual examination assuring that identification and markings are in accordance with purchase order requirements (head markings for grade and manufacturers symbol)
2. Protective covers and seals - covers have performed their intended function.
3. Cleanliness
4. Physical damage - items are not cracked, or deformed and the threads are free of detrimental gouges, dents, scratches, or burrs.

5. Dimensional - General visual inspection including random checks of bolt lengthn, thread pitch, diameter etc.
6. Workmanship

If all inspection documentation and physical attributes are found acceptable the items are released to the Stores Supervisor for storage.

Non-Safety Related fasteners do not require formal receipt in inspection by Quality Control. Store Room personnel check these items for damage, conformance to purchase order description, and quantity. If found acceptable, the items are transferred to storage.

1b. When the receipt inspection for Safety Related, ASME Code and Regulatory Related material is completed and acceptable, an identifying 2 part red stock tag is placed on each item or batch/lot of items in the case of fasteners. The tag will list, as applicable, the lot number, heat number, purchase order number, description of material, receipt inspection number, ASME data and quantity issued. For items which have been coded for inventory, the inventory code number will also be listed on the tag. The materials are then placed in stock by the Stores Supervisor. Items with a red stock tag are stored separately from non-safety related items.

Material to be used for Safety Related, code and regulatory work is specified in the work instructions. To withdraw an item from stores, a material request form must be completed identifying the work request number, function or work order, quantity required, description of item, and inventory code number. Safety Related, ASME Code and Regulatory Related items must be issued with the 2 part red stock tag. When the 2 part tag is issued, one part labeled "To Remain on Material" is to be attached to and remains on the items until they are used. The other part labeled "Office Copy" will be plced in the work package for traceability purposes. If all of the items are not used for a specific job, the items are returned to the storeroom along with the part of the tag labeled "To Remain on Material. The returned items are reinspected by QC and if acceptable return to stock controlled by the red stock tag system.

Non-Safety Related fasteners that are to be used in Non-Safety Related applications are issued from stock after completion of the Material Request Form. The fastener can then be installed in the Non-Safety Related application. Fastener inspection for these uses is maintenance mechanic/foreman observation of fastener quality during the installation process. Formal, documented quality inspection is not required. Maintenance may request assistance or inspection from Quality Control for any questionable quality or physical problems noted on these fasteners.

Traceability of Safety Related and commercial grade fasteners is achieved through the work request package, associated tags, and Maintenance History. The use of Non-Safety Related fasteners in Non-Safety Related applications is documented through the work request package and Maintenance History.

ENCLOSURE 2

Response to Item #2, 3 & 4 of NRC Bulletin 87-02

Item #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; A-325 Types 1, 2 or 3; A-354 grades BB, BC, BD; A-490; A-320 LTM; A-307; A-563; or equivalent.

Item #3 For the selected sample of fasteners in item 2, include a sample of typical nuts that would be used with each fastener (one-for one). In particular, nuts purchased to the chemical and mechanical specifications of A-194 are of interest.

Item #4 Chemical testing shall be performed on all samples. Mechanical testing shall be performed on each safety-related fastener. Hardness testing shall be performed on each nut and non-safety-related fastener. All testing shall be performed by a laboratory which 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.



Attachment 1

Fastener Testing Data Sheet

\*Sample ID# DS 1

Fastener Description: 1/4" - 8 stud

Description of Sample Stock Location: 760657

Material Specification as Documented by Licensee Records: A 193 B7

Head Marking (Specification and Manufacturer): N/A

\*\*Class/Procurement Level: SR

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

Vendor: SCI

QA Requirements Imposed on Vendor: P.O. # 501792 DR 12 ( 6/18/84 )  
(CMTR)

Licensee Representative:

Signature

*AS*

Date

1/4/88

\*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# DSZ

Fastener Description: 1/2" - 13 x 1 hex bolt and nut

Description of Sample Stock Location: 760445, 500E56

Material Specification as Documented by Licensee Records: A 307 bolt, A 194 2H nut

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: S.R.

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

Vendor: SCI

QA Requirements Imposed on Vendor:

Bolt P.O 501026 xx 420 (4/10/87)

Nut P.O 501792 DR11

Licensee Representative:

commercial grade - C. of C. <sup>for bolt</sup> upgraded stock  
CMTR for nut

Signature

AK

Date

1/4/88

\*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# DS 3

Fastener Description: 5/8"-18X3 hex bolt and nut

Description of Sample Stock Location: 77BH76, 760G54

Material Specification as Documented by Licensee Records: A 193 B7, A 194 2H

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SR

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

Vendor: SCI

QA Requirements Imposed on Vendor: 501792 DR 11 (3/14/87) Certificate of Conformance  
for the bolt, CUTE for the nut

Licensee Representative:

Signature

RS Ken

Date

1/4/88

\*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# DS 4

Fastener Description: 7/8"-9x7 hex bolt and nut

Description of Sample Stock Location: 761 B 37, 530A10

Material Specification as Documented by Licensee Records: A 325 Ty 1, A 194-2H

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SR

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

Vendor: SCI

QA Requirements Imposed on Vendor: 501879 DR 2 (4/23/84) Certificate of Conformance  
502026 DR 25 (3/16/87) for both bolt and nut

Licensee Representative:

Signature AS

Date 1/4/88

\*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# DS 5

Fastener Description: 5/8" - 18 x 5 hex bolt and nut

Description of Sample Stock Location: 761E36, 760G54

Material Specification as Documented by Licensee Records: A 325 Ty1, A 194 2H

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SR

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

Vendor: SCI

QA Requirements Imposed on Vendor: 501879 DR 2 (4/17/84)

501792 DR 11 (3/14/87)

Cert. of Conformance for bolt, CMT for nut

Licensee Representative:

Signature

AS Green

Date

1/4/88

\*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# DS 6

Fastener Description: 5/8-11 x 8 hex bolt and nut

Description of Sample Stock Location: 762CB4, 766HB2

Material Specification as Documented by Licensee Records: SAE 5, A194 2H

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: S.R.

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

Vendor: SCI  
ITT Hammel-Dahl/Conflow Corp

QA Requirements Imposed on Vendor: 501.879 DR 3 (6/27/84)

300712 (10/11/85)

Certificate of Conformance for both bolt and nut  
Licensee Representative:

Signature RL Gen Date 1/4/88

\*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# DS7

Fastener Description: 7/8" - 9 x 4 1/2 hex bolt and nut

Description of Sample Stock Location: N/C, 530A10

Material Specification as Documented by Licensee Records: A 193-87, A194-2H

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SR

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

Vendor: JOLIET VALVE  
SCF

QA Requirements Imposed on Vendor: 501539 DR 42 (1/12/81)

Cert. of conformance for both bolt and nut.  
502026 DR 25 (3/16/87)

Licensee Representative:

Signature 

Date 1/4/87

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

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

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# DS-8

Fastener Description: 1 3/8" - 8 x 9 1/4 stud and nuts

Description of Sample Stock Location: stud and nuts are N/C

Material Specification as Documented by Licensee Records: A 193-B7, A 194-24

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SR

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

Vendor: Midland Pipe & Supply Co

QA Requirements Imposed on Vendor: PO 726921 (4/13/79)

CMTE for both stud and nuts

Licensee Representative:

Signature

*R. J. Kern*

Date

1/4/88

\*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# DS 9

Fastener Description: 3/8" - 16 x 1 1/2 hex bolt and nut

Description of Sample Stock Location: 504 E93, 508A31

Material Specification as Documented by Licensee Records: SAE S, A 194-2H

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SR

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

Vendor: MANUFACTURERS BOLT & NUT

SCI

QA Requirements Imposed on Vendor: 501 999 8X47 (7/3/85)

bolt non safety related purchase, upgraded to safety; nut cert. of conformance for nut  
Licensee Representative: 502 107 DR 3

Signature

AS Green

Date

1/4/88

\*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# DS 10

Fastener Description: 4" NPS Pipe Clamp bolts (square head)

Description of Sample Stock Location: 507468

Material Specification as Documented by Licensee Records: per mfr catalog

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SR

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

Vendor: JOLIET VALVE

QA Requirements Imposed on Vendor: 501427 DR 03 (6/10/80)  
Cent. of Conformance for all pieces

Licensee Representative:

Signature AS Gen

Date 1/4/88

\*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# *DN 1*

Fastener Description: *1/2" - 13 x 3 hex bolt and nut*

Description of Sample Stock Location: *531519, 533579*

Material Specification as Documented by Licensee Records: *SAE S, A194-2H*

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: *NSR*

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

Vendor: *Not traceable*

QA Requirements Imposed on Vendor: *None*

Licensee Representative:

Signature

*AS Kern*

Date

*1/5/88*

\*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# *DNZ*

Fastener Description: *5/8" - 11 x 1 1/2 hex bolt and nut*

Description of Sample Stock Location: *531533, 533581*

Material Specification as Documented by Licensee Records: *SAE 5, J104*

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: *NSR*

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

Vendor: *Not traceable*

QA Requirements Imposed on Vendor: *None*

Licensee Representative:

Signature *[Signature]* Date *1/5/88*

\*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# *DN3*

Fastener Description: *3/4" - 10 x 4 hex bolt and nut*

Description of Sample Stock Location: *531556, 533476*

Material Specification as Documented by Licensee Records: *SAE 5, J104*

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: *NSR*

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

Vendor: *not traceable*

QA Requirements Imposed on Vendor: *None*

Licensee Representative:

Signature

*RD Yuen*

Date

*1/5/08*

\*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# *DN 4*

Fastener Description: *1" - 8 x 4 hex bolt and nut*

Description of Sample Stock Location: *534884, 533583*

Material Specification as Documented by Licensee Records: *SAE 5, J104*

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: *NSR*

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

Vendor: *not traceable*

QA Requirements Imposed on Vendor: *none*

Licensee Representative:

Signature *AS Guin* Date *1/5/88*

\*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# DN 5

Fastener Description: 1/4"-7x6 1/2 hex bolt and nut

Description of Sample Stock Location: 776349, 776350

Material Specification as Documented by Licensee Records: SAE 5, J104

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: NSR

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

Vendor: not traceable

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature W. G. [Signature] Date 1/5/88

\*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# DN 6

Fastener Description: 1 1/4" - 7 x 2 1/2 hex bolt and nut

Description of Sample Stock Location: 531468, 776350

Material Specification as Documented by Licensee Records: SALE 5, ~~10~~ J.104

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: NSR

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

Vendor: Not traceable

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature

*M. K. [Signature]*

Date

1/5/08

\*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# *DN 7*

Fastener Description: *3/4" - 10x7 std and nut*

Description of Sample Stock Location: *255280, 255281*

Material Specification as Documented by Licensee Records: *A193-B7, A194-2H*

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: *NSR*

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

Vendor: *not traceable*

QA Requirements Imposed on Vendor: *none*

Licensee Representative:

Signature

*[Signature]*

Date

*1/5/88*

\*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# *DNB*

Fastener Description: *1"-8x6 std and nut*

Description of Sample Stock Location: *530270, N/C*

Material Specification as Documented by Licensee Records: *A193-87, A194-24*

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: *NSR*

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

Vendor: *not traceable*

QA Requirements Imposed on Vendor: *none*

Licensee Representative:

Signature *W. G. ...*

Date *1-5-88*

\*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# *DN 9*

Fastener Description: *1 1/4 - 8 x 6 stud and nut*

Description of Sample Stock Location: *538683, 538685*

Material Specification as Documented by Licensee Records: *A193-B7, A194-2H*

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: *NSR*

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

Vendor: *not traceable*

QA Requirements Imposed on Vendor: *None*

Licensee Representative:

Signature *as Ben* Date *1/5/88*

\*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# *DN-10*

Fastener Description: *1 1/4" - 7 x 4 1/2 stud (no nut)*

Description of Sample Stock Location: *N/C*

Material Specification as Documented by Licensee Records: *A 193 - B7*

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level:

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

Vendor: *not traceable*

QA Requirements Imposed on Vendor: *none*

Licensee Representative:

Signature

*[Handwritten Signature]*

Date

*1/5/88*

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-1

Fastener Description: Bolt, Stud SI# 213A78 1<sup>3</sup>/<sub>8</sub>-6x10"  
Heat # 50713

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A193 B7

Head Marking (Specification and Manufacturer): B7 No Manufacturer symbol

\*\*Class/Procurement Level: Safety Related 10 CFR part 21 is applicable

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

Vendor: Acimet MFG  
Cleveland Ohio

QA Requirements Imposed on Vendor: 1. Cert of Conformance to Spec and Grade  
Note: CMTR's were included in documentation

Licensee Representative:

Signature Loren M. Fleming Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-1

Fastener Description: Nut, Hex SI# 213A79 1 $\frac{3}{8}$ -6

Description of Sample Stock Location: GCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A194 2H

Head Marking (Specification and Manufacturer): 2H A

\*\*Class/Procurement Level: Safety Related 10 CFR part 21 is applicable

General Plant Application (e.g., Pressure Boundary, Structural)  
Various Uses per Purchase order

Vendor: Acimet MFG  
Cleveland, Ohio

QA Requirements Imposed on Vendor: Cert of Conformance to Spec and grade

Licensee Representative:

Signature Kevin M Fleming Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-2

Fastener Description: Bolt, Stud SI# 505EB6  $\frac{5}{8}$ -11x5"  
Heat # 7512 B

Description of Sample Stock Location: GCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A 320 L7

Head Marking (Specification and Manufacturer): L7  
C

\*\*Class/Procurement Level: Safety Related 10 CFR part 21 is applicable

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

Vendor: Cardinal Industrial Products Corp  
Las Vegas Nev

QA Requirements Imposed on Vendor: 1. CMTR's 3. Cert of Conformance  
2. Impact test results 4. CELO Approved QA Program

Licensee Representative:

Signature Kevin M Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-2

Fastener Description: Nut, Hvy Hex SI# 505E87  $\frac{5}{8}$ "-11  
Heat # N970E

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

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

Head Marking (Specification and Manufacturer): 4 U

\*\*Class/Procurement Level: Safety Related 10crk part 21 is applicable

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

Vendor: Cardinal Industrial Products Corp  
Las Vegas, Nev

QA Requirements Imposed on Vendor: 1. CMTR's  
2. Impact Test Results  
3. Cert of Conformance  
4. CECO Approved QA program

Licensee Representative:

Signature Kevin M Fleming Date 1-6-88

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

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



Fastener Testing Data Sheet

\*Sample ID# QS-3

Fastener Description: Stud, Anchor SI#504AB5 3/4-10x4"

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A 193 BT

Head Marking (Specification and Manufacturer): BT  
C

\*\*Class/Procurement Level: Safety Related Commercial Grade  
10 CFR part 21 is not applicable

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

Vendor: Cardinal Ind. Prod. Corp.  
Las Vegas, Nev

QA Requirements Imposed on Vendor: 1. CMTR'S  
2. Cert of Conformance

Licensee Representative:

Signature Leven M. Fleming Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-3

Fastener Description: Nut, Hvy Hex SI#500ESB 3/4-10

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A194 2H

Head Marking (Specification and Manufacturer): 2H (←)

\*\*Class/Procurement Level: Safety Related Commercial Grade  
10 CFR part 21 is not applicable

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

Vendor: SCI Corp  
Streator, IL

QA Requirements Imposed on Vendor: Cert of Conformance

Licensee Representative:

Signature

Karen M Fleming

Date

1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-4

Fastener Description: Stud, Disc Plate SI# 508B72  $\frac{3}{4}$  x  $3\frac{1}{4}$ "

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A193 B7

Head Marking (Specification and Manufacturer): B7 S

\*\*Class/Procurement Level: Safety Related 10 CFR part 21 is applicable

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

Vendor: Crane Co.  
Carol Stream, IL

QA Requirements Imposed on Vendor: Cert of Conformance  
Note: Original Equipment Manufacturer

Licensee Representative:

Signature Kevin M. Flooring Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-4

Fastener Description: Nut, Disc Plate SI# 508B73 3/4-10

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A194 2H

Head Marking (Specification and Manufacturer): 2H NH

\*\*Class/Procurement Level: Safety Related Commercial Grade  
10 CFR part 21 is not applicable

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

Vendor: Crane Co  
Carol Stream, IL

QA Requirements Imposed on Vendor: Cert of Conformance

Note: Original Equipment Manufacturer

Licensee Representative:

Signature Kevin M Fleming Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-5

Fastener Description: Screw, Cap SI # 501F33  $\frac{3}{4}$ -10 x 2 $\frac{1}{2}$ "

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A193 B7

Head Marking (Specification and Manufacturer): B7 B7S

\*\*Class/Procurement Level: Safety Related off the shelf 10 CFR part 21  
is not applicable (commercial grade)

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

Vendor: Fabsco Corp  
Calumet Park, IL

QA Requirements Imposed on Vendor: Cert of Conformance to Spec and grade

Licensee Representative:

Signature Kevin M Fleming Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-5

Fastener Description: Nut, Hvy Hex SI\* 500E58 3/4-10

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

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

Head Marking (Specification and Manufacturer): 2H U

\*\*Class/Procurement Level: Safety Related 10 CFR part 21 is applicable

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

Vendor: Fabsco Corp  
Calumet Park, IL

QA Requirements Imposed on Vendor: Cert of Conformance to Spec and Grades

Licensee Representative:

Signature Kevin M. Downing Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-6

Fastener Description: Screw, Cap SI # 504C46 1/2-13 x 2"

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A193 B7

Head Marking (Specification and Manufacturer): B7  
C

\*\*Class/Procurement Level: Safety Related Commercial Grade  
10 CFR part 21 is not applicable

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

Vendor: Cardinal Ind. Prod. Corp.  
Las Vegas, Nev

QA Requirements Imposed on Vendor: Cert of Conformance

Licensee Representative:

Signature Kevin M. Fleming Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-6

Fastener Description: Nut, Hvy Hex SI# 500ESL 1/2-13

Description of Sample Stock Location: GCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A 194 2H

Head Marking (Specification and Manufacturer): 2H T

\*\*Class/Procurement Level: Safety related off the shelf and 10 CFR part 21 is  
not applicable (commercial grade)

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

Vendor: Texas Bolt Company  
Houston, Texas

QA Requirements Imposed on Vendor: 1. Cert of Conformance to spec and grade  
2. Nuts and bolts marked per spec

Licensee Representative:

Signature Kevin W. Fleming Date 1-6-88

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

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



Fastener Testing Data Sheet

\*Sample ID# QS-7

Fastener Description: Screw, Cap SI# 504 F02  $\frac{7}{8}$ -9 x  $3\frac{3}{4}$ "

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A193 B7

Head Marking (Specification and Manufacturer): B7 C F  
S

\*\*Class/Procurement Level: Safety Related off the shelf and 10 CFR part 21  
is not applicable (Commercial grade)

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

Vendor: Standard Equipment and Supply Corp.  
Hammond IN

QA Requirements Imposed on Vendor: Cert of Conformance to Spec and Grade

Licensee Representative:

Signature Kevin M Fleming Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-7

Fastener Description: Nut, Hex SI# 500E59 7/8-9

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A194 2H

Head Marking (Specification and Manufacturer): 2H U

\*\*Class/Procurement Level: Safety Related 10 CFR part 21 is applicable

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

Vendor: Wilkens Pipe and Supply  
Moline, IL

QA Requirements Imposed on Vendor: Cert of Conformance  
Ceco Approved QA program

Licensee Representative:

Signature Levens M Fleming Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-8

Fastener Description: Screw, Cap SI# 504E9B  $\frac{5}{8}$ -11x 2"

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A193 B7

Head Marking (Specification and Manufacturer): B7 TB

\*\*Class/Procurement Level: Safety Related off the shelf and 10 CFR part 21  
is not applicable (commercial grade)

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

Vendor: Texas Bolt Co  
Houston, Texas

QA Requirements Imposed on Vendor: Cert of Conformance to Spec and Grade

Licensee Representative:

Signature Kevin M. Downing Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-8

Fastener Description: Nut, Hex SI # 504B08  $\frac{5}{8}$ -11

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

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

Head Marking (Specification and Manufacturer): 2H C

\*\*Class/Procurement Level: Safety Related 10 CFR part 21 is applicable

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

Replace Stock Pressure Boundary Sect III Class

Vendor: Cardinal Ind. Prod. Corp  
Las Vegas, Nev

QA Requirements Imposed on Vendor: 1. CELO approved QA program

2. Cert of Conformance, per requirements of NCA 3867.4b and NC 2000 of 1983 Edition  
and Summer of 1983 Addenda of the ASME code

3. Vendor's QA program meets requirements of Sect III Div I Subsect. NCA par. 3800 of 1983 Edition  
Licensee Representative: and Summer 1983 Add. of ASME code

Signature

Kevin M. Fleming

Date

1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-9

Fastener Description: Screw, Cap SI# 506A07  $\frac{3}{8}$ -16 x 1 $\frac{1}{4}$ "

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A193 B7

Head Marking (Specification and Manufacturer): B7 MD

\*\*Class/Procurement Level: Safety Related Commercial Grade and  
10 CFR part 21 is not applicable

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

Vendor: Action Threaded Products  
Bridgeview, IL

QA Requirements Imposed on Vendor: Cert of Conformance

Licensee Representative:

Signature Kevin M Fleming Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-9

Fastener Description: Nut, Hex SI# 506A05 3/8-16

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

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

Head Marking (Specification and Manufacturer): 2H T

\*\*Class/Procurement Level: Safety Related Commercial Grade and  
10 CFR part 21 is not applicable

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

Vendor: Action Threaded Products  
Bridgeview, IL

QA Requirements Imposed on Vendor: Cert of Conformance

Licensee Representative:

Signature Kevin M Fleming Date 1-7-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-10

Fastener Description: Screw, Cap SI # 504C55 1/2-13x3"

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A 193 B7

Head Marking (Specification and Manufacturer): B7 TB

\*\*Class/Procurement Level: Safety Related off the shelf and 10 CFR part 21 is  
not applicable (commercial grade)

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

Vendor: Texas Bolt Company

QA Requirements Imposed on Vendor: 1. Cert of Conformance to Spec and grade  
2. Nuts and bolts marked per spec

Licensee Representative:

Signature Karen M Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QS-10

Fastener Description: Nut, Hvy Hex SI#500E56 1/2-13

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Safety Related Area

Material Specification as Documented by Licensee Records: A 194 2H

Head Marking (Specification and Manufacturer): 2H (→)

\*\*Class/Procurement Level: Safety Related off the shelf and 10 CFR part 21  
is not applicable (Commercial grade)

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

Vendor: Standard Equipment and Supply Corp  
Hammond, In

QA Requirements Imposed on Vendor: Cert of Conformance to Spec and grade

Licensee Representative:

Signature Kevin M. Fleming Date 1-7-88

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

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



Fastener Testing Data Sheet

\*Sample ID# QN-1

Fastener Description: Screw, Cap SI\*783867 1/4 x 1"

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): B7 MD

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-1

Fastener Description: Nut, Hex      SI # 462265      4-20

Description of Sample Stock Location: GCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): 2H T

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming      Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-2

Fastener Description: Screw, Cap SI\* None  $\frac{5}{16}$  x 2"

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): B7 BIS

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-2

Fastener Description: Nut, Hex SI #462266 5/16-18

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): 2H F

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-3

Fastener Description: Screw, Cap SI# 807803  $\frac{3}{8} \times 1\frac{1}{2}$ "

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): B7 BIS

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-3

Fastener Description: Nut, Hex SI #462267  $\frac{3}{8}$ -16

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): 2H F

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-4

Fastener Description: Screw, Cap SI# 782631  $\frac{1}{2} \times \frac{1}{2}$ "

Description of Sample Stock Location: GCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): B7 J

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M Fleming Date 1-16-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-4

Fastener Description: Nut, Hex SI #462269 1/2-13

Description of Sample Stock Location: GCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): 2H JS ☆

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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



Fastener Testing Data Sheet

\*Sample ID# QN-5

Fastener Description: Screw, Cap SI\*771280  $\frac{3}{4} \times 3''$

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): B7 J

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Leven M Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-5

Fastener Description: Nut, Hex SI # 462272 3/4-10

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): 2H NH

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-6

Fastener Description: Stud SI# NONE 1/2 x 5"

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): B7 V

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-6

Fastener Description: Nut, Hex SI # 462269 1/2-13

Description of Sample Stock Location: GCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): 2H JS ☆

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-7

Fastener Description: Stud SI # NONE  $\frac{9}{16} \times 4\frac{1}{2}$ "

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): B7 V

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-7

Fastener Description: Nut, Hex SI # 462270 9/16-12

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): 2H JS

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-8

Fastener Description: Stud SI # 538641 3/4 x 5"

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): B7  $\Delta$

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-8

Fastener Description: Nut, Hex SI # 462272 3/4-10

Description of Sample Stock Location: GCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): 2H NH

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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



Fastener Testing Data Sheet

\*Sample ID# QN-9

Fastener Description: Stud SI# None 1x3"

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): B7 V

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-9

Fastener Description: Nut, Hex SI # 462274 1-8

Description of Sample Stock Location: GCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): 2H E

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-10

Fastener Description: Stud SI # NONE 1/4 x 4"

Description of Sample Stock Location: GCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): B7 V

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

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

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

Fastener Testing Data Sheet

\*Sample ID# QN-10

Fastener Description: Nut, Hex SI # 462265 1/4-20

Description of Sample Stock Location: QCNPS Storeroom, Level B  
Non-Safety Related Area

Material Specification as Documented by Licensee Records:  
No Records Available

Head Marking (Specification and Manufacturer): 2H T

\*\*Class/Procurement Level: Non Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

Licensee Representative:

Signature Kevin M. Fleming Date 1-6-88

\*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# ZIN01

Fastener Description: Threaded stud (3/4" dia x 1/2") with 2 grade 2H hex nuts

Description of Sample Stock Location: Zion Station Store Room

Material Specification as Documented by Licensee Records: A-193 B7 stud,  
A-194 2H nuts

Head Marking (Specification and Manufacturer): nuts = NH, 2H, stud: Δ, B7

\*\*Class/Procurement Level: Non-Safety related, no class or  
procurement level.

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

Vendor: SCI, 812 E. Broadway, Streator, IL 61364

QA Requirements Imposed on Vendor: None

Licensee Representative: JEFFREY B. TREDWAY

Signature



Date 12/17/87

\*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# *ZIN02*

Fastener Description: *Threaded Stud (3/4" dia x 1 1/2") with 2 grade 2H hex nuts*

Description of Sample Stock Location: *Zion Station Store Room*

Material Specification as Documented by Licensee Records: *A-193 B7 stud,  
A-194 2H nuts*

Head Marking (Specification and Manufacturer): *nuts: NH, 2H; stud: Δ, B7*

\*\*Class/Procurement Level: *Non-Safety related, no class or procurement level.*

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

*Structural fasteners, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# *ZIN03*

Fastener Description: *Threaded stud (5/8" dia. x 4 1/2") with 2 hex nuts*

Description of Sample Stock Location: *Zion Station Store Room*

Material Specification as Documented by Licensee Records: *A-193 B7 stud,*

Head Marking (Specification and Manufacturer): *nuts: NH, ZH; stud: Δ, B7*

\*\*Class/Procurement Level: *Non-safety related, no class/procurement level.*

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

*Structural fastener; pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date *12/17/87*

\*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# *ZIN 04*

Fastener Description: *Threaded stud (5/8" dia x 4 1/2") with 2 hex nuts*

Description of Sample Stock Location: *Zion Station Store Room*

Material Specification as Documented by Licensee Records: *A193 B7 stud;*

Head Marking (Specification and Manufacturer): *nuts NH, 2H; stud: A, B7*

\*\*Class/Procurement Level: *Non-Safety related, no class/procurement level.*

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

*Structural fastener, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# *ZIN 05*

Fastener Description: *Threaded stud (5/8" dia x 7") , with 2 hex nuts*

Description of Sample Stock Location: *Zion Station Store Room*

Material Specification as Documented by Licensee Records: *A-193 B7 stud,*

Head Marking (Specification and Manufacturer): *nuts: NH, ZH; stud: M, B7*

\*\*Class/Procurement Level: *Non-Safety related, no class/procurement level.*


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

*Structural fasteners, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature 

Date *12/17/87*

\*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# *ZIN 06*

Fastener Description: *Threaded stud (3/4" dia x 6") with 2 hex nuts*

Description of Sample Stock Location: *Zion Station Store Room*

Material Specification as Documented by Licensee Records: *A-193 B7 stud,*

Head Marking -(Specification and Manufacturer): *nuts: NH, ZH; stud: Δ, B7*

\*\*Class/Procurement Level: *Non-Safety related, no class/procurement level.*

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

*Structural fastener, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor:

*None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# *ZIN 07*

Fastener Description: *Threaded stud (1" dia x 7") with 2 hex nuts*

Description of Sample Stock Location: *Zion Station Store Room*

Material Specification as Documented by Licensee Records: *A-193 B7 stud,*

Head Marking (Specification and Manufacturer): *nuts: J, S, ZH; stud: D, B7*

\*\*Class/Procurement Level: *Non-Safety related, no class/procurement level.*

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

*Structural fastener, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# *ZIN 08*

Fastener Description: *Threaded stud (1" dia. x 7") with 2 hex nuts*

Description of Sample Stock Location: *Zion Station Store Room*

Material Specification as Documented by Licensee Records: *A-193 B7 stud,*

Head Marking (Specification and Manufacturer): *nuts: J, S, ZH, stud: D, B7*

\*\*Class/Procurement Level: *Non-Safety related, no class/procurement level.*

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

*Structural fasteners, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# *ZIN 09*

Fastener Description: *Threaded stud (1" dia x 7 1/2") with 2 hex nuts*

Description of Sample Stock Location: *Zion Station Stove Room*

Material Specification as Documented by Licensee Records: *A-193 B7 stud,*

Head Marking (Specification and Manufacturer): *nuts: (1) U, ZH, (1) J, S, ZH; studs: S, B7*

\*\*Class/Procurement Level: *Non-safety related, no procurement/class level.*


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

*Structural fasteners, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature 

Date *12/17/87*

\*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# *ZIN 10*

Fastener Description: *Threaded stud (1" dia x 7/8") with 2 hex nuts*

Description of Sample Stock Location: *Zion Station Store Room*

Material Specification as Documented by Licensee Records: *A-193 B7 stud,*

Head Marking (Specification and Manufacturer): *NUTS: (1) J, S, ZH, (1) A, S, ZH;*  
*stud: S, B7*

\*\*Class/Procurement Level: *Non-Safety related, no class/procurement level.*

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

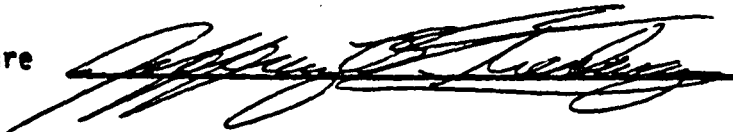
*Structural, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# ZIN 11

Fastener Description: Hex nut, 1/2" dia.

Description of Sample Stock Location: Zion Station Store Room

Material Specification as Documented by Licensee Records: A-194 2H,  
Stainless Steel T-304

Head Marking (Specification and Manufacturer): no markings

\*\*Class/Procurement Level: Non-Safety related, no class/procurement level.

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

Structural, pressure boundary

Vendor: SCI

QA Requirements Imposed on Vendor: None

Licensee Representative: JEFFREY B. TREDWAY

Signature 

Date 12/17/87

\*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# *ZIH12*

Fastener Description: *Hex nut, 1/2" dia.*

Description of Sample Stock Location: *Zion Station Store Room*

Material Specification as Documented by Licensee Records: *A-194 ZH,  
Stainless Steel T-304*

Head Marking (Specification and Manufacturer): *no marking*

\*\*Class/Procurement Level: *Non-Safety related, no class/procurement level.*

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

*Structural, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date *12/17/87*

\*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# *ZIN 13*

Fastener Description: *Hex nut, 1/2" dia.*

Description of Sample Stock Location: *Zion Station Stove Room*

Material Specification as Documented by Licensee Records: *A-194 2H,  
Stainless Steel T-304*

Head Marking (Specification and Manufacturer): *no markings*

\*\*Class/Procurement Level: *Non-Safety related, no class/procurement level.*

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

*Structural, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature  Date *12/17/87*

\*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# *ZIN 1A*

Fastener Description: *Hex nut, 1 1/8" dia.*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *A-194 ZH*

Head Marking (Specification and Manufacturer): *NH, ZH*


\*\*Class/Procurement Level: *Non-Safety related, no class/procurement level.*

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

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature  Date *12/17/87*

\*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# *ZIN15*

Fastener Description: *Hex nut, 1 1/8" dia.*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *A-194 ZH*

Head Marking (Specification and Manufacturer): *NH, ZH*


\*\*Class/Procurement Level: *Non-safety related, no class/procurement level.*

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

Vendor: *SCI*

QA Requirements Imposed on Vendor: *None*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature  Date *12/17/87*

\*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# *ZIN16*

Fastener Description: *Hex nut, 1 1/8" dia.*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *A-194 ZH*

Head Marking (Specification and Manufacturer): *NH, ZH*

\*\*Class/Procurement Level: *Non-Safety related, no class/procurement level.*

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

Vendor: *SCI*

QA Requirements Imposed on Vendor:  
*None*

Licensee Representative: *JERREY B. TREDWAY*

Signature *[Handwritten Signature]* Date *12/17/87*

\*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# ZIN 17

Fastener Description: stud, 1 3/4" dia. x 20"

Description of Sample Stock Location: Zion Station Warehouse

Material Specification as Documented by Licensee Records: A-193 B7

Head Marking (Specification and Manufacturer): none

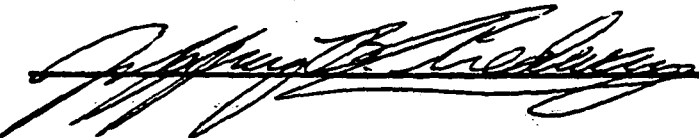
6. \*\*Class/Procurement Level: Safety related,  
ZAP 13-52-1 provides storage levels based on environmental  
General Plant Application (e.g., Pressure Boundary, Structural)  
Diesel head pressure boundary

Vendor: SCI

QA Requirements Imposed on Vendor: commercial grade, certificate  
of conformance

Licensee Representative: JEFFREY B. TREDWAY

Signature



Date

12/17/87

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

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

6. (cont'd)  
conditions and special protection measures,  
Level B

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# *ZIN 18*

Fastener Description: *Stud, 1 3/4" dia. x 20"*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *A-193 B7*

Head Marking (Specification and Manufacturer): *none*

\*\*Class/Procurement Level: *Safety related, ZAP 13-52-1 provides storage levels based on environmental conditions and special protection measures, Level B*  
General Plant Application (e.g., Pressure Boundary, Structural)  
*Diesel head pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *Commercial grade, certificate of conformance*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# *ZIN 19*

Fastener Description: *Stud, 1 3/4" dia. x 20"*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *A-193 B7*

Head Marking (Specification and Manufacturer): *NONE*

\*\*Class/Procurement Level: *Safety related, ZAP 13-52-1 provides storage levels based on environmental conditions and special protection measures, Level B.*  
General Plant Application (e.g., Pressure Boundary, Structural)

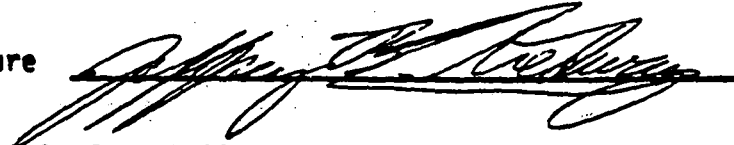
*Diesel head pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *commercial grade, certificate of conformance*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# ZIN20

Fastener Description: Threaded stud, 3/4" dia x 5", no nuts

Description of Sample Stock Location: Zion Station Warehouse

Material Specification as Documented by Licensee Records: A-193 B7,  
AISI 4140 carbon

Head Marking (Specification and Manufacturer): stud: Δ, B7; nuts: n/a

\*\*Class/Procurement Level: Safety related, ZAP 13-52-1 provides storage levels based on environmental conditions and special protection measures, Level B

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

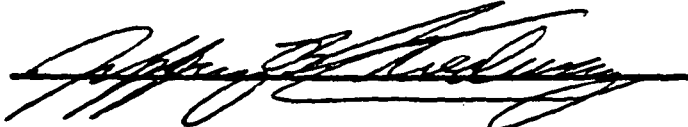
Structural, pressure boundary

Vendor: SCI

QA Requirements Imposed on Vendor: commercial grade, certificate of conformance

Licensee Representative: JEFFREY B. TREDWAY

Signature



Date 12/17/87

\*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# ZIN21

Fastener Description: Threaded stud with 2 hex nuts,  
(stud - 1" x 6", 1" is dia.)

Description of Sample Stock Location: \$<sup>12/17/07</sup> Zion Station Warehouse

Material Specification as Documented by Licensee Records: A-193 BT stud,  
A-194 ZH nuts

Head Marking (Specification and Manufacturer): <sup>12/17/07</sup> nuts: (1) (S), ZH, (1) U, ZH, stud:  
S, BT

\*\*Class/Procurement Level: Safety related ZAP 13-52-1 provides  
storage levels based on environmental conditions and special  
protection measures, Level B.

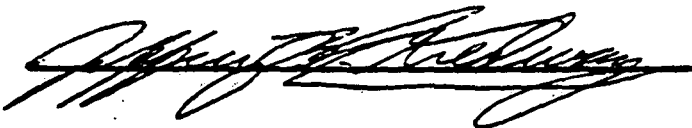
General Plant Application (e.g., Pressure Boundary, Structural)

Structural, pressure boundary

Vendor: SCI

QA Requirements Imposed on Vendor: commercial grade, certificate  
of conformance

Licensee Representative: JEFFREY B. TREDWAY

Signature 

Date 12/17/07

\*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# ZIN 22

Fastener Description: (3/4" x 7") Threaded stud, 2 hex nuts

Description of Sample Stock Location: Zion Station Warehouse

Material Specification as Documented by Licensee Records: A193 B7 stud,  
A-194 2H nuts

Head Marking (Specification and Manufacturer): stud: M, B7; nuts: NH, 2H

\*\*Class/Procurement Level: Safety related, ZAP 13-52-1 provides  
storage levels based on environmental conditions and  
special protection measures, LEVEL B  
General Plant Application (e.g., Pressure Boundary, Structural)

Structural, pressure boundary

Vendor: SCI

QA Requirements Imposed on Vendor: commercial grade,  
certificate of conformance

Licensee Representative: JEFFREY B. TREDWAY

Signature



Date

12/17/87

\*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# ZIN 23

Fastener Description: 1/4" dia. x 8 1/2" stud, 2 hex nuts

Description of Sample Stock Location: Zion Station Warehouse

Material Specification as Documented by Licensee Records: A193 B7, A194 ZH

Head Marking (Specification and Manufacturer): stud: lead: VB7, lend: V4,  
nuts: Z, H, T

\*\*Class/Procurement Level: Safety-related, ZAP 13-52-1 provides storage levels based on environmental conditions and special protection measures, Level B  
General Plant Application (e.g., Pressure Boundary, Structural)  
Structural, Pressure Boundary

Vendor: SCI

QA Requirements Imposed on Vendor: commercial grade; certificate of conformance

Licensee Representative: JEFFREY B. TRETWAY

Signature



Date

12/17/87

\*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# ZIN24

Fastener Description: Cap Screw (1" dia x 2 1/2")

Description of Sample Stock Location: Zion Station Warehouse

Material Specification as Documented by Licensee Records: SAE J429 gr.5

Head Marking (Specification and Manufacturer): 1  
151

\*\*Class/Procurement Level: Safety-related, ZAP 13-52-1 provides storage levels based on environmental conditions and special protection measures, Level B  
General Plant Application (e.g., Pressure Boundary, Structural)  
Structural

Vendor: Action Threaded Products

QA Requirements Imposed on Vendor: commercial grade, certificate of conformance

Licensee Representative: JEFFREY B. TREDWAY

Signature  Date 12/17/87

\*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# *ZIN 25*

Fastener Description: *Cap Screw, (1" x 2 1/2")*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *SAE J429 grade 5*

Head Marking (Specification and Manufacturer): *15*


\*\*Class/Procurement Level: *Safety related, ZAP 13-52-1 provides storage levels based on environmental conditions and special protection measures, Level B.*  
General Plant Application (e.g., Pressure Boundary, Structural)

*Structural*

Vendor: *Action Threaded Products, Inc., 7440 W. 100TH Place, Bridgeview, IL 60455*

QA Requirements Imposed on Vendor: *commercial grade, certificate of conformance*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature 

Date *12/17/87*

\*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# ZIN26

Fastener Description: CAP SCREW, (1" x 2 1/2")

Description of Sample Stock Location: Zion Station Warehouse

Material Specification as Documented by Licensee Records: SAE J429 grade 5

Head Marking (Specification and Manufacturer): 15


\*\*Class/Procurement Level: Safety related, ZAP 13-54-1 provides storage levels based on environmental conditions and special protection measures, Level B.  
General Plant Application (e.g., Pressure Boundary, Structural)

Structural

Vendor: Action Threaded Products, Inc. (Ref. ZIN25 for address)

QA Requirements Imposed on Vendor: commercial grade, certificate of conformance

Licensee Representative: JEFFREY B. TREDWAY

Signature 

Date 12/17/87

\*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# *ZIN27*

Fastener Description: *Hex nut, 3/4" dia.*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *A-194ZH*

Head Marking (Specification and Manufacturer): *Z,H,X*

\*\*Class/Procurement Level: *Safety related, ZAP 13-52-1 provides storage levels based on environmental conditions and special protection measures, Level B*

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

*Structural, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *commercial grade, certificate of conformance*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature:  Date *12/17/87*

\*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# *ZIN28*

Fastener Description: *Hex nut, 7/8" dia.*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *A-19A ZH*

Head Marking (Specification and Manufacturer): *Z, H, M*

\*\*Class/Procurement Level: *Safety-related ZAP 13-52-1 provides storage levels based on environmental conditions and special protection measures, Level B*

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

*Structural, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *commercial grade, certificate of conformance*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



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# *ZIN29*

Fastener Description: *Hex Nut, 1" dia.*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *A-194 ZH*

Head Marking (Specification and Manufacturer): *(H), ZH*

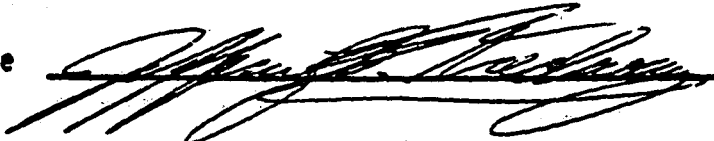
\*\*Class/Procurement Level: *Safety related, ZAP-13-52-1, provides storage levels based on environmental conditions and special protection measures, Level B*  
General Plant Application (e.g., Pressure Boundary, Structural)

Vendor: *SCI*  
*Structural, pressure boundary*

QA Requirements Imposed on Vendor: *commercial grade, certificate of conformance*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# *ZIN30*

Fastener Description: *Hex nut, 1 1/2" dia.*

Description of Sample Stock Location: *Zion Station Warehouse*

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

Head Marking (Specification and Manufacturer): *J, S, 2H*

\*\*Class/Procurement Level: *Safety-related, Level B, ZAP 13-52-1*  
*provides storage levels based on environmental conditions and special protection measures, Level B*  
General Plant Application (e.g., Pressure boundary, Structural)  
*Structural, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *commercial grade, certificate of conformance*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# *ZIN31*

Fastener Description: *Hex Nut, 2" dia.*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *A-194 2H*

Head Marking (Specification and Manufacturer): *A, 2H*

\*\*Class/Procurement Level: *Safety related, ZAP 13-52-1 provides storage levels based on environmental conditions and special protection measures, Level B.*

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

*Structural, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *commercial grade certificate of conformance*

Licensee Representative: *JEFFREY B. TREDWAY*

Signature



Date

*12/17/87*

\*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# *ZIN32*

Fastener Description: *Hex nut, 1 1/8" dia*

Description of Sample Stock Location: *Zion Station Warehouse*

Material Specification as Documented by Licensee Records: *A-194 ZH*

Head Marking (Specification and Manufacturer): *NH, ZH*

\*\*Class/Procurement Level: *Safety related, ZAP 13-52-1 provides storage levels based on environmental conditions and special protection measures, Level B*

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

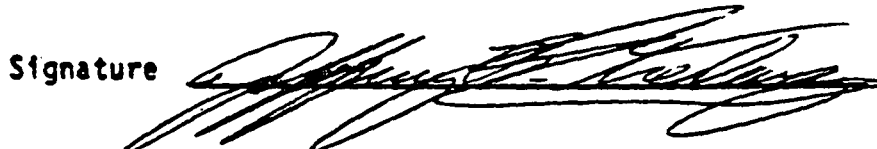
*Structural, pressure boundary*

Vendor: *SCI*

QA Requirements Imposed on Vendor: *commercial grade, certificate of conformance*

Licensee Representative: *JEFFREY B. TRETWAY*

Signature



Date

*12/17/87*

\*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# L-1

Fastener Description: BOLT, Heavy Hex, 3/4 - 10 in. UNC-2A x 4 1/2 in. Length

Description of Sample Stock Location: QA Storage Area of the storeroom

Material Specification as Documented by Licensee Records: SA-193, B-7, ASME Sec III, NE, CLASS MC

Head Marking (Specification and Manufacturer): (N)

\*\*Class/Procurement Level: Safety AND ASME Related AND 10 CFR Part 21 is applicable

General P...ication (e.g., Pressure Boundary, Structural) Pressure Boundary.

Vendor: Energy Steel & Supply

QA Requirements Imposed on Vendor: 10 CFR Part 21 is applicable

Licensee Representative: Robert M. Clark

Signature. Robert M. Clark Date 1/11/89

\*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# L-2

Fastener Description: Screw, CAP; Hex Head, 5/8-11, X 6-3/4" Long

Description of Sample Stock Location: QA Storage Area of the storeroom.

Material Specification as Documented by Licensee Records: ASTM - A325

Head Marking (Specification and Manufacturer): V

\*\*Class/Procurement Level: Safety Related Commercial Grade

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

Vendor: Victor Products

QA Requirements Imposed on Vendor: Commercial Grade

Licensee Representative: Robert M. Clark

Signature Robert M. Clark Date 1/14/88

\*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# L-3

Fastener Description: Bolt, Hex Head ; 5/8" - 11 NC x 6 in.

Description of Sample Stock Location: QA Storage Area of the storeroom.

Material Specification as Documented by Licensee Records: ASTM-A307 with zinc coating  
ASTM-1-164.

Head Marking (Specification and Manufacturer): 'DT'

\*\*Class/Procurement Level: Safety Related, Commercial Grade

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

Vendor: SCI

QA Requirements Imposed on Vendor: Commercial Grade

Licensee Representative: Robert M. Clark

Signature: Robert M. Clark

Date: 1/14/00

\*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# L-4

Fastener Description: Screw, Cap; Hex Head, Heavy, 1"-8 UNC x 4" Long, 2 1/2" th  
Low

Description of Sample Stock Location: QA Storage Area of the Stoveroom

Material Specification as Documented by Licensee Records: ASTM A-143, B7, ASME  
Sec. III CL.2

Head Marking (Specification and Manufacturer): AQ

\*\*Class/Procurement Level: Safety AND ASME Related, 10 CFR Part 21 is applicable.

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

Vendor: Cardinal Industrial Products

QA Requirements Imposed on Vendor: 10 CFR Part 21 is applicable

Licensee Representative: Robert M. Clark

Signature: Robert M. Clark Date: 1/11/88

\*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# L-5

Fastener Description: Stud; 1 1/4" - 7UNC x 7" Long

Description of Sample Stock Location: QA Storage Area of the Storeroom

Material Specification as Documented by Licensee Records: ASME SA-449, ASME Sec III, Div 1  
Class 2, NC-2000

Head Marking (Specification and Manufacturer): V

\*\*Class/Procurement Level: Safety AND ASME Related AND 10 CFR Part 21 is applicable

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

Vendor: Rockwell International

QA Requirements Imposed on Vendor: 10 CFR Part 21 is applicable

Licensee Representative: Robert M. Clark

Signature: Robert M. Clark Date: 1/11/88

\*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# L-6

Fastener Description: Screw; Cap, Hex Head, 5/8" - 11 X 3" Long.

Description of Sample Stock Location: QA Area of the storeroom

Material Specification as Documented by Licensee Records: ASTM-A325

Head Marking (Specification and Manufacturer): V

\*\*Class/Procurement Level: Safety Related, Commercial Grade.

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

Vendor: Victor Products

QA Requirements Imposed on Vendor: Commercial Grade

Licensee Representative: Robert M. Clark

Signature: Robert M. Clark

Date: 4/11/88

\*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# L-7

Fastener Description: Stud, Valve; Bonnet, C.S. 1"-8UNC-3AX 6 1/2" LONG

Description of Sample Stock Location: QA Storage Location of the Storeroom

Material Specification as Documented by Licensee Records: ASTM-A193 Gr B7, ASME Sec III, CL1

Head Marking (Specification and Manufacturer): V

\*\*Class/Procurement Level: Safety AND ASME Related AND 10 CFR Part 21 is Applicable

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

Vendor: Crosby Valve Div.

QA Requirements Imposed on Vendor: 10 CFR Part 21 is Applicable

Licensee Representative: Robert M. Clark

Signature: Robert Clark Date: 1/11/88

\*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# L-8

Fastener Description: Screw, Cap; Hex Head  $3/8$ "-16 x  $1 3/8$ " Long

Description of Sample Stock Location: QA Storage Area of the Storeroom

Material Specification as Documented by Licensee Records: ASME SA-193 Sec III Div. 1, N  
Class 2

Head Marking (Specification and Manufacturer): C

\*\*Class/Procurement Level: Safety AND ASME Related AND 10 CFR Part 21 is applicable

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

Vendor: Cardinal Industrial Products, Corp.

QA Requirements Imposed on Vendor: 10 CFR Part 21 is applicable

Licensee Representative: Robert M. Clark

Signature: Robert M. Clark

Date: 1/11/88

\*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# L-9

Fastener Description: Screw, Cap; Heavy Hex Head, 3/4" - 10 x 3", 13/16" thread length

Description of Sample Stock Location: QA Storage Area of the storeroom

Material Specification as Documented by Licensee Records: ASTM A-325 Type 1

Head Marking (Specification and Manufacturer): 'PF'

\*\*Class/Procurement Level: Safety Related, Commercial Grade

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

Vendor: Victor Products, SCI

QA Requirements Imposed on Vendor: Commercial Grade

Licensee Representative: Robert M. Clark

Signature: Robert M. Clark Date: 1/11/20

\*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# L-10

Fastener Description: Screw, CAPi Socket Head, 1/4"-20 x 7/8" Long

Description of Sample Stock Location: QA Storage Area of the Storeroom

Material Specification as Documented by Licensee Records: ASTM A574 Grade 5-8

Head Marking (Specification and Manufacturer): No Marks

\*\*Class/Procurement Level: Safety Related, Commercial Grade

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

Vendor: SCI

QA Requirements Imposed on Vendor: Commercial Grade

Licensee Representative: Robert M Clark

Signature: Robert M Clark Date: 1/11/88

\*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# L-11

Fastener Description: Stud;  $5/8"$  - 11 x  $2\ 3/4'$  Long

Description of Sample Stock Location: QA Storage Area of the storeroom

Material Specification as Documented by Licensee Records: ASME SA-449 Sec III, Div. 1, CL 2,  
NC-2000

Head Marking (Specification and Manufacturer):  $\infty$  or B

\*\*Class/Procurement Level: Safety and ASME related and 10 CFR Part 21 is applicable

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

Vendor: Rockwell International

QA Requirements Imposed on Vendor: 10 CFR Part 21 is applicable

Licensee Representative: Robert M. Clark

Signature Robert M. Clark Date 1/11/88

\*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# L-12

Fastener Description: Screw, Cap, Hex Head, 1"-14 X 4"

Description of Sample Stock Location: General Storeroom

Material Specification as Documented by Licensee Records: Grade 8

Head Marking (Specification and Manufacturer): L 8 \*

\*\*Class/Procurement Level: Stock Material

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

Vendor: Panbor Ind Supply

QA Requirements Imposed on Vendor: NONE

Licensee Representative: Robert M Clark

Signature: Robert M Clark

Date: 1/11/00

\*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# L-13

Fastener Description: Screw, Cap; Hex Head, 5/8"-11 x 2" Long

Description of Sample Stock Location: General Storage room

Material Specification as Documented by Licensee Records: Grade 8

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: Stock Material

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

Vendor: SCI, American Fastener, FASCO, PANSOR, Manufacturers Nut & Bolt

QA Requirements Imposed on Vendor: NONE

Licensee Representative: Robert M Clark

Signature: Robert M Clark

Date: 1/11/08

\*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# L-14

Fastener Description: Screw, Cap ; Hex Head 7/8" - 9 x 6" Long

Description of Sample Stock Location: General Storeroom

Material Specification as Documented by Licensee Records: Grade 8

Head Marking (Specification and Manufacturer): 88, ∞

\*\*Class/Procurement Level: Stock Material

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

Vendor: Manufacturers Bolt and Nut, PANBOR Ind. Supply

QA Requirements Imposed on Vendor: NONE

Licensee Representative: Robert M. Clark

Signature: Robert M. Clark

Date: 1/11/88

\*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# L-15

Fastener Description: Cap, Hex Head, Screw 3/8" - 10 x 1/2"

Description of Sample Stock Location: General storeroom

Material Specification as Documented by Licensee Records: Grade 8

Head Marking (Specification and Manufacturer): \* LE

\*\*Class/Procurement Level: Stock Material

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

Vendor: NO VENDOR WAS FOUND

QA Requirements Imposed on Vendor: NONE

Licensee Representative: Robert M. Clark

Signature. Robert M. Clark

Date 1/11/08

\*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# L-16

Fastener Description: Screw, Cap; Hex Head 7/8" - 9 x 2" Long

Description of Sample Stock Location: General Storeroom

Material Specification as Documented by Licensee Records: Grade 8

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: Stock Material

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

Vendor: American Fastener, Manufacturers Bolt & Nut, PANBOR INC. Supply

QA Requirements Imposed on Vendor: NONE

Licensee Representative: Robert M. Clark

Signature. Robert M. Clark

Date 1/11/88

\*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# L-17

Fastener Description: L-17 SCREW; CAP; Hex Head  $\frac{3}{8}$ " - 16 x  $1\frac{1}{2}$ "

Description of Sample Stock Location: General Storeroom

Material Specification as Documented by Licensee Records: Grade B

Head Marking (Specification and Manufacturer):  $\frac{1}{2}$  KS

\*\*Class/Procurement Level: Stock Material

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

Vendor: American Fastener Corp, SCI, Manufacturers Bolt & Nut.

QA Requirements Imposed on Vendor: NONE

Licensee Representative: Robert M Clark

Signature: Robert M Clark Date: 1/11/88

\*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# L-18

Fastener Description: L-18 Screw, Cap; Hex Head 1" - 8 x 2"

Description of Sample Stock Location: General Stoveroom

Material Specification as Documented by Licensee Records: Grade B

Head Marking (Specification and Manufacturer): "NF"

\*\*Class/Procurement Level: Stock Material

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

Vendor: Manufacturers Bolt and Nut, Hazerty Bros, PanBOR Ind. Supply

QA Requirements Imposed on Vendor: NONE

Licensee Representative: Robert M Clark

Signature: Robert M Clark Date: 1/11/88

\*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# L-19

Fastener Description: Screw, Cap; Hex Head, 1/2-13 x 4 1/2"

Description of Sample Stock Location: General Storeroom

Material Specification as Documented by Licensee Records: Grade 8

Head Marking (Specification and Manufacturer):  NF

\*\*Class/Procurement Level: Stock Material

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

Vendor: American Fasteners, Manufacturers Bolt & Nut, Pandor, Faeco

QA Requirements Imposed on Vendor: NONE

Licensee Representative: Robert M Clark

Signature: Robert M Clark

Date: 1/11/88

\*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# L-20

Fastener Description: Screw, Cap; Hex Head, 1" - 8 x 3" Long

Description of Sample Stock Location: General Stoveroom

Material Specification as Documented by Licensee Records: GRADE 8

Head Marking (Specification and Manufacturer): \* LE

\*\*Class/Procurement Level: Stock Material

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

Vendor: FASCO, PANBOR, Manufacturers Bolt & Nut

QA Requirements Imposed on Vendor: NONE

Licensee Representative: Robert M Clark

Signature: Robert M Clark Date: 1/11/88

\*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# L-21

Fastener Description: Bolt, Stud; 7/8" - 9 X 6"

Description of Sample Stock Location: General Storeroom

Material Specification as Documented by Licensee Records: A193-B7

Head Marking (Specification and Manufacturer): S B7

\*\*Class/Procurement Level: Stock Material

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

Vendor: SCI Corp.

QA Requirements Imposed on Vendor: NONE

Licensee Representative: Robert M Clark

Signature: Robert M Clark Date: 1/1/88

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

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

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

Non-Safety Related  
Fastener Testing Data Sheet Summary

<u>SAMPLE ID #</u>	<u>SI NO.</u>	<u>P.O. NO.</u>
BY - 1	103660	427003
BY - 2	103665	427003
BY - 3	<sup>30 PP. 1/1/88</sup> <del>503942</del>	Unknown
BY - 4	458361	Unknown
BY - 5	532575	Unknown
BY - 6	458364	Unknown
BY - 7	462227	Unknown
BY - 8	458368	Unknown
BY - 9	531416	Unknown
BY - 10	454746	Unknown
BY - 11	532541	Unknown
BY - 12	454744	Unknown
BY - 13	532557	Unknown
BY - 14	458365	Unknown
BY - 15	766B19	300099
BY - 16	766F18	300099
BY - 17	<sup>94 PP. 1/1/88</sup> <del>749186</del>	281654
BY - 18	770A87	420594
BY - 19	150342	Unknown
BY - 20	535882	281654

Sample Taken By: Paul J. O'Hall Date 12/23/87  
Quality Control Supervisor

Verified By: Nanette Gelles Date 12/23/87  
NRC Inspector

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 1

Fastener Description: Hex Head Bolt, 7/8" - 10 X 4 3/4"

Description of Sample Stock Location: SI NO. 103660

Material Specification as Documented by Licensee Records:  
ASTM A-325

Head Marking (Specification and Manufacturer):

Specification: A 325

Manufacturer: UNY

Class/Procurement Level: Non-Safety Related  
P.O. No. 427003

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

Vendor: Rockford Fastener

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 2

Fastener Description: Hex Nut . 7/8" - 10

Description of Sample Stock Location: SI NO. 103665

Material Specification as Documented by Licensee Records:  
ASTM A-325

Head Marking (Specification and Manufacturer):

Specification: None

Manufacturer: U

Class/Procurement Level: Non-Safety Related  
P.O. No. 427003

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

Vendor: Rockford Fastener

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul O'Neill Date 1/10/1988  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 3

Fastener Description: Cap Screw, 5/16" - 18 X 3 1/2"

Description of Sample Stock Location: SI NO. 530942

Material Specification as Documented by Licensee Records:  
Grade 5

Head Marking (Specification and Manufacturer):

Specification: Gr. 5

Manufacturer: KS

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature

*Paul J. O'Neill*

Date 01/04/88

Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 4

Fastener Description: Hex Nut. 5/16" - 18

Description of Sample Stock Location: SI NO. 458361

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 5

Manufacturer: None

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 5


Fastener Description: Cap Screw. 1/2" -13 X 5"

Description of Sample Stock Location: SI NO. 532573

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 8

Manufacturer: 

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 6

Fastener Description: Hex Nut. 1/2" -13

Description of Sample Stock Location: SI NO. 458364

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 5

Manufacturer: None

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul H. O'Neill Date 01/04/88  
Quality Control Supervisor



COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 7

Fastener Description: Cap Screw 3/8" - 24 X 2"

Description of Sample Stock Location: SI NO. 462227

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 8

Manufacturer: LE

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/01/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 8

Fastener Description: Hex Nut, 3/8" - 24

Description of Sample Stock Location: SI NO. 458368

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 5

Manufacturer: None

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 9

Fastener Description: Cap Screw 1" - 8 X 5"

Description of Sample Stock Location: SI NO. 531416

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 8

Manufacturer:  $\Delta$

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 10

Fastener Description: Hex Nut, 1" - 8

Description of Sample Stock Location: SI NO. 454746

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 5

Manufacturer: None

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/01/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 11

Fastener Description: Cap Screw. 3/4" - 10 X 2 1/2"

Description of Sample Stock Location: SI NO. 532541

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 8

Manufacturer: 

Class/Procurement Level: Non-Safety Related

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

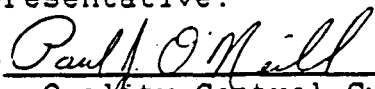
Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature

  
Quality Control Supervisor

Date 01/04/88

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 12

Fastener Description: Hex Nut, 3/4" - 10

Description of Sample Stock Location: SI NO. 454744

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 5

Manufacturer: None

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 13

Fastener Description: Cap Screw. 5/8" - 11 X 3 1/2"

Description of Sample Stock Location: SI NO. 532557

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 8

Manufacturer: 

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/01/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 14

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

Description of Sample Stock Location: SI NO. 458365

Material Specification as Documented by Licensee Records:  
Grade 8

Head Marking (Specification and Manufacturer):

Specification: Gr. 5

Manufacturer: None

Class/Procurement Level: Non-Safety Related

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

Vendor: Unknown

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor



COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 15

Fastener Description: Hex Nut, 1 1/8" - 7 . ASME Section III.  
Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766B19

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

Head Marking (Specification and Manufacturer):

Specification: 7. Trace Code OR48

Manufacturer: T

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 236-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Hardness Test Results
7. Charpy V-Notch Test Results
8. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 16

Fastener Description: Hex Nut, 5/8" - 11. ASME Section III.  
Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766F18

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

Head Marking (Specification and Manufacturer):

Specification: 2H

Manufacturer: T

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No: 236-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Hardness Test Results
7. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Neill Date 01/01/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 17

Fastener Description: Threaded Rod, 5/8" - 11 X 12'

Description of Sample Stock Location: SI NO. 749186

Material Specification as Documented by Licensee Records:  
ASTM A-193 B7

Head Marking (Specification and Manufacturer):

Specification: B7

Manufacturer: C

Class/Procurement Level: Downgraded to Non-Safety Related.  
Originally Safety Related, ASME Section III  
P.O. No. 281654

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

Vendor: Cardinal Industrial Products

QA Requirements Imposed on Vendor:

1. 10 CFR Part 21
2. C of C to QA Program
3. CMTR or C of C to Material Spec. and Grade
4. Marked with Grade and Manufacturer
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01 / 01 / 88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 18

Fastener Description: Hex Nut, 1/2" - 13, ASME Section III,  
Class II, 1971 Ed./W72 Add.

Description of Sample Stock Location: SI NO. 770A87

Material Specification as Documented by Licensee Records:  
A-193 Gr. B6

Head Marking (Specification and Manufacturer):

Specification: 6. Trace Code 410

Manufacturer: J

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 420594 QRI No. 695-87

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

Vendor: Crosby Valve and Gage Co.

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR (Not supplied, Certificate of Compliance supplied  
as allowed by ASME Section III)
- 5.
- 6.

Licensee Representative:

Signature Paul H. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 19

Fastener Description: Flange Bolt. 1 1/8" - 8 X 4 1/2"

Description of Sample Stock Location: SI NO. 150342

Material Specification as Documented by Licensee Records:  
ASTM A-193 B7

Head Marking (Specification and Manufacturer):

Specification: B7

Manufacturer: CFS

Class/Procurement Level: Non-Safety Related

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

Vendor: Westinghouse Electric

QA Requirements Imposed on Vendor: None

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature

*Paul J. O'Neill*

Date 01/04/88

Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - 20

Fastener Description: Threaded Rod, 1/2" - 13 X 12'

Description of Sample Stock Location: SI NO. 535882

Material Specification as Documented by Licensee Records:  
ASTM A-193 B7

Head Marking (Specification and Manufacturer):

Specification: B7

Manufacturer: C

Class/Procurement Level: Downgraded to Non-Safety Related.  
Originally Safety Related, ASME Section III  
P.O. No. 281654

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

Vendor: Cardinal Industrial Products

QA Requirements Imposed on Vendor:

1. 10 CFR Part 21
2. C of C to QA Program
3. CMTR or C of C to Material Spec. and Grade
4. Marked with Grade and Manufacturer
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/01/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

Safety Related  
Fastener Testing Data Sheet Summary

<u>SAMPLE ID #</u>	<u>SI NO.</u>	<u>P.O. NO.</u>	<u>ORI NO.</u>
BY - A	766A15	300099	0119-86
BY - B	766D13	300099	0109-86
BY - C	766D19	300099	0243-86
BY - D	766B17	300099	0219-86
BY - E	766E07	300099	0083-86
BY - F	766B18	300099	0232-86
BY - G	766B19	300099	0240-86
BY - H	766F18	300099	0236-86
BY - J	766H18	300099	0238-86
BY - K	766A10	300099	0098-86
BY - L	770F11	288592	0031-86
BY - M	506B77	269837	0612-83
BY - N	506B71	269837	0606-83
BY - P	506B62	269837	0597-83
BY - Q	772G11	502026 BY- <del>8</del> <sup>3 P/O</sup> <sub>1/4/88</sub>	0315-87
BY - R	770A87	420636	0669-87
BY - S	506B20	273097	0186-83
BY - T	766H18	300099	0238-86
BY - U	772A07 (Stud)	Unknown	0116-87
BY - V	772A07 (Nuts)	Unknown	0116-87

Sample Taken By: Paul J. O'Neill Date 12 / 23 / 87  
Quality Control Supervisor

Verified By: Nanette Gilles Date 12 / 23 / 87  
NRC Inspector

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - A

Fastener Description: Hex Head Bolt, 7/8" - 9 X 4", ASME Section III, Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766A15

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

Head Marking (Specification and Manufacturer):

Specification: B7

Manufacturer: TB

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 119-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor



COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - B

Fastener Description: Hex Head Cap Screw 3/4" - 10 X 2" ASME  
Section III, Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766D13

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

Head Marking (Specification and Manufacturer):

Specification: B7

Manufacturer: TB

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 109-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - C

Fastener Description: Hex Nut, 1 3/8" - 6 ASME  
Section III, Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766D19

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

Head Marking (Specification and Manufacturer):

Specification: 7 Trace Code: OR50

Manufacturer: T

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 243-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Hardness Test Results
7. Charpy V-Notch Test Results
8. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Neill Date 01/01/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - D

Fastener Description: Hex Head Cap Screw 1 3/8" - 6 X 5" ASME  
Section III, Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766B17

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

Head Marking (Specification and Manufacturer):

Specification: B7 Trace Code: OR42

Manufacturer: TB

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 219-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Charpy V-Notch Test Results
7. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature

Paul J. O'Hill  
Quality Control Supervisor

Date 01/01/88

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - E

Fastener Description: Hex Head Cap Screw 3/8" - 16 X 3". ASME  
Section III, Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766E07

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

Head Marking (Specification and Manufacturer):

Specification: B7

Manufacturer: TB

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 083-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Hill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - F

Fastener Description: Hex Nut, 3/8" - 16, ASME  
Section III, Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766B18

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

Head Marking (Specification and Manufacturer):

Specification: 2H

Manufacturer: T

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 232-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Hardness Test Results
7. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul E. Hill Date 01/01/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - G

Fastener Description: Hex Nut, 1 1/8" - 7 , ASME Section III,  
Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766B19

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

Head Marking (Specification and Manufacturer):

Specification: 7, Trace Code OR48

Manufacturer: T

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 236-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Hardness Test Results
7. Charpy V-Notch Test Results
8. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - H

Fastener Description: Hex Nut, 5/8" - 11, ASME Section III.  
Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766F18

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

Head Marking (Specification and Manufacturer):

Specification: 2H

Manufacturer: T

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 236-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Hardness Test Results
7. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - J

Fastener Description: Hex Nut, 7/8" - 9, ASME  
Section III, Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766H18

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

Head Marking (Specification and Manufacturer):

Specification: 2H

Manufacturer: T

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 238-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Hardness Test Results
7. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor



COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - K

Fastener Description: Hex Head Cap Screw 1/2" - 13 X 4" ASME  
Section III, Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766A10

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

Head Marking (Specification and Manufacturer):

Specification: B7

Manufacturer: TB

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 098-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Neill Date 01/01/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - L

Fastener Description: Hex Head Cap Screw 1/2" - 13 X 4" ASME  
Section III. Class II, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 770F11

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

Head Marking (Specification and Manufacturer):

Specification: B7 Trace Code: DV

Manufacturer: J

Class/Procurement Level: Safety Related. ASME Section III  
P.O. No. 288592 QRI No. 031-86  
Originally supplied with complete valve.

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

Vendor: Masoneilan Div., Dresser Industries C/O Process Sales

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Hydro Test (Complete Valve)
6. ASME Code Data Report (Complete Valve)

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - M

Fastener Description: Hex Nut, 3/4" - 10, ASME  
Section III, Class III, 1974 Ed./S74 Add.

Description of Sample Stock Location: SI NO. 506B77

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

Head Marking (Specification and Manufacturer):

Specification: 2H Trace Code: U

Manufacturer: C

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 269837 QRI No. 612-83

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

Vendor: Atlas Industrial Mfg. Co.

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - N

Fastener Description: Flange Stud, 3/4" - 10 X 6 3/4" ASME  
Section III, Class II, 1974 Ed./S74 Add.

Description of Sample Stock Location: SI NO. 506B71

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

Head Marking (Specification and Manufacturer):

Specification: B7 Trace Code: 25

Manufacturer: C

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 269837 QRI No. 606-83

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

Vendor: Atlas Industrial Mfg. Co.

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
- 5.
- 6.

Licensee Representative:

Signature Paul O'Neill Date 01/01/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - P

Fastener Description: Hex Nut, 3/4" - 10, ASME  
Section III, Class III, 1974 Ed./S74 Add.

Description of Sample Stock Location: SI NO. 506B62

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

Head Marking (Specification and Manufacturer):

Specification: 2H Trace Code: U

Manufacturer: C

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 269837 QRI No. 612-83

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

Vendor: Atlas Industrial Mfg. Co.

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - Q

Fastener Description: Stud. 5/8" - 11 X 4 1/2"

Description of Sample Stock Location: SI NO. 772G11

Material Specification as Documented by Licensee Records:  
A-193 B7

Head Marking (Specification and Manufacturer):

Specification: B7

Manufacturer:

Class/Procurement Level: Commercial Grade, With Documentation  
P.O. No. 502026 BY-3 QRI No. 315-87

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

Vendor: SCI Corp.

QA Requirements Imposed on Vendor:

1. C of C on Material
- 2.
- 3.
- 4.
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - R

Fastener Description: Hex Nut. 1/2" - 13 . ASME Section III.  
Class II. 1971 Ed./W72 Add.

Description of Sample Stock Location: SI NO. 770A87

Material Specification as Documented by Licensee Records:  
A-193 Gr. B6

Head Marking (Specification and Manufacturer):

Specification: 6. Trace Code 410

Manufacturer: J

Class/Procurement Level: Safety Related. ASME Section III  
P.O. No. 420636 QRI No. 669-87

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

Vendor: Crosby Valve and Gage Co.

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR (Not supplied. Certificate of Compliance supplied as allowed by ASME Section III)
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/01/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - S

Fastener Description: Flange Stud, 1 1/8" - 8 X 19" ASME  
Section III, Class II, 1974 Ed.

Description of Sample Stock Location: SI NO. 506B20

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

Head Marking (Specification and Manufacturer):

Specification: B7 Trace Code: HT

Manufacturer: DE

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 273097 QRI No. 186-83

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

Vendor: Joseph Oat Inc.

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
- 5.
- 6.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor



COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - T

Fastener Description: Hex Nut, 7/8" - 9, ASME  
Section III, Class I, 1974 Ed./W75 Add.

Description of Sample Stock Location: SI NO. 766H18

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

Head Marking (Specification and Manufacturer):

Specification: 2H

Manufacturer: T

Class/Procurement Level: Safety Related, ASME Section III  
P.O. No. 300099 QRI No. 238-86

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

Vendor: Energy Steel And Supply Company

QA Requirements Imposed on Vendor:

1. 10CFR Part 21
2. Certification to QA Program
3. C of C on Material
4. CMTR
5. Tension Test Results
6. Hardness Test Results
7. Items Marked with Grade and Manufacturer

Licensee Representative:

Signature Paul J. O'Hill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - U

Fastener Description: Stud. 1 1/4" X 12"

Description of Sample Stock Location: SI NO. 772A07(Stud)

Material Specification as Documented by Licensee Records:  
A-193 Gr. B7

Head Marking (Specification and Manufacturer):

Specification: B7

Manufacturer: A

Class/Procurement Level: Non Safety Related, Upgraded(Dedicated)  
P.O. No. Unknown QRI No. 116-87

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

Vendor: Posi-Seal

QA Requirements Imposed on Vendor: None

Upgrade Requirements

1. Visual Inspection for damage
2. Marked with "B7"
- 3.
- 4.
- 5.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

COMMONWEALTH EDISON COMPANY  
BYRON NUCLEAR POWER STATION

NRC COMPLIANCE BULLETIN NO. 87-02

FASTENER TESTING DATA SHEET

Sample ID#: BY - V

Fastener Description: Hex Nut, 1 1/4"

Description of Sample Stock Location: SI NO. 772A07(Nut)

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

Head Marking (Specification and Manufacturer):

Specification: 2H

Manufacturer: JS

Class/Procurement Level: Non Safety Related, Upgraded(Dedicated)  
P.O. No. Unknown QRI No. 116-87

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

Vendor: Posi-Seal

QA Requirements Imposed on Vendor: None

Upgrade Requirements

1. Visual Inspection for damage
2. Marked with "2H"
- 3.
- 4.
- 5.

Licensee Representative:

Signature Paul J. O'Neill Date 01/04/88  
Quality Control Supervisor

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-14 51 506 1377

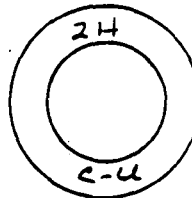
Fastener Description: HEAVY HEX NUT 3/4"

Description of Sample Stock Location: HOLD CAGE

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
269836

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SAFETY RELATED



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

Vendor: ATLAS

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GERHART

Signature

Robert P. Gerhart

Date

12-21-87

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

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

Attachment 1

Fastener Testing Data Sheet

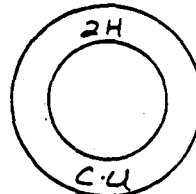
\*Sample ID# BR-15 51 506 B62

Fastener Description: HEAVY HEX NUT 3/4"

Description of Sample Stock Location: HOLD CAGE

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: ATKINS

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart

Date 12-21-87

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

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

Attachment 1

Fastener Testing Data Sheet

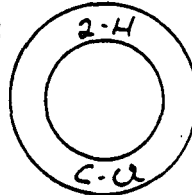
\*Sample ID# BR-16 31 506 B72

Fastener Description: HEAVY HEX NUT 3/4"

Description of Sample Stock Location: HOLD CAGE

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O. 269836

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: ATLAS

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GEBHART

Signature

Date

12-21-87

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

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

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-17 31 506 B57

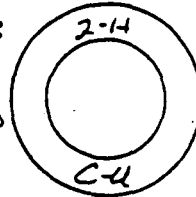
Fastener Description: HEAVY HEX NUT 3/4"

Description of Sample Stock Location: HOLD CAGE

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
269836

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SAFETY RELATED



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

Vendor: ATLAS

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT F. GEBHARD

Signature

Date

12-21-80

\*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# BR-13 SI 506B67

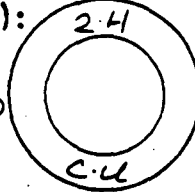
Fastener Description: HEAVY HEX NUT 3/4"

Description of Sample Stock Location: HOLD CAGE

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
269036

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SAFETY RELATED



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

Vendor: ATLAS

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GERHART

Signature Robert P. Gerhart

Date 12-21-87

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

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



ITEM CLASS <b>873</b>	VEN. OR. NO. <b>SEE BELOW</b>	C.C.	ITEM	FUNCT. OR ORDER	SUB.	EST. COST
REQUISITION BR <b>650-5877-0206</b>	REQUESTED BY <b>G. Cherveney</b>	<b>A</b>		<b>020</b>		
TO BE USED FOR <b>Spare Parts for W NSSS Aux. Heat Exchangers</b>						
TOTAL						<b>\$ 5,687.00</b>

NUMBER  
**269836**

DATE  
**DEC 07 1982**

C. TKT. NO.

ATLAS INDUSTRIAL MFG CO  
81 SOMERSET PLACE  
CLIFTON, NJ 07012

06132A

SHIP TO  
**COMMONWEALTH EDISON CO.**  
Braidwood Nuclear Station  
E/S IL Rt. 53 1 1/2 miles south IL Rt. 113  
Braidwood, Illinois 60408  
Attn: Dave Cline, Storekeeper

TAX: <input type="checkbox"/> NONE <input checked="" type="checkbox"/> STATE <input type="checkbox"/> STATE & MUNICIPAL <input type="checkbox"/> SERVICE <input type="checkbox"/> PTA	F. O. B. <b>CLIFTON, N.J.</b>	SHIP VIA	DELIVERY REQUIRED <b>EARLIEST NORMAL 8-10 weeks</b>	SHIPMENT PROMISED
TERMS OF PAYMENT <b>1-10-30</b>		YOUR QUOTATION <b>A-6340-82</b>	BUYER-TEL. NO. (312) 294-3417	<b>G. ADAMATIS</b>

CARRIER	PRO. NO.	DEL/SHIPPING TICKET NO.
---------	----------	-------------------------

Q. LINE ITEM	QUANTITY	DESCRIPTION	C. E. ITEM No.
--------------	----------	-------------	----------------

**ENTERED IN COMPUTER**

THE FOLLOWING ITEMS, 1 THRU 30, ARE SAFETY RELATED TO CFR PART 21 IS APPLICABLE DOCUMENTATION REQUIRED.  
Item 31 is Non-Safety Related, No Documentation required.  
ITEMS 3,4,5,8,9,10,13,14,15,18,19,20,23,24,25,28,29, & 30 REQUIRE DOCUMENTATION IN ACCORDANCE WITH ASME SECTION III CLASS 2 AND 3, 1974 EDITION INCLUDING SUMMER 1974 EDITION INCLUDING SUMMER 1974 ADDENDA CODE CASE: 1567, 1607, 1637

VENDOR TO SUPPLY DOCUMENTATION THAT HIS QUALITY ASSURANCE PROGRAM MEETS THE REQUIREMENTS OF ASME SECTION III, DIV. I, SUBSECTION NCA PARA. 3800, CURRENT EDITION, CURRENT ADDENDA, AND THAT THE ITEMS SUPPLIED ON THIS PURCHASE ORDER WERE PROVIDED IN ACCORDANCE WITH THIS PROGRAM.

PARTS BEING ORDERED ARE TO BE USED AS SPARE PARTS FOR W.N.S.S.S. AUX. HEAT EXCHANGERS ORIGINALLY ORDERED FROM ATLAS IND. CO. PURCHASE ORDER 546-214811/12/13/14 - 546-215331/32/33/34

THESE SPARE PARTS ARE THOSE AS RECOMMENDED BY YOUR QUOTATION ATLAS #A-5835-82 WITH ADDITIONS AND DELETIONS AS MEETS OUR REQUIREMENTS.

SAFETY RELATED-DOC. REQUIRED

DEPARTMENT MEMO (OC-MT,QA-TS)  
1X-Prod, Stores; 1X-F. Kofron  
1X-L.C. Boyer (G.S.O) Acct, Brwd  
2X-R. Hoffman, Maint, Brwd

Q.A. Dept. 10-21-82  
Atlas Industrial Mfg. Co.  
81 Somerset Place  
Clifton, N.J. 07012

Commonwealth Edison Company  
POST OFFICE BOX 767 \* CHICAGO, ILLINOIS 60690

review with AT 1/10/83  
PRODUCTION  
KOVITCH  
W. ECK  
STORES  
SHOULD BE MAILED TO ABOVE ADDRESS

QTY. REC'D.	UNIT
-------------	------

RECEIVED AND CHECKED BY DATE

APPROVED

10/T

269836

PAGE  
2

REQUISITION NO.  
GSO-5877

QUANTITY	DESCRIPTION	UNIT
	<p>BY ACCEPTANCE OF THIS ORDER AND UPON NOTIFICATION, THE VENDOR AGREES TO PROVIDE ACCESS TO HIS FACILITIES FOR QUALITY INSPECTION AND AUDIT WHEN REQUIRED BY THE PURCHASER.</p> <p>NO MATERIAL WILL BE RECEIVED OR PAYMENT PROCESSED UNLESS ALL PARTS ARE TAGGED SHOWING CUSTOMER PURCHASE ORDER NUMBER, P.O.LINE ITEM, C.E. STORES ITEM NUMBER, AND A BRIEF DESCRIPTION OF THE ITEM.</p> <p>THE CONTRACTOR SHALL FURNISH COMMONWEALTH EDISON COMPANY, WITH THE SHIPMENT, ANY SPECIAL INSTRUCTIONS NEEDED DURING HANDLING OR STORAGE OF THE SPARE PARTS, EQUIPMENT OR MATERIAL TO MAINTAIN QUALITY PRIOR TO INSTALLATION OR USE.</p> <p>VENDOR SHALL SUPPLY A CERTIFICATE OF CONFORMANCE THAT CERTIFY THE ITEMS SUPPLIED ARE AS IDENTIFIED ON THE PURCHASE ORDER. WHERE THE PURCHASE ORDER DOES NOT SPECIFICALLY IDENTIFY THE SPECIFICATION, NATIONAL STANDARD OR CATALOG NUMBER TO WHICH THE ITEM IS MANUFACTURED, THE APPLICABLE CORRESPONDING REQUIREMENTS SHALL BE IDENTIFIED AND PROVIDED BY THE VENDOR IN SUPPORT OF THE CERTIFICATION. THE CONTRACTOR SHALL COMPLETE THE CERTIFICATE OF CONFORMANCE FORM 4-51-1, (OR INCLUDE HIS CERTIFICATE).</p> <p>Items 3,8,13,18,23 and 28 Documetation Requirements are:</p> <ol style="list-style-type: none"> <li>1. CMTR for SA-193-B7 Studs</li> </ol> <p>Items 4,9,14,19,24 and 29 Documentation Requirements are:</p> <ol style="list-style-type: none"> <li>1. CMTR for SA-194-2H Nuts</li> </ol> <p>Items 5,10,15,20,25 and 30 Documentation Requirements are:</p> <ol style="list-style-type: none"> <li>1. CMTR for T304, SA-479 Tube Plugs</li> </ol> <p>Items 1,2,6,7,11,12,16,17,21,22,26,27 Documentation Requirements are</p>	

LINE ITEM	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT	DATE
<p>1. Certificate of Compliance/Conformance for gasket items will state that gaskets supplied are of the same material, type, and as requested by the Atlas Purchase order.</p> <p>The following items, 1 thru 5 are for the Excess Letdown Heat Exchanger Atlas Dwg. No. D-4113</p> <p style="text-align: right;"><i>ALL EACH NET</i></p>					
1	2	ea., Gasket, Shellside - Spiral Wound 12 1/8" O.D. x 8 7/8" I.D. x .175" Thick Part No. 25	506B49	2 EA	10-12-83
		<i>\$ 59.00</i>			
2	2	ea., Gasket, Tubeside - Spiral Wound with Double Jacketed Ribs 12 1/8" O.D. x 8 7/8" I.D. x .175" Thick Part No. 25 and 32	506B50	1 EA	10-12-83
		<i>\$ 85.00</i>			
3	4	ea., Studs, Flange 1 5/8" - 8 x 13" Class 2A Fit Material A.S., SA-193-B7 Part No. 23	506B51	4 EA	10-12-83
		<i>\$ 271.00</i>			
4	8	ea., Nuts, Flange 1 5/8" - 8 Heavy Hex Class 2B Fit Material C.S., SA 194-2H Part No. 24	506B52	8 EA	10-12-83
		<i>INCLUDED IN ITEM #3</i>			
5	10	ea., Plugs, Tube - For 5/8" O.D. 14 to 20 Ga. Tubes Material T304 SA-479 Part No. 75	506B53	10 EA	10-12-83
		<i>\$ 20.00</i>			
<p>The following items, 6 thru 10, are for the Seal Water Heat Exchanger Atlas Dwg. No. D-4386</p>					
6	1	ea., Gasket, Shellside - Spiral Wound 21 1/8" O.D. x 20 3/8" I.D. x .175" Thick Part No. 30A	506B54	1 EA	10-12-83
		<i>\$ 208.00</i>			
7	1	ea., Gasket, Tubeside - Spiral Wound with Double Jacketed Ribs 21 1/8" O.D. x 20 3/8" I.D. x .175" Thick Part No. 29 and 30	506B55	1 EA	10-12-83
		<i>\$ 180.00</i>			
8	4	ea., Studs, Flange 3/4"-10x7 1/2" Class 2A Fit Material A.S., SA-193-B7 Part No. 39	506B56	4 EA	10-12-83
		<i>\$ 51.50</i>			
9	8	ea., Nuts, Flange 3/4"-10 Heavy Hex Class 2B Fit Material C.S., SA-194-2H Part No. 40	506B57	8 EA	10-12-83
		<i>INCLUDED IN ITEM #8</i>			

(CONTINUED)

269836

IN QUANTITY NO

GSO-5877

QUANTITY	DESCRIPTION	ITEM NO	UNIT	DATE
	<i>ALL EACH NET</i>			
0	10 ea., Plugs, Tube - For 3/4" O.D. 15 to 22 Ga. Tubes Material T304, SA479, Part No. 75 \$ 20.00 The following items, 11 thru 15, are for the Spent Fuel Pit Heat Exchanger Atlas Dwg. No. D-4425	506B58	✓	10 EA 10-12-82
1	1 ea., Gasket, Shellside - Spiral Wound 49 1/8" O.D. x 48 1/8" I.D. x .175" Thick with 1/8" Thick x 47 3/8" I.D., Inner Metal Ring Part No. 26 \$ 771.00	506B59	✓	1 EA 10-12-82
2	1 ea., Gasket, Tubeside - Spiral Wound with Double Jacketed Ribs 49 1/8" O.D. x 48 1/8" I.D. x .175" Thick Part No. 27 and 28 \$ 175.00	506B60	✓	1 EA 10-12-82
3	4 ea., Studs, Flange - 3/4"-10x11" Class 2A Fit Material A.S., SA-193-B7; Part No. 24 \$ 55.00	506B61	✓	4 EA 10-12-82
4	8 ea., Nuts, Flange-3/4"-10 Heavy Hex Class 2B Fit Material C.S., SA-194-2H; Part No. 25 INCLUDED IN ITEM # 13	506B62	✓	8 EA 10-12-82
15	10 ea., Plugs, Tube - For 3/4" O.D. 15 to 22 Ga. Tubes Material T304, SA 479; Part No. 75 \$ 20.00 The following items, 16 thru 20, are for the Letdown Chiller Heat Exchanger, Atlas Dwg. No. D-4119	506B63	✓	10 EA 10-12-82
16	1 ea., Gasket, Shellside - Spiral Wound 20 3/4" O.D. x 19 3/4" I.D. x .175" Thick; Part No. 20 \$ 72.00	506B64	✓	1 EA 10-12-82
17	1 ea., Gasket, Tubeside - Spiral Wound with Double Jacketed Ribs 20 3/4" O.D. x 20" I.D. x .175" Thick Part No. 21 and 22 \$ 170.00	506B65	✓	1 EA 10-12-82
18	4 ea., Studs, Flange - 3/4"-10 x 8 1/4" Class 2A Fit Material A.S., SA-193-B7; Part No. 34 \$ 54.00	506B66	✓	4 EA 10-12-82
19	8 ea., Nuts, Flange - 3/4"-10 Heavy Hex Class 2B Fit Material C.S., SA-194-2H; Part No. 35 INCLUDED IN ITEM # 18	506B67	✓	8 EA 10-12-82

(CONTINUED)

IN QUESTION NO  
GSO-5877

269836

*ALL EACH NET*

QUANTITY	DESCRIPTION	ITEM NO	UNIT	DATE
10	ea., Plugs, Tube - For 3/4" O.D. 15 to 22 Ga. Tubes Material T304, SA479 <i>\$ 20.00</i>	506B68	EA	10-18-53
The following items, 21 thru 25, are for the Letdown Reheat Heat Exchanger, Atlas Dwg. No. D-4121				
1	ea., Gasket, Shellside - Spiral Wound 9 3/8" O.D. x 8 5/8" I.D. x .175" Thick, Part No. 25 <i>\$ 46.00</i>	506B69	EA	10-18-53
1	ea., Gasket, Tubeside - Spiral Wound with Double Jacketed Ribs 9 3/8" O.D. x 8 5/8" I.D. x .175" Thick Part No. 25 and 26 <i>\$ 60.00</i>	506B70	EA	10-18-53
4	ea., Studs, Flange-3/4"-10x 6 3/4" Class 2A Fit Material A.S., SA-193-B7, Part No. 27 <i>\$ 48.00</i>	506B71	EA	10-18-53
8	ea., Nuts, Flange-3/4"-10, Heavy Hex Class 2B Fit Material C.S., SA-194-2H Part No. 28 <i>INCLUDED IN ITEM # 23</i>	506B72	EA	10-18-53
10	ea., Plugs, Tube-For 3/4" O.D. 15 to 22 Ga. Tubes Material T304, SA 479 <i>\$ 20.00</i>	506B73	EA	10-18-53
The following Items, 26 thru 30, are for the Moderating Heat Exchanger, Atlas Dwg. No. D-4114				
1	ea., Gasket, Shellside - Spiral Wound 18 3/4" O.D. x 18" I.D. x .175" Thick; Part No. 26 <i>\$ 62.00</i>	506B74	EA	10-18-53
1	ea., Gasket, Tubeside - Spiral Wound with Double Jacketed Ribs 18 3/4" O.D. x 18" I.D. x .175" Thick, Part No. 26 and 27 <i>\$ 106.00</i>	506B75	EA	10-18-53
4	ea., Studs, Flange - 3/4"-10x7 1/2", Class 2A Fit Material A.S., SA-193-B7, Part No. 24 <i>\$ 51.50</i>	506B76	EA	10-18-53
8	ea., Nuts, Flange - 3/4"-10 Heavy Hex Class 2B Fit Material C.S., SA-194-2H, Part No. 25 <i>INCLUDED IN ITEM # 28</i>	506B77	EA	10-18-53
10	ea., Plugs, Tube - For 3/4" O.D. 15 to 22 Ga. Tube Material T304, SA 479 <i>\$ 20.00</i>	506B78	EA	10-18-53

(CONTINUED)

THE ORDERING NO  
GSO-5877

269836

LINE ITEM	QUANTITY	DESCRIPTION	U. S. PRICE
31	2	ea., Tube Expander Assembly with 2 1/4" Rollers Part No. 100 <i>\$205.00 EA NET</i>	494681
<p>Quality assurance documents as specified herein are an integral part of this order. One copy of specified documents, referencing the purchase order number, is required with the shipment of material. Invoice payments will be withheld until documentation is received.</p>			

17 21 19 73

Attachment 1

Fastener Testing Data Sheet

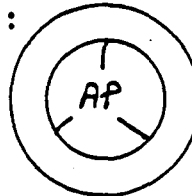
\*Sample ID# BR-19 SI 503987

Fastener Description: HEX HEAD CAP SCREW 3/4" - 10 X 2"  
STEEL, GRADE 5

Description of Sample Stock Location: 17

Material Specification as Documented by Licensee Records: STEEL GRADE 5  
SEE ATTACHED P.O. 501832 XX4

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level:

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

Vendor: AMERICAN FASTENER CORP

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart

Date 12-21-87

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

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

1-18-07

DPY 5 - RECEIVING DEPT.

Commonwealth Edison Company

SHIPMENT RELEASE

PIC P.C. TKT

CLASS 531	VENDOR NO. 03798	C.C.	ITEM	FUNCT OR ORDER	SUB	X
ACQUISITION NO 083210	REQUISITION DATE 04/02/84			020		
BE USED FOR STOCK REPLENISHMENT	QUANTITY REQUIRED					

P.O. NO. 501832  
RELEASE XX41  
DATE 04/02/84

ACCOUNTING USE

03798  
AMERICAN FASTENER CORP  
1919 W 19TH ST  
BROADVIEW, IL 60153

SHIP TO  
COMMONWEALTH EDISON CO.  
BRAIDWOOD STATION  
E/S RT 53, 1.5 MI S. RT 113  
BRAIDWOOD, ILLINOIS 60408

DATE		NUMBER
MO.	DAY	
DUE DATE		CASH DISC. AMT.
MO.	DAY	

NONE	F C B	SHIP VIA	DELIVERY REQUIRED	SHIPMENT PROMISED
STATE		TERMS OF PAYMENT	YOUR QUOTATION	BUYER
STATE & MUNICIPAL				
SERVICE	%			

CARRIER <i>UPS</i>	PREL NO	ADD/CLAIM NO

QUANTITY	DESCRIPTION	CE ITEM NO.	QTY RCD	UNIT	
PAGE 1					
300 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 2 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 05/02/84	503982 EA			NEW (REQ:083209)
300 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 2-1/2 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	503983 EA			NEW (REQ:082200)
300 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 3-1/2 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	503985 EA			NEW (REQ:082201)
100 EA	SCREW, CAP; HEX HEAD, 3/4-10 X 2-1/2, STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	503986 EA			NEW (REQ:082202)
100 EA	SCREW, CAP; HEX HEAD, 3/4-10 X 2 IN., STEEL GRADE 5 DELIVERY REQUIRED BY 04/27/84 ( CONTINUED ON PAGE 2 )	503987 EA	100	EA	NEW (REQ:082203)

RECEIVED AND CHECKED BY <i>[Signature]</i>	DATE 5/1/84	ENTERED BY	DATE
APPROVED <i>[Signature]</i>	DATE		

TEMPORARY FUNCTION-000

EXPIRES 04/27/84



5-18-84 53

COPY 5 - RECEIVING DEPT.

Commonwealth Edison Company

SHIPMENT RELEASE

PIC INC. TRK

CLASS	VENDOR NO	CC	ITEM	FUNCT. OR ORDER	SUB	X
ACQUISITION NO 083210	REQUISITION DATE			020		
BE USED FOR STOCK REPLENISHMENT	QUANTITY REQUIRED					

P.O. NO. 501832  
RELEASE XX41  
DATE 04/02/84

ACCOUNTING USE

03798  
AMERICAN FASTENER CORP  
1919 N 19TH ST  
BROADVIEW, IL 60153

SHIP TO  
COMMONWEALTH EDISON CO.  
BRAIDWOOD STATION  
E/S RT 53, 1.5 MI S. RT 113  
BRAIDWOOD, ILLINOIS 60408

DATE		NUMBER
MO	DAY	
DATE		CASH DISC. AMT.
MO	DAY	

NONE	F.C.B.	SHIP VIA	DELIVERY REQUIRED	SHIPMENT PROMISED
STATE		TERMS OF PAYMENT	YOUR QUOTATION	BUYER
STATE & MUNICIPAL				
SERVICE				

TAXES	ADJ / CLAIM NO
PRO NO	

QUANTITY	DESCRIPTION	CE ITEM NO	QTY RCD	UNIT	
PAGE 2					
100 EA	SCREW, CAP; HEX HEAD, 3/4-10 X 3 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	503988 EA			NEW (REQ:082204)
100 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 6 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	530918 EA			NEW (REQ:082243)
100 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 7 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	530919 EA	55	EA	NEW (REQ:082244)
100 EA	SCREW, CAP; HEX HEAD, 7/8-9 X 3 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	530956 EA	100	EA	NEW (REQ:082245)
100 EA	SCREW, CAP; HEX HEAD, 7/8-9 X 4 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84 ( CONTINUED ON PAGE 3 )	530957 EA	60	EA	NEW (REQ:082246)

TEMPORARY ... ION-000

RECEIVED AND CHECKED BY <i>Ch. A. ...</i>	DATE 5/11/84	ENTERED BY	DATE
APPROVED <i>...</i>	DATE		

COMPLETED

125

DPY 5 - RECEIVING DEPT.

### Commonwealth Edison Company

### SHIPMENT RELEASE

### FIG. INC. TKT

CLASS	VENDOR NO.	CC	ITEM	FUNCT. OR ORDER	SUB	X
ACQUISITION NO. 083210	REQUISITION DATE			020		
USE FOR STOCK REPLENISHMENT	QUANTITY REQUIRED					

P.O. NO. 501832  
 RELEASE XX41  
 DATE 04/02/84

ACCOUNTING USE

03798

AMERICAN FASTENER CORP  
 1919 N 19TH ST  
 BROADVIEW, IL 60153

SHIP TO  
 COMMONWEALTH EDISON CO.  
 BRAIDHOOD STATION  
 E/S RT 53, 1.5 MI S. RT 113  
 BRAIDHOOD, ILLINOIS 60408

INVOICE	
DATE MO. DAY	NUMBER
DUE DATE MO. DAY	CASH DISC. AMT.

NONE	F C B	SHIP VIA	DELIVERY REQUIRED	SHIPMENT PROMISED
STATE		TERMS OF PAYMENT	YOUR QUOTATION	BUYER
STATE & MUNICIPAL SERVICE	X			

CARRIER	ADJ. CLAIM NO.
---------	----------------

QUANTITY	DESCRIPTION	CE ITEM NO.	QTY RCD	UNIT	
100 EA	SCREW, CAP; HEX HEAD, 3/4-10 X 5 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	535199 EA			NEW (REQ:082278)
100 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 8 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	535454 EA	100	EA	NEW (REQ:082279)
100 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 5-1/2 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	535691 EA			NEW (REQ:082282)
***** END OF ORDER *****					

TEMPORARY FUNCTION. 00000

RECEIVED AND CHECKED BY <i>Chuck F...</i>	DATE 5/1/84	ENTERED BY	DATE
APPROVED <i>A. Clark</i>	DATE		

# COMPLETED

Attachment 1

Fastener Testing Data Sheet

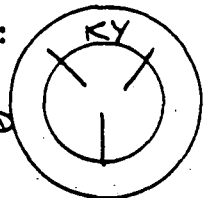
\*Sample ID# BR-20 S1 503985

Fastener Description: HEX HEAD CAP SCREW 5/8"-11 X 3 1/2"  
STEEL, GRADE 5

Description of Sample Stock Location: 16

Material Specification as Documented by Licensee Records: STEEL, GRADE 5  
SEE ATTACHED P.O. 501832 XX41

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: NON-SAFETY RELATED

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

Vendor: AMERICAN FASTENER

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart

Date 12-21-87

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

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

1-18-09 4122

COPY 5 - RECEIVING DEPT.

Commonwealth Edison Company

SHIPMENT RELEASE

PIC PROC. TKT

ITEM CLASS 531	VENDOR NO. 03798	C.C.	ITEM	FUNCT. OR ORDER	SUB	X
REQUISITION NO. 083210	REQUISITION DATE 04/02/84			020		
TO BE USED FOR STOCK REPLENISHMENT	QUANTITY REQUIRED					

P.O. NO. 501832

RELEASE XX41

DATE 04/02/84

ACCOUNTING USE

03798  
 AMERICAN FASTENER CORP  
 1919 W 19TH ST  
 BROADVIEW, IL 60153

SHIP TO  
**COMMONWEALTH EDISON CO.**  
 BRAIDWOOD STATION  
 E/S RT 53, 1.5 MI S. RT 113  
 BRAIDWOOD, ILLINOIS 60408

DATE		NUMBER
MO.	DAY	
DUE DATE		CASH DISC. AMT.
MO.	DAY	

TAX

NONE	F.C.B.	SHIP VIA	DELIVERY REQUIRED	SHIPMENT PROMISED
STATE				
STATE & MUNICIPAL		TERMS OF PAYMENT	YOUR QUOTATION	BUYER
SERVICE	%			

CARRIER  
*UPS*

PREPARED

ADD. CLAIM FILED

QUANTITY	DESCRIPTION	C.E. ITEM NO.	QTY RCD	UNIT
PAGE 1				
300 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 2 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 05/02/84	503982 EA		NEW (REQ:083209)
300 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 2-1/2 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	503983 EA		NEW (REQ:082200)
300 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 3-1/2 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	503985 EA		NEW (REQ:082201)
100 EA	SCREW, CAP; HEX HEAD, 3/4-10 X 2-1/2, STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	503986 EA		NEW (REQ:082202)
100 EA	SCREW, CAP; HEX HEAD, 3/4-10 X 2 IN., STEEL GRADE 5 DELIVERY REQUIRED BY 04/27/84 ( CONTINUED ON PAGE 2 )	503987 EA	100 EA	NEW (REQ:082203)

RECEIVED AND CHECKED BY <i>Charles...</i>	DATE 5/1/84	ENTERED BY	DATE
APPROVED <i>D. Levine</i>	DATE 4-12-84		

TEMPORARY FUNCTION-000

RECEIVED

COPY 5 - RECEIVING DEPT.

Commonwealth Edison Company

SHIPMENT RELEASE

PIC REG. TRK

ITEM CLASS	VENDOR NO.	CC	ITEM	FUNCT. OR ORDER	SUB	X
REQUISITION NO 083210	REQUISITION DATE		020			
TO BE USED FOR STOCK REPLENISHMENT		QUANTITY REQUIRED				

P.O. NO. 501832  
RELEASE XX41  
DATE 04/02/84

ACCOUNTING USE

03798

AMERICAN FASTENER CORP  
1919 N 19TH ST  
BROADVIEW, IL 60153

SHIP TO  
COMMONWEALTH EDISON CO.  
BRAIDWOOD STATION  
E/S RT 53, 1.5 MI S. RT 113  
BRAIDWOOD, ILLINOIS 60408

INVOICE

DATE	NUMBER
MO. DAY	
TIME DATE	CASH DISC. AMT.
MO. DAY	

TAX

NONE	FCB.	SHIP VIA	DELIVERY REQUIRED	SHIPMENT PROMISED
STATE				
STATE & MUNICIPAL		TERMS OF PAYMENT	YOUR QUOTATION	BUYER
SERVICE	%			

CARRIER	PRO NO	ADJ/CLAIM NO

QUANTITY	DESCRIPTION	CE ITEM NO.	QTY RCD	UNIT	
PAGE 2					
100 EA	SCREW, CAP; HEX HEAD, 3/4-10 X 3 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	503988 EA			NEW (REQ:082204)
100 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 6 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	530918 EA			NEW (REQ:082243)
100 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 7 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	530919 EA	55	EA	NEW (REQ:082244)
100 EA	SCREW, CAP; HEX HEAD, 7/8-9 X 3 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	530956 EA	100	EA	NEW (REQ:082245)
100 EA	SCREW, CAP; HEX HEAD, 7/8-9 X 4 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84 ( CONTINUED ON PAGE 3 )	530957 EA	60	EA	NEW (REQ:082246)

TEMPORARY ... ION-0001

RECEIVED AND CHECKED BY <i>Chad F...</i>	DATE 5/17/84	ENTERED BY	DATE
APPROVED <i>D. Levine</i>	DATE 4-2-84		

COMPLETED

153

OPY 5 - RECEIVING DEPT.

Commonwealth Edison Company

SHIPMENT RELEASE

PJC REG. TKT

CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	X
ACQUISITION NO 083210	REQUISITION DATE			020		
ITEM USED FOR STOCK REPLENISHMENT		QUANTITY REQUIRED				

P.O. NO. 501832  
 RELEASE XX41  
 DATE 04/02/84

ACCOUNT NUMBER	

03798  
 AMERICAN FASTENER CORP  
 1919 W 19TH ST  
 BROADVIEW, IL 60153

SHIP TO  
 COMMONWEALTH EDISON CO.  
 BRAIDHOOD STATION  
 E/S RT 53, 1.5 MI S. RT 113  
 BRAIDHOOD, ILLINOIS 60408

DATE		NUMBER
MO.	DAY	
DUE DATE		CASH DISC. AMT.
MO.	DAY	

NONE	FOB	SHIP VIA	DELIVERY REQUIRED	SHIPMENT PROMISED
STATE				
STATE & MUNICIPAL		TERMS OF PAYMENT	YOUR QUOTATION	BUYER
SERVICE	%			

CARRIER	
FRT (FA)	ADI - CLAIM #

QUANTITY	DESCRIPTION	CE ITEM NO	QTY REQ	UNIT	
	PAGE 4				
100 EA	SCREW, CAP; HEX HEAD, 3/4-10 X 5 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	535199 EA			NEW (REQ:082278)
100 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 8 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	535454 EA	100	EA	NEW (REQ:082279)
100 EA	SCREW, CAP; HEX HEAD, 5/8-11 X 5-1/2 IN., STEEL, GRADE 5 DELIVERY REQUIRED BY 04/27/84	535691 EA			NEW (REQ:082282)
***** END OF ORDER *****					

TEMPORARY IDENTIFICATION 0000

RECEIVED AND CHECKED BY <i>Chuck F...</i>	DATE 5/1/84	ENTERED BY	DATE
APPROVED <i>D. Ch...</i>	DATE		

COMPLETED

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# 13R-21 51 476315

Fastener Description: SOCKET HEAD CAP SCREW 1/2"-13 x 1"

Description of Sample Stock Location: 30 I

Material Specification as Documented by Licensee Records: 316 SS  
SEE ATTACHED P.O. 502052 XX184

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: NON-SAFETY RELATED

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

Vendor: ACTION THREADED PRODUCTS

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT T. GEBHART

Signature Robert T. Gebhart Date 12-21-87

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

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

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Commonwealth Edison Company

SHIPMENT RELEASE

1-4 86

PIC RFC. TKT	
ACCOUNTING USE	
1-12	00349
1324	00350
25-36	00351
#48	00352

ITEM CLASS 531	VENDOR NO. 01745A	C.C.	ITEM	FUNCT. OR ORDER 020	SUB	X
REQUISITION NO. 077878	REQUISITION DATE 10/16/85					
TO BE USED FOR STOCK REPLENISHMENT	QUANTITY REQUIRED					

P.O. NO. 502052  
RELEASE XX184  
DATE 10/16/85

01745A ACTION THREADED PRODUCTS, INC 7440 W 100TH PL BRIDGEVIEW, IL 60455	SHIP TO COMMONWEALTH EDISON CO. BRAIDWOOD STATION E/S RT 53, 1.5 MI S. RT 113 BRAIDWOOD, ILLINOIS 60408
--	---

INVOICE	
DATE	NUMBER
MO. DAY	
DUE DATE	CASH DISC. AMT.
MO. DAY	

TAX	F.O.B.	SHIP VIA	DELIVERY REQUIRED 11/30/85	SHIPMENT PROMISED
NONE				
STATE		TERMS OF PAYMENT	YOUR QUOTATION	BUYER
STATE & MUNICIPAL				
SERVICE %				

CARRIER UPS	PRONO	ADJ / CLAIM NO

QUANTITY	DESCRIPTION	CE ITEM NO.	QTY RCD	UNIT	
PAGE 1					
100 EA	SCREW, CAP; SOCKET HEAD, 1/4 IN. -20 X 1/2 IN., 316 STAINLESS STEEL ACTION THREADED ACTION THREADED PRODUCTS, INC PART NUMBER: PART NUMBER:	476289 EA	100	EA	NEW (REQ:076089)
100 EA	SCREW, CAP; SOCKET HEAD, 1/4 IN. -20 X 3/4 IN., 316 STAINLESS STEEL ACTION PROD. ACTION THREADED PRODUCTS, INC PART NUMBER: PART NUMBER:	476290 EA	100	EA	NEW (REQ:076090)
100 EA	SCREW, CAP; SOCKET HEAD, 1/4 IN. -20 X 1 IN., 316 STAINLESS STEEL ACTION PROD. ACTION THREADED PRODUCTS, INC PART NUMBER: PART NUMBER:	476291 EA	100	EA	NEW (REQ:076091)
100 EA	SCREW, CAP; SOCKET HEAD, 1/4 IN. -20 X 1-1/4 IN., 316 STAINLESS STEEL ACTION THREADED PRODUCTS, INC PART NUMBER: PART NUMBER: ( CONTINUED ON PAGE 2 )	476292 EA	100	EA	NEW (REQ:076092)

PARTIAL

SENT TRACES  
12-11-85

RECEIVED AND CHECKED BY <i>[Signature]</i>	DATE 1-8-86	ENTERED BY <i>[Signature]</i>	DATE 1-9-86
APPROVED <i>[Signature]</i>	DATE 89.2		



COPY 5 - RECEIVING DEPT.

Commonwealth Edison Company

SHIPMENT RELEASE

PIC REC. TKT 00814  
ACCOUNTING USE

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB
REQUISITION NO. 077878	REQUISITION DATE			020	
TO BE USED FOR STOCK REPLENISHMENT	QUANTITY REQUIRED				

P.O. NO. 502052  
RELEASE XX184  
DATE 10/16/85

01745A  
ACTION THREADED PRODUCTS, INC  
7440 W 100TH PL  
BRIDGEVIEW, IL 60455

SHIP TO  
COMMONWEALTH EDISON CO.  
BRAIDWOOD STATION  
E/S RT 53, 1.5 MI S. RT 113  
BRAIDWOOD, ILLINOIS 60408

DATE		NUMBER
MO.	DAY	
DUE DATE		CASH DISC. AMT.
MO.	DAY	

TAX

NONE	F.O.B.	SHIP VIA	DELIVERY REQUIRED	SHIPMENT PROMISED
STATE			11/30/85	
STATE & MUNICIPAL		TERMS OF PAYMENT	YOUR QUOTATION	BUYER
SERVICE %				

CARRIER UPS

PRO NO	AD / CLAIM NO

QUANTITY	DESCRIPTION	CE ITEM NO.	QTY RCD	UNIT	
PAGE 6					
100 EA	SCREW, CAP; SOCKET HEAD, 3/8 IN.-16 X 4 IN., 316 STAINLESS STEEL ACTION THREADED PRODUCTS, INC PART NUMBER:	476314 EA			NEW (REQ:07611)
100 EA	SCREW, CAP; SOCKET HEAD, 1/2 IN.-13 X 1 IN., 316 STAINLESS STEEL ACTION THREADED PRODUCTS, INC PART NUMBER:	476315 EA			NEW (REQ:07611)
100 EA	SCREW, CAP; SOCKET HEAD, 1/2 IN.-13 X 1-1/4 IN., 316 STAINLESS STEEL BARR SAUNDERS ACTION THREADED PRODUCTS, INC PART NUMBER:	476316 EA			NEW (REQ:07611)
100 EA	SCREW, CAP; SOCKET HEAD, 1/2 IN.-13 X 2 IN., 316 STAINLESS STEEL ACTION THREADED PRODUCTS, INC PART NUMBER:	476318 EA	100	EA	NEW (REQ:07611)
100 EA	SCREW, CAP; SOCKET HEAD, 1/2 IN.-13 X 2-1/2 IN., 316 STAINLESS STEEL ACTION THREADED PRODUCTS, INC PART NUMBER: ( CONTINUED ON PAGE 7 )	476319 EA	87	EA	NEW (REQ:07611)

RECEIVED AND CHECKED BY <i>C. Ferraro</i> 7/18/86	DATE	ENTERED BY <i>Bill Schumann</i> 7-19-86	DATE
APPROVED <i>D. Cline</i> 8912	DATE		

**COMPLETED**

6-3-86

7-22-86

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-22 S1 530445

Fastener Description: HEX NUT 1/2"-13 P/N 93613

Description of Sample Stock Location: 22A

Material Specification as Documented by Licensee Records: P/N ONLY  
SEE ATTACHED P.O. GEN WAREH

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: NON-SAFETY RELATED

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

Vendor: ACTION THREADED PRODUCTS

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT P. GERHART

Signature

Robert P. Gerhart

Date

12-21-87

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

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

NUCLEAR GENERATING STATIONS

C.E. CO. 86-6024 (S) 6-84

ITEM CL.	VENDOR NUMBER	C.C.
----------	---------------	------

ORDER  P.O. and Ref. No.: GEN. WA. 10015  
 VIA.  Small P.O. No.: \_\_\_\_\_  
 \_\_\_\_\_

DATE 7/5/85

Action Threaded Products

VENDOR RUDY PURCELL, BOWMAN DISTRIBUTION

SPECIAL REQUIREMENTS:

REQUESTED BY G. GRUMM

MTT FREEDOM ST., JOGLET, IL, 60455

Handling

EST. COST 500<sup>00</sup>

PH. 815-723-7507

Storage

CHARGE TO: 10267A-783

TO BE USED FOR: MAINTENANCE

Shelf Life

020

DATE REQUIRED E/N

ITEM NO.	QUANTITY REQUIRED	DESCRIPTION	QA CLASSIFICATION			STORES ITEM NUMBER	SCHED RPRS.	NEW ITEMS						
			ASME	SAFE-TY	RELIABILITY			FOR STOCK - TO BE CODED						
								SPARE PARTS	MAT'L	SUPP.	MIN. QUAN.	MAX. QUAN.		
NON-SAFETY, NO DOCUMENTATION REQUIRED														
DO NOT SUBSTITUTE														
ALL PARTS TO BE STAINLESS STEEL TYPE 304														
(18-8) PER SPEC. EM-51308														
1	150	EA MACHINE SCREW, ROUND HEAD, 6-32, 1/2" LONG	N/A	No	No	535167	✓	X			100	150	4 <sup>03</sup> / <sub>50</sub>	
		PART #92612												
2	150	EA MACHINE SCREW, ROUND HEAD, 6-32, 3/4" LONG	N/A	No	No	535168	✓	X			100	150	4 <sup>03</sup> / <sub>50</sub>	
		PART #92614												
TAGS AND STICKERS														
ORDERED - DATE <u>7-7-85</u>														

APPROVED BY <u>[Signature]</u>	IDENTITY CODE □□□□	<u>Helen Schueler</u> 7-9-85 QUALITY CONTROL	<u>J. Pietschmann</u> 7/9/85 QA INSP./ENGINEER	<u>H. Pietschmann</u> STORES SUPERVISOR	DATE <u>7-9-85</u>
DATE RECEIVED	PURCHASE ORDER NO.		STOCKMAN	DATE	

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-23 51 535898

Fastener Description: HEX NUT 7/16"-20

Description of Sample Stock Location: 24K

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
501596 BR-1051

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: NON-SAFETY RELATED

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

Vendor: BARRET HARDWARE

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT P. GERHART

Signature Robert P. Gerhart Date 12-21-07

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

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

5 RECEIVING DEPT. COPY

86-5065(S) 4-79

Commonwealth Edison Company

SHIPMENT RELEASE

07906

ITEM CLASS 789	VENDOR NO. 08620	C.C. 9	ITEM	FUNCT. OR ORDER 100267A	SUB 771	ESTIMATED COST \$
EQUIPMENT NO.		REQUESTED BY R. Larsen				
TO BE USED FOR Mach Shop Fasteners						

P.O. NO. 501596  
RELEASE BR-1051  
DATE 9-14-83

RECEIVED FROM

Barrett Hardware Co.  
324 Henderson  
Joliet, IL 60434

RECEIVED AT

COMMONWEALTH EDISON CO.  
Braidwood Nuclear Station  
E/S Rt. 53, 1 1/2 Miles South Rt. 113  
Braidwood, Illinois 60408  
Attn: Dave Cline, Storekeeper

(Page 1 of 4)

**PARTIAL**

CARRIER

VICTOR

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED E/N	PRO NO.	DEL. SHIPPING TICKET NO.
---	--------	----------	-------------------	---------	--------------------------

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	THE FOLLOWING ARE: UNRF HEX CAP SCREWS GRADE 5				
1	100 ea., 1/4"-28 x 1/2"	532328			
2	100 ea., 1/4"-28 x 1"	532327			
3	50 ea., 1/4"-28 x 1 1/2"	532326			
4	50 ea., 1/4"-28 x 2"	532324			
5	50 ea., 5/16"-24 x 1/2"	532325			
6	50 ea., 5/16"-24 x 1"	532323			
7	50 ea., 5/16"-24 x 1 1/2"	532322			
8	50 ea., 5/16"-24 x 2"	532321			
9	50 ea., 5/16"-24 x 2 1/2"	532223			
10	100 ea., 3/8"-24 x 1/2"	763307			

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS 789	VENDOR NO. 08620	C.C. 9	ITEM	FUNCT. OR ORDER 100267A	SUB 771	ESTIMATED COST \$
REQUISITION NO.	REQUESTED BY R. Larsen					
TO BE USED FOR Mach Shop Fasteners						

P.O. NO. 501596  
RELEASE BR-1051  
DATE 9-14-83

RECEIVED FROM

Barrett Hardware Co.  
324 Henderson  
Joliet, IL 60434

(Page 3 of 4)

RECEIVED AT

COMMONWEALTH EDISON CO.  
Braidwood Nuclear Station  
E/S Rt. 53, 1 1/2 Miles South Rt. 113  
Braidwood, Illinois 60408  
Attn: Dave Cline, Storekeeper

CARRIER

VENDOR

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED E/M	PRO NO.	DEL/SHIPPING TICKET NO.
---	--------	----------	----------------------	---------	-------------------------

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
22	25 ea., 7/16"-20 x 4"	532334	25	EA	
23	50 ea., 1/2"-20 x 1"	532333	50	EA	
24	50 ea., 1/2"-20 x 1 1/2"	532332	50	EA	
25	50 ea., 1/2"-20 x 2 1/2"	532222	50	EA	
26	50 ea., 1/2"-20 x 3"	532330			
27	25 ea., 1/2"-20 x 4"	532329			
THE FOLLOWING ARE: UNF FULL THICKNESS HEX NUTS					
28	300 ea., 1/4"-28	535809	300	EA	
29	300 ea., 5/16"-24	535897	300	EA	
30	300 ea., 3/8"-24	535810	300	EA	
31	300 ea., 7/16"-20	535898	300	EA	

PARTIAL

RECEIVED AND CHECKED BY DATE

Vidmar 10-15-83

APPROVED DATE

D. Pietraszewski 10-19-83

ENTERED BY

DATE

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-24 31 53581.0

Fastener Description: HEX NUT 3/8"-24

Description of Sample Stock Location: 24 K

Material Specification as Documented by Licensee Records: SEE ATTACHED 7.0.  
501596 BR-1051

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: NON-SAFETY RELATED

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

Vendor: BARRET HARDWARE

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart Date 12-21-87

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

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

Commonwealth Edison Company

SHIPMENT RELEASE

0106

ITEM CLASS 789	VENDOR NO. 08620	C.C. 9	ITEM	FUNCT. OR ORDER 100267A	SUB 771	ESTIMATED COST \$
ACQUISITION NO.	REQUESTED BY R. Larsen					
TO BE USED FOR Mach Shop Fasteners						

P.O. NO. 501596  
RELEASE BR-1051  
DATE 9-14-83

RECEIVED FROM  
Barrett Hardware Co.  
324 Henderson  
Joliet, IL 60434  
  
(Page 1 of 4)

RECEIVED AT  
COMMONWEALTH EDISON CO.  
Braidwood Nuclear Station  
E/S Rt. 53, 1 1/2 Miles South Rt. 113  
Braidwood, Illinois 60408  
Attn: Dave Cline, Storekeeper

**PARTIAL**

CARRIER  
V. [Signature]

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED E/N	PRO NO.	DEL SHIPPING ORDER NO.
---	--------	----------	----------------------	---------	------------------------

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	THE FOLLOWING ARE: UNRF HEX CAP SCREWS GRADE 5				
100	ea., 1/4"-28 x 1/2"	532328			
100	ea., 1/4"-28 x 1"	532327			
50	ea., 1/4"-28 x 1 1/2"	532326			
50	ea., 1/4"-28 x 2"	532324			
50	ea., 5/16"-24 x 1/2"	532325			
50	ea., 5/16"-24 x 1"	532323			
50	ea., 5/16"-24 x 1 1/2"	532322			
50	ea., 5/16"-24 x 2"	532321			
50	ea., 5/16"-24 x 2 1/2"	532223			
100	ea., 3/8"-24 x 1/2"	763307			

M.V. 10-17-83  
RECEIVED AND CHECKED BY [Signature] DATE  
APPROVED [Signature] DATE



Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS 789	VENDOR NO. 08620	C.C. 9	ITEM 100267A	FUNCT. OR ORDER 771	SUB S	ESTIMATED COST
REQUISITION NO.	REQUESTED BY R. Larson					
TO BE USED FOR Mach Shop Fasteners						

P.O. NO. 501596  
RELEASE BR-1051  
DATE 9-14-83

RECEIVED FROM

Barrett Hardware Co.  
324 Henderson  
Joliet, IL 60434

(Page 3 of 4)

RECEIVED AT

COMMONWEALTH EDISON CO.  
Braidwood Nuclear Station  
E/S Rt. 53, 1 1/2 Miles South Rt. 113  
Braidwood, Illinois 60408  
Attn: Dave Cline, Storekeeper

CARRIER

VENDOR

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED E/M	PRO NO.	DEL/SHIPPING TARIFF #
---	--------	----------	-------------------	---------	-----------------------

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING US
22	25 ea., 7/16"-20 x 4"	532334	25	EA	
23	50 ea., 1/2"-20 x 1"	532333	50	EA	
24	50 ea., 1/2"-20 x 1 1/2"	532332	50	EA	
25	50 ea., 1/2"-20 x 2 1/2"	532222	50	EA	
26	50 ea., 1/2"-20 x 3"	532330			
27	25 ea., 1/2"-20 x 4"	532329			
THE FOLLOWING ARE: UNF FULL THICKNESS HEX NUTS					
28	300 ea., 1/4"-28	535809	300	EA	
29	300 ea., 5/16"-24	535897	300	EA	
30	300 ea., 3/8"-24	535810	300	EA	
31	300 ea., 7/16"-20	535898	300	EA	

PARTIAL

RECEIVED AND CHECKED BY Vidmar 10-15-83	DATE	ENTERED BY	DATE
APPROVED J. Pietraszewski	DATE		
	10-19-83		

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-07 51 213 A97

Fastener Description: HEX HEAD CAP SCREW 1/4 X 5  
P/N 6513293H03

Description of Sample Stock Location: 325-05

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
728535 1-6A

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: WESTINGHOUSE

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart Date 12-21-87

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

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

Attachment 1

Fastener Testing Data Sheet

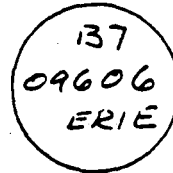
\*Sample ID# BR-10 51 213 A99

Fastener Description: BOLT 7/8 - 9UNC2A X 2 1/4  
P/N 6513293M13

Description of Sample Stock Location: 325-05

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
728538 1-6A

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: WESTINGHOUSE

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart Date 12-21-87

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

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

# Commonwealth Edison Company

REC. TKT. N

00110

DA 9072 (S) 2-78

ITEM CLASS 570	VENDOR NO. 90870E	C.C.	ITEM 9	FUNCT. OF ORDER 100130A	SUB.	EST. COST \$
EQUIPMENT 50-4677	REQUESTED BY BOYER-GILLIOM			PLUMBER - 020		
TO BE USED FOR NCS9	SHAPE PARTS BRAIDWOOD					

P.O. NO. 728538  
RELEASE 1-6A  
DATE 3-17-80

RECEIVED FROM  
WESTINGHOUSE ELECTRIC CORP.  
ATTN: MR. J. V. MATTINGLY  
P.O. BOX 1827  
INDIANAPOLIS, IN 46206

RECEIVED AT  
COMMONWEALTH EDISON CO.  
BRAIDWOOD STATION  
EAST OF RT. 53, 1 1/2 MILES SOUTH OF RT. 113  
BRAIDWOOD, ILLINOIS 60408  
ATTN: DAVE CLINE/STOREKEEPER

CARRIER  
ROADWAY EXPRESS

THE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO. 705-11938-8	DEL/SHIPPING TICS
--	--------	----------	---------------	------------------------	-------------------

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING
1	18EA MANWAY GASKET 390A029H01	213B00	18	EA	
2	8EA MANWAY CLOSURE BOLT 651B293H01	213A95	8	EA	
3	2EA MANWAY INSERT 651B110H01	213A96	2	EA	
5	6EA SEC. MANWAY CLOSURE BOLT 651B295H03	213A97	6	EA	
6	18EA SEC. MANWAY GASKET 390A029H01	114761	18	EA	
7	6EA SEC. HANDHOLE CLOSURE 651B293H05	213A98	6	EA	
8	16EA SEC. MANWAY GASKET 390A029H02	115700	16	EA	
9	1EA MANWAY BRACKET 389A200H01	114A01	1	EA	
10	12EA INSTR. OPEN CLOSURE BOLT 651B293H13	213A99	12	EA	

**PARTIAL**  
**TEMPORARY FUNCTION - 00000**

RECEIVED AND CHECKED BY DATE

4 RECEIVING  
88-6066(S) 10-77

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS 870	VENDOR NO. 96870E	C.C.	ITEM	FUNCT. OR ORDER	SUB
REQUISITION NO. SO-4676			REQUESTED BY BOYER-GILLIOM		
TO BE USED FOR S.S.S. SPARE PARTS, BRAIDWOOD			SEE BELOW		

P.O. NO. 728538  
RELEASE 1-6  
DATE 10-25-79

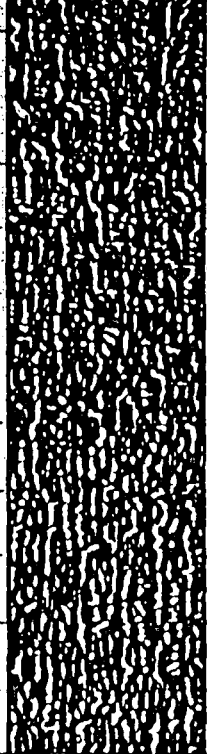
ACCOUNTING USE

RECEIVED FROM  
WESTINGHOUSE ELECTRIC CORP  
ATTN: MR. J.V. MATTINGLY  
P.O. BOX 1827  
INDIANAPOLIS, IN 46206

RECEIVED AT  
COMMONWEALTH EDISON CO.  
BRAIDWOOD STATION C/O STOREKEEPER:  
D. CLINE  
EAST-SOUTH OF IL. RT. 53  
1-1/2 MILE SOUTH OF ROUTE 113  
BRAIDWOOD, IL 60408

DATE		NUMBER
MO.	DAY	
DUE DATE		CASH DISC. AMT.
MO.	DAY	
CARRIER		

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL/SHIPPING TICKET NO.
---	--------	----------	---------------	---------	-------------------------



DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
G.A. Code "A" and "D" items on attached SPIN RCPCSG Are Safety Related.				
10 CFR Part 21 and the Quality Assurance Documentation Requirements apply to these items. Remaining items are Non-Safety Related and no Documentation is required.				
FUNCTION: A. Item 9: 100130A \$3200.00				
B. Remainder: 020 \$7300.00				

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS 870	VENDOR NO. 96870E	C.C.	ITEM FUNCT. OR ORDER	SUB
REQUISITION NO. QSO-4676	REQUESTED BY BOYER-GILLIOM			
TO BE USED FOR N.S.S.S. SPARE PARTS, BRAIDWOOD				

P.O. NO. 728538

RELEASE

1-5

DATE

10-25-79

ACCOUNTING USE

RECEIVED FROM

WESTINGHOUSE ELECTRIC CORP  
ATTN: MR. J.V. MATTINGLY  
P.O. BOX 1827  
INDIANAPOLIS, IN 46206

RECEIVED AT

COMMONWEALTH EDISON CO.  
BRAIDWOOD STATION C/O STOREKEEPER:  
D. CLINE  
EAST-SOUTH OF IL. RT. 53  
1-1/2 MILE SOUTH OF ROUTE 113  
BRAIDWOOD, IL 60408

INVOICE

DATE		NUMBER
MO.	DAY	
DUE DATE		CASH DISC. AMT.
MO.	DAY	

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL/SHIPPING TICKET NO.
---	--------	----------	---------------	---------	-------------------------

DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
<p><b>QUALITY ASSURANCE DOCUMENTATION REQUIREMENTS:</b></p> <p>Quality assurance documentation shall be furnished in accordance with Westinghouse Product Assurance Procedure 5.16, Rev. 2.</p> <p>Upon receipt of order, quality assurance documentation in the form of a Westinghouse Unpriced Purchase Order detailing the documentation requirements of each item, and a copy of the applicable Westinghouse E-Spec. and/or drawing, shall be forwarded to the Storekeeper at the receiving location for our review. In addition, one copy of the unpriced purchase order shall be sent to:</p> <p>George J. Adamaitis Production Stores, RM. 1230 P.O. Box 767 Chicago, IL 60690</p> <p>Quality assurance documentation, in the form of a Westinghouse Quality Release, shall accompany the material at the time of shipment.</p>				

RECEIVED AND CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ ENTERED BY \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

4 RECEIVING TICKET  
86-5085(5) 77

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB
REQUISITION NO.	REQUESTED BY				
TO BE USED FOR					

P.O. NO. 728538  
RELEASE 1-6  
DATE 10-25-73

ACCOUNTING USE

RECEIVED FROM

RECEIVED AT

COMMONWEALTH EDISON CO.

INVOICE

DATE		NUMBER
MO.	DAY	
DUE DATE		CASH DISC. AMT.
MO.	DAY	

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL/SHIPPING TICKET NO.
---	--------	----------	---------------	---------	-------------------------

DESCRIPTION

STORES ITEM

QTY. RECD.

UNIT

ACCOUNTING USE

QUALITY ASSURANCE DOCUMENTS AS SPECIFIED HEREIN ARE AN INTEGRAL PART OF THIS ORDER. ONE COPY OF THE SPECIFIED DOCUMENTS, REFERENCING THE PURCHASE ORDER NUMBER, IS REQUIRED WITH THE SHIPMENT OF MATERIAL. INVOICE PAYMENTS WILL BE WITHHELD UNTIL DOCUMENTATION IS RECEIVED. AS REQUIRED BY THE NUCLEAR REGULATORY COMMISSION, THE SELLER IS HEREBY NOTIFIED THAT THE PROVISIONS OF NUCLEAR REGULATORY COMMISSION REGULATION 10 CFR PART 21 APPLY TO THIS PURCHASE ORDER.

RECEIVED AND CHECKED BY DATE ENTERED BY DATE

APPROVED DATE

RECEIVING TICKET

Forward promptly upon receipt of material or service to ACCOUNTS PAYABLE DEPARTMENT

4 RECEIVING TICKET  
86-6065(S) 1

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS 870	VENDOR NO. 96870E	C.C.	ITEM	FUNCT. OR ORDER	SUB
REQUISITION NO. GSO-4676	REQUESTED BY BOYER-GILLIOM				
TO BE USED FOR N.S.S.S. SPARE PARTS, BRAIDWOOD					

P.O. NO. 728538  
RELEASE 1-5  
DATE 10-25-79

ACCOUNTING USE

RECEIVED FROM  
WESTINGHOUSE ELECTRIC CORP  
ATTN: MR. J.V. MATTINGLY  
P.O. BOX 1827  
INDIANAPOLIS, IN 46206

RECEIVED AT  
COMMONWEALTH EDISON CO.  
BRAIDWOOD STATION C/O STOREKEEPER:  
D. CLINE  
EAST-SOUTH OF IL. RT. 53  
1-1/8 MILE SOUTH OF ROUTE 113  
BRAIDWOOD, IL 60408

INVOICE	
DATE	NUMBER
MO. DAY	
DUE DATE	CASH DISC. AMT.
MO. DAY	
CARRIER	

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL/SHIPPING TICKET NO
---	--------	----------	---------------	---------	------------------------

DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
<p>THE CONTRACTOR SHALL FURNISH COMMONWEALTH EDISON COMPANY WITH THE SHIPMENT, ANY SPECIAL INSTRUCTIONS, SUCH AS SHELF LIFE, PREVENTIVE MAINTENANCE, LEVEL OF STORAGE, NEEDED DURING HANDLING OR STORAGE OF THE SPARE PARTS. EQUIPMENT OR MATERIAL TO MAINTAIN QUALITY PRIOR TO INSTALLATION OR USE.</p>				

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		

Forward promptly upon receipt of material or



Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-04 51 761 EOB

Fastener Description: PHILLIPS HEAD SCREW A-143 GR. B-8

Description of Sample Stock Location: 327-06K

Material Specification as Documented by Licensee Records: A-143 GR B-8

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: BABCOCK & WILCOX

QA Requirements Imposed on Vendor: SEE ATTACHED P.O. 290443

Licensee Representative: ROBERT P. GEBHART

Signature

Robert P. Gebhart

Date

12-21-87

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

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

REQUEST FOR PURCHASE -  
NUCLEAR GENERATING STATIONS  
C.E. CO. 86-6024 (S) 6-84

ITEM CL.	VENDOR NUMBER	C.C.
----------	---------------	------

Requisition No.: BR074  
 P.O. and Rel. No.: 29044  
 VIA.  Small P.O. No.: \_\_\_\_\_  
 DATED JULY 20, 81

DATE 1-21-85

VENDOR BABCOCK & WILCOX CO  
3315 OLD FOREST ROAD  
P.O. BOX 1260 LYNCHBURG, VA 24505

SPECIAL REQUIREMENTS:

Handling   
 Storage   
 Shelf Life

REQUESTED BY R. Larsen

ORIG. EST. COST 9,981.00  
 COST THIS ENG. NC  
 CHARGE TO: 020

TO BE USED FOR: CHANGE ORDER TO CORRECT  
DOCUMENTATION REQUIREMENTS

DATE REQUIRED EIN

ITEM NO.	QUANTITY REQUIRED	DESCRIPTION	QA CLASSIFICATION			STORES ITEM NUMBER	SOI/ED RPRS.	NEW ITEMS				
			ASME	SAFE-TY	RELIABILITY			FOR STOCK - TO BE CODED				
							SPARE PARTS	MAT'L	SUPP.	MIN. QUAN.	MAX. QUAN.	
		COMMERCIAL GRADE DOCUMENTATION REQUIRED.										
		10 CFR PART 21 IS NOT APPLICABLE										
		ALL OTHER PURCHASE ORDER REQUIREMENTS REMAIN THE SAME.										

APPROVED BY <u>J. Hoffman</u>	IDENTITY CODE <u>    </u>	<u>H. Ellison</u> 1-25-85	<u>J. R. Williams</u> 1-30-85	<u>J. Pietraszewski</u>	DATE <u>2-7-85</u>
DEPT/HEAD		QUALITY CONTROL	QA INSP./ENGINEER	STORES SUPERVISOR	
DATE RECEIVED		PURCHASE ORDER NO.		STOCKMAN	DATE

REQUEST PURCHASE -  
NUCLEAR GENERATING STATIONS  
C.E. CO. 88-6024 (S) 6-84

ITEM CL.	VENDOR NUMBER	C.C.
----------	---------------	------

Requisition No.: 118 0111 11  
 ORDER  P.O. and Ref. No.: 290443 20.P.  
 VIA.  Small P.O. No.:  
 DATED July 20, 84 2.9.85

DATE 1-21-85

VENDOR BABCOCK & WILCOX CO  
3315 OLD FOREST ROAD  
P.O. BOX 1260 LYNCHBURG, VA 24505

SPECIAL REQUIREMENTS:

Handling   
 Storage   
 Shelf Life

REQUESTED BY R. Larsen

ORIG. EST. COST 9,931.00  
 COST THIS ENG. NC  
 CHARGE TO: 020

TO BE USED FOR: CHANGE ORDER TO CORRECT  
DOCUMENTATION REQUIREMENTS

DATE REQUIRED EIN

ITEM NO.	QUANTITY REQUIRED	DESCRIPTION	QA CLASSIFICATION			STORES ITEM NUMBER	SCHED. FIGRS.	NEW ITEMS						
			ASME	SAFE-TY	RELIABILITY			FOR STOCK - TO BE CODED						
								SPARE PARTS	MATL	SUPP.	MIN. QUAN.	MAX. QUAN.		
		PLEASE MAKE THE FOLLOWING												
		CHANGES TO THIS PURCHASE ORDER												
		CHANGE THE FOLLOWING												
		STATEMENT FROM:												
		THIS ORDER IS SAFETY RELATED												
		10 CFR PART 21 IS APPLICABLE												
		TO:												
		THIS ORDER IS SAFETY RELATED												
		10 CFR PART 21 IS APPLICABLE												
		TO ITEMS # 1 AND # 2.												
		ITEMS # 3, 4, 5, 6, 7, 8, 9, 10,												
		AND # 11 ARE SAFETY RELATED												

APPROVED BY <u>J. Hillson</u> DEPT. HEAD	IDENTITY CODE □ □ □ □	1-25-85 Hillson 1-25-85	1-30-85 J.A. Williams QA INSP./ ENGINEER	DATE 2-7-85
DATE RECEIVED	PURCHASE ORDER NO.	STOCKMAN	STORES SUPERVISOR <u>A. Pietraszewski</u>	DATE

# 4 RECEIVING TICKET

RECEIVING TICKET - RECEIVING TICKET - RECEIVING TICKET - RECEIVING TICKET -  
Commonwealth Edison Company

## PURCHASE ORDER

ITEM CLASS	VENDOR NO.	CF	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST
878	SEE BELOW			020		
REQUISITION	REQUESTED BY					
BR074	J. Andrasco	A				
TO BE USED FOR Spare Parts For Reactor Vessels Byron & Braidwood Stations						
TOTAL						9,981.00

NUMBER  
**290443**  
DATE  
JUL 20 1984

UNBILLED NO. \_\_\_\_\_

ACCOUNTING USE (66-73) \_\_\_\_\_

INVOICE

DATE (28-29)		NUMBER (30-33)	
NO.	DAY		
DUE DATE (38-41)		CASH DISC. AMT. (42-48)	
NO.	DAY		

CARRIER \_\_\_\_\_

PRO NO. \_\_\_\_\_ DEL SHIPPING TICKET NO. \_\_\_\_\_

QTY RC'D	UNIT	ACCT. USE

RECEIVED AND CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED \_\_\_\_\_

BABCOCK & WILCOX CO  
3315 OLD FOREST RD  
P O BOX 1260  
LYNCHBURG, VA 24505

07880H

SHIP TO  
COMMONWEALTH EDISON CO.  
Braidwood Nuclear Station  
E/S Rt. 53.1 1/2 Miles So. Rt. 113  
Braidwood, IL 60408  
Attn: Dave Cline, Storekeeper

- TAX:  NONE  
 STATE  
 STATE & MUNICIPAL  
 SERVICE %  
 RTA %

F.O.B. Lynchburg, VA

SHIP VIA	DELIVERY REQUIRED	SHIPMENT PROMISED
	Earliest Normal	14-36 wks
TERMS OF PAYMENT	YOUR QUOTATION	BUYER TEL NO (312) 294-3417
NET 30	QCP-113R42	C. Adamaitis

P.O. LINE	ITEM	DESCRIPTION	C E ITEMNO
-----------	------	-------------	------------

ENTERED IN COMPUTER

THIS ORDER IS SAFETY RELATED 10 CFR PART 21 IS APPLICABLE for items 1+2 per C.O. attached

ITEMS 1 & 2 REQUIRE DOCUMENTATION IN ACCORDANCE WITH ASME SECTION III CL. 1, 1977 EDITION INCLUDING SUMMER 1978 ADDENDA. NOTE: ITEMS 3 thru 11 are S/R CG 10 CFR PART 21 IS NOT APPLICABLE per C.O. attached

PARTS BEING ORDERED ARE TO BE USED AS SPARE PARTS FOR REACTOR VESSELS ORIGINALLY ORDERED FROM WESTINGHOUSE PURCHASE ORDER: WNES 546-CVJ-195412-BP F/L SPEC. 2702-105

THESE SPARE PARTS ARE THOSE AS RECOMMENDED BY YOUR QUOTATION QCP-113 WITH ADDITIONS AND DELETIONS AS MEETS OUR REQUIREMENTS.

BY ACCEPTANCE OF THIS ORDER AND UPON NOTIFICATION, THE VENDOR AGREES TO PROVIDE ACCESS TO HIS FACILITIES FOR QUALITY INSPECTION AND AUDIT WHEN REQUIRED BY THE PURCHASER.

VENDOR TO SUPPLY DOCUMENTATION THAT HIS QUALITY ASSURANCE PROGRAM MEETS THE REQUIREMENTS OF ASME SECTION III, DIV. 1, SUBSECTION NCA, PARA. 4000, CURRENT EDITION, CURRENT ADDENDA, AND THAT THE ITEMS

not required for items 3 thru 11 per C.O. attached

SAFETY RELATED-DOC. REQUIRED R/R 4, 5, 6 - Storekeeper  
DEPARTMENT MEMO (Q.C. - JH, Q.A. - W.N. A. Dr. C. J. J. J.)  
X-W. ECK  
1x-Prod. Stores, 1x-J. Banderaki, Acct. Brwd. 3315 Old Forrest Rd.  
1x-L. C. Boyer, Prod. Stores PRODUCTION P. O. Box 1260

Commonwealth Edison Company  
POST OFFICE BOX 787 • CHICAGO, ILLINOIS 60604

62A

290443

PAGE 2	REQUISITION NO BR0741	DESCRIPTION	QUANTITY
		<p>SUPPLIED ON THIS PURCHASE ORDER WERE PROVIDED IN ACCORDANCE WITH THIS PROGRAM.</p> <p>NO MATERIAL WILL BE RECEIVED OR PAYMENT PROCESSED UNLESS ALL PARTS ARE TAGGED SHOWING CUSTOMER PURCHASE ORDER NUMBER P.O. LINE ITEM, C.E. STORES ITEM NUMBER, AND A BRIEF DESCRIPTION OF THE ITEM.</p> <p>THE CONTRACTOR SHALL FURNISH COMMONWEALTH EDISON COMPANY, WITH THE SHIPMENT, ANY SPECIAL INSTRUCTIONS NEEDED DURING HANDLING OR STORAGE OF THE SPARE PARTS, EQUIPMENT OR MATERIAL TO MAINTAIN QUALITY PRIOR TO INSTALLATION OR USE.</p> <p>VENDOR TO CERTIFY THAT THE ITEMS/SERVICES SUPPLIED ON THIS PURCHASE ORDER WERE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF HIS CURRENTLY APPROVED QUALITY ASSURANCE MANUAL.</p> <p>VENDOR TO CERTIFY THAT ALL CODE MATERIAL MEETS OR EXCEEDS THE REQUIREMENTS OF THE ORIGINAL CODE OF CONSTRUCTION.</p> <p>THE FOLLOWING ARE DOCUMENTATION REQUIREMENTS FOR ITEMS 1 &amp; 2:</p> <ul style="list-style-type: none"> <li>A) Certified Material Test Reports</li> <li>B) 100% Volumetric Exam (Ultrasonic)</li> <li>C) Physical Test Results (Tensile/Hardness)</li> <li>D) Certification of Heat Treatment (May Be On CMTR)</li> <li>E) Magnetic Particle Exam</li> <li>F) Certification of Dimensional Inspection (Including "Go"/"No Go" Thread Gages)</li> <li>G) Charpy Impact Test Results</li> <li>H) Certification To Cleaning, Packaging, Preserving Per ANSI N45.2 Requirements</li> <li>I) Certificate of Conformance That All Purchase Order Requirements Have Been Met</li> <li>J) Certificate of Phosphate Coatings</li> <li>K) Approved Contract Variation Requests</li> </ul> <p>THE FOLLOWING ARE DOCUMENTATION REQUIREMENTS FOR ITEMS 3 &amp; 4:</p> <ul style="list-style-type: none"> <li>A) Certified Material Test Reports</li> <li>B) Physical Test Results (Tensiles/Hardness)</li> </ul>	

*Applicable to items and specified drawings*

62 P<sup>2</sup>

290443

REQUISITION NO

BR0741

QUANTITY

DESCRIPTION

CF ITEM NO

- C) Certification of Dimensional Inspections (Including "Go"/"No Go" Thread Gages)
- D) Certification That All Parts Were Cleaned, Packaged, and Preserved Per ANSI N45.2
- E) Certificate of Conformance That All Purchase Order Requirements Have Been Met

THE FOLLOWING ARE DOCUMENTATION REQUIREMENTS FOR ITEMS 5, 6, 7, 8, 9:

- A) Certification That All Parts Were Cleaned, Packaged and Preserved Per ANSI N45.2
- B) Certificate of Conformance That All Purchase Order Requirements Have Been Met

THE FOLLOWING DOCUMENTATION REQUIREMENTS ARE FOR ITEMS 10 & 11:

- A) Certificate of Conformance That All Purchase Order Requirements Have Been Met

*"ALL EACH NET"*

4	ea., Washer, Concave, Spherical 7" Mat'1. SA-540 GR.B23 Class 3 Mark No. 89-3 P/N 1104643-004	\$ 760.00	761F05
4	ea., Washer, Convex, Spherical 7" Mat'1. SA-540 GR.B23 Mark No. 89-4 P/N 1104643-005	\$ 760.00	761B06
4	ea., Insert, Bottom, Carbon Steel (C1018) P/N 1104643-006 Mark No. 89-5	\$ 330.00	761D06
4	ea., Insert, Top SAE 1020 or Similar P/N 1104643-007 Mark No. 89-7	\$ 104.00	761G06
1	ea., Eye Bolt P/N 1104643-210 Mark No. 89-6	\$ 70.00	761B07
1	ea., Eye Bolt P/N 1104643-211 Mark No. 98-3	\$ 135.00	761D07
16	ea., Clips, Retaining, Mat'1. AISITP304 P/N 1104643-104 Mark No. 87-3	\$ 54.00	761G07
16	ea., Screw, Phillips Head, Binding Mat'1. A-193 GR.B-8 0.0002" - 0.0004" Chrome Plated P/N 1104643-105 Mark No. 87-4	\$ 6.00	761E08
20	ea., "O"-Ring Gasket Mat'1. Buna-N-60 Duro. P/N 1104643-008 Mark No.	\$ 44.40	761H08

62 4

NUMBER

290443

REGISTRATION NO.

BR0741

PAGE  
4

LINE  
ITEM

QUANTITY

DESCRIPTION

ITEM NO.

98-13

10

2

ea., Key, Stainless Steel, Mat'l. A-193 GR.B-8 P/N 1104643-214 Mark.  
No. 98-14

761C09

\$424.00 EA.NET

11

2

ea., Screw, Socket Hd. Cap, Stainless Steel Mat'l. ASA B18-3  
P/N 1104643-215 Mark No. 98-15

761C09

\$32.00 EA.NET

TERMS & CONDITIONS OF CECO P.O. 213914  
SHALL GOVERN THIS ORDER.

Quality assurance documents as specified herein are an  
intergral part of this order. One copy of specified  
documents, referencing the purchase order number, is  
required with the shipment of material. Invoice payments  
will be withheld until documentation is received.

Attachment 1

Fastener Testing Data Sheet

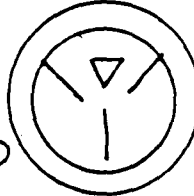
\*Sample ID# BR-03 51 774E16

Fastener Description: HEX HEAD CAP SCREW 1/2"-13 X 2 3/4"

Description of Sample Stock Location: 329-32L

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
502052 BR1006

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: ACTION THREADED PRODUCTS

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GERHART

Signature

A handwritten signature in cursive script, appearing to read "Robert P. Gerhart".

Date

12-21-87

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

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



Attachment 1

Fastener Testing Data Sheet

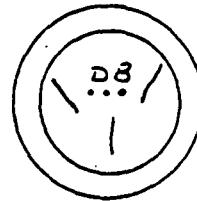
\*Sample ID# BR-05 31 774D16

Fastener Description: HEX HEAD CAP SCREW 1/2"-13 X 6 3/4"

Description of Sample Stock Location: 329-18

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
302052 BR 1006

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: ACTION THREADED PRODUCTS

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GERHART

Signature Robert P. Gerhart

Date 12-21-07

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

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

Attachment 1

Fastener Testing Data Sheet

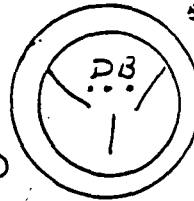
\*Sample ID# BR-06 51 774C16

Fastener Description: HEX HEAD CAP SCREW 1/2-13 x B 1/4 GR. 5

Description of Sample Stock Location: 329-18

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
502052 BR 1006

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: ACTION THREADED PRODUCTS

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart Date 12-21-87

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

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

Commonwealth Edison Company

SHIPMENT RELEASE

SAFETY RELATED  
COMMERCIAL GRADE  
DOCUMENTATION REQUIRED  
QC-G.S. QA-W.G.

ITEM CLASS 531	VENDOR NO. 01745A	C.C. 9	ITEM	FUNCT. OR ORDER 020	SUB	ESTIMATED COST \$ 930.00
REQUISITION NO. BR2082	REQUESTED BY J. GIUFFRE					
TO BE USED FOR  (2) 1DGO1KA (B)						

P.O. NO. 502052  
RELEASE BR 1006  
DATE 4/9/87

RECEIVED FROM  
ACTION THREADED PRODUCTS INC.  
7440 WEST 100TH PLACE  
BRIDGEVIEW, ILLINOIS 60455

RECEIVED AT  
COMMONWEALTH EDISON CO.  
BRAIDWOOD NUCLEAR STATION  
E/S RT. 53, 1 1/2 MILES SO. RT. 113  
BRAIDWOOD, ILLINOIS 60408  
ATTN: DAVE CLINE, STOREKEEPER

PAGE 1 OF 5

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED 4/14/87	PRO NO.	DEL / SHIPPING TRKET NO
---	--------	----------	--------------------------	---------	-------------------------

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	THIS ITEM IS COMMERCIAL GRADE.				
1	EA. SAE GRADE 5, BOLTS 1/2 - 13 X 8-1/4 (COOPER INDUSTRIES NO. 1-01F-001-032-082)	774C16	100	EA	
2	EA. SAE GRADE 5, BOLTS 1/2-13 X 6-3/4 (COOPER INDUSTRIES NO. 1-01F-001-032-006)	774D16	100	EA	
3	EA. SAE GRADE 5, BOLTS 1/2 - 13 - 2-3/4 (COOPER INDUSTRIES NO. 1-01F-001-032-026)	774E16	100	EA	
	QUALITY ASSURANCE DOCUMENTS AS SPECIFIED HEREIN ARE AN INTEGRAL PART OF THIS ORDER. ONE COPY OF THE SPECIFIED DOCUMENTS, REFERENCING THE PURCHASE ORDER NUMBER, IS REQUIRED WITH THE				

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST
REQUISITION NO.	REQUESTED BY					\$
TO BE USED FOR						

P.O. NO. 502052  
 RELEASE BR 1006  
 DATE 4/9/87

RECEIVED FROM

┌  
  
└

RECEIVED AT

COMMONWEALTH EDISON CO.

PAGE 2 OF 5

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL / SHIPPING INSTRUCTIONS
---	--------	----------	---------------	---------	-----------------------------

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	SHIPMENT OF MATERIAL. INVOICE PAYMENTS WILL BE WITHHELD UNTIL DOCUMENTATION IS RECEIVED.				
	IF FOR ANY REASON THE MATERIAL OR PART NUMBERS DIFFER FROM THE PURCHASE ORDER, PLEASE STATE WHY ON THE DOCUMENTATION.				
	THE CONTRACTOR SHALL FURNISH COMMONWEALTH EDISON COMPANY WITH THE SHIPMENT, ANY SPECIAL INSTRUCTIONS NEEDED DURING HANDLING OR STORAGE OF THE SPARE PARTS, EQUIPMENT OR MATERIAL TO MAINTAIN QUALITY PRIOR TO INSTALLATION OR USE.				

RECEIVED AND CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ ENTERED BY \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

Commonwealth Edison Company

SHIPMENT RELEASE

86-5085 (S) 6

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST
REQUISITION NO.	REQUESTED BY					\$
TO BE USED FOR						

P.O. NO. 502052  
 RELEASE BR 1006  
 DATE 4/9/87

RECEIVED FROM

RECEIVED AT

COMMONWEALTH EDISON CO.

PAGE 3 OF 5

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL. SHIPPING INVOICE NO.
QUANTITY	DESCRIPTION	STORES ITEM	QTY. REC'D	UNIT	ACCOUNTING USE
	BY ACCEPTANCE OF THIS ORDER AND UPON NOTIFICATION, THE VENDOR AGREES TO PROVIDE ACCESS TO HIS FACILITIES FOR QUALITY INSPECTION AND AUDIT WHEN REQUIRED BY THE PURCHASER.				
	VENDOR SHALL SUPPLY A CERTIFICATE OF CONFORMANCE OR OTHER EQUIVALENT CERTIFICATION THAT CERTIFIES THE ITEMS SUPPLIED ARE AS IDENTIFIED ON THE PURCHASE ORDER. WHERE THE PURCHASE ORDER DOES NOT SPECIFICALLY IDENTIFY THE SPECIFICATION, NATIONAL STANDARD OR CATALOG NUMBER TO WHICH THE ITEM IS MANUFACTURED, THE APPLICABLE CORRESPONDING REQUIREMENTS SHALL BE IDENTIFIED AND PROVIDED BY THE VENDOR IN SUPPORT OF THE				

RECEIVED AND CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ ENTERED BY \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

IDENTITY [ ] [ ] [ ] [ ] [ ] [ ]

86-5065 (S) 6-

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST
REQUISITION NO.	REQUESTED BY					\$
TO BE USED FOR						

P.O. NO. 502052  
 RELEASE BR 1006  
 DATE 4/9/87

RECEIVED FROM

RECEIVED AT

COMMONWEALTH EDISON CO.

PAGE 4 OF 5

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL / SHIPPING INTR. NO.
QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD	UNIT	ACCOUNTING USE
	CERTIFICATION. (ENVIRONMENTAL QUALIFICATION REPORT NUMBER(S) SHALL BE IDENTIFIED ON THE CERTIFICATION WHEN APPLICABLE.)				
	CERTIFICATES FURNISHED BY THE VENDOR SHALL BE ATTESTED TO BY THE VENDOR'S EMPLOYER WHO IS RESPONSIBLE FOR ASSURING THAT THE ITEMS MEET THE PURCHASE ORDER REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE THE CERTIFICATE OF CONFORMANCE FORM 4-51-1/FORM 4-51.4 (OR INCLUDE HIS CERTIFICATE).				
	ALL ITEMS ARE TO BE IDENTIFIED BY TAGGING OR MARKING WHICH IS TRACEABLE TO THE COMMONWEALTH EDISON CO. PURCHASE ORDER ITEM				

RECEIVED AND CHECKED BY

DATE

ENTERED BY

DATE

APPROVED

DATE

Commonwealth Edison Company

SHIPMENT RELEASE

P.O. NO. 502052  
 RELEASE BR 1006  
 DATE 4/9/87

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST \$
REQUISITION NO.	REQUESTED BY					
TO BE USED FOR						

RECEIVED FROM

RECEIVED AT

COMMONWEALTH EDISON CO.

PAGE 5 OF 5

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	REL / SHIPPING TICKET NO
---	--------	----------	---------------	---------	--------------------------

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	<b>DESCRIPTION AND ASSOCIATED DOCUMENTATION.</b>				

RECEIVED AND CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ ENTERED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-02 SI 771B20

Fastener Description: SOCKET HEAD CAP SCREW 3/8-24 X 1 3/4 GR-8

Description of Sample Stock Location: 32B-05

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
502051 YX82

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: MANUFACTURERS BOLT & NUT

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart

Date 12-21-87

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

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



COPY 5 - RIVING DEPT.

Commonwealth Edison Company

SHIPMENT RELEASE

PIC REC. 00189  
ACCOUNTING USE

ITEM CLASS 531	VENDOR NO. 56938A	C.C.	ITEM	FUNCT. OR ORDER	SUB	X
REQUISITION NO. 004770	REQUISITION DATE 07/16/86			020		
TO BE USED FOR STOCK REPLENISHMENT	QUANTITY REQUIRED 200					

P.O. NO. 502054

RELEASE XX82

DATE 07/16/86

56938A  
**MANUFACTURERS BOLT & NUT**  
 951 W THORNDALE AVE  
 BENSENVILLE, IL 60106

SHIP TO  
**COMMONWEALTH EDISON CO.**  
 BRAIDWOOD STATION  
 E/S RT 53, 1.5 MI S. RT 113  
 BRAIDWOOD, ILLINOIS 60408

DATE		NUMBER
MO.	DAY	
DUE DATE		CASH DISC. AMT
MO.	DAY	

TAX.

<input type="checkbox"/> NONE	F.O.B.	SHIP VIA	DELIVERY REQUIRED 07/21/86	SHIPMENT PROMISED
<input type="checkbox"/> STATE		TERMS OF PAYMENT	YOUR QUOTATION	BUYER
<input type="checkbox"/> STATE & MUNICIPAL				
<input checked="" type="checkbox"/> SERVICE				

CARRIER **UPS**  
 PRO NO. \_\_\_\_\_  
 ADJ / CLAIM NO. \_\_\_\_\_

QUANTITY	DESCRIPTION	CE ITEM NO.	QTY RCD	UNIT
200 EA	<p>CONFIRMING ORDER - DO NOT DUPLICATE PAGE 1</p> <p>SCREW, CAP; SOCKET HEAD, 3/8-24 X 1-3/4 IN., GRADE 8, BLACK STEEL. ANCHOR PART NUMBER: ***** END OF ORDER *****</p>	<p>771B20 -807646- EA</p>	200	EA

**COMPLETED**

RECEIVED AND CHECKED BY <i>C. Ferreri</i> 7/28/86	DATE 7/28/86	ENTERED BY <i>Fred Williams</i>	DATE 7/28/86
APPROVED <i>D. L. ...</i> 8912	DATE		

**INFORMATION  
ONLY**

Evaluation Number 86-047

COMPONENT/PART TECHNICAL EVALUATION

PAGE 1 of 5 \*

REQUESTOR SHOULD PROVIDE ALL INFORMATION IN PART A WHICH IS AVAILABLE

**INFORMATION  
ONLY**

A. Evaluation

1. Identify the following if available

- a. Reason for initiating the Evaluation UPGRADE NSR  
CAP SCREWS TO BE SRCG
- b. Part Description CAP SCREW 3/8-24 x 1 3/4"
- c. Manufacturer Part # MFG BOLT AND NUT # 3020-2235
- d. Stores Item # 807646
- e. Present Part Classification NON SR
- f. Component EPN 1MS001A-D
- g. Component Classification SAFETY RELATED
- h. Affected Component Description MSIV
- i. Work Request # (if applicable) \_\_\_\_\_
- j. Requestor Name MIKE BOYLE

NOTE

THE WORD "PART" USED BELOW DESIGNATES THE ITEM UNDER EVALUATION (COMPONENT OR PART OF A COMPONENT).

2. Design/purchase requirements and specifications.

- a. Identify the original design/purchase req-specs, E.Q. requirements, etc.

S+L SPEC L-2756

THE CAP SCREWS SPECS WERE NOT IDENTIFIED  
IN -2756.

- b. Identify any known changes to the above.

THIS EVALUATION - USING S+L CQD 91006 REV0  
FURTHER IDENTIFY THE CAP SCREW SPECIFICATIONS.

APPROVED

FEB 07 1986

BRAIDWOOD  
OR-07E REVIEW

c. Demonstrate the part to meet the req-specs with any combination of the items below:

1) By including requirements on purchase order. List here:

N/A

**INFORMATION  
ONLY**

2) With functional tests, material analysis, dimensional checks, etc. as necessary (for purchase orders - specify this for receipt inspection). List here:

VISUAL INSPECTION PER CQD 31006 REV 0

3) With the documentation that arrived with the part (for on-hand parts only). List here:

NO DOCUMENTATION REQUIRED BEYOND

PART IDENTIFICATION PER CQD 31006 REV 0

3. Visual inspection for compatibility and quality. Perform those applicable below.

a. Compare this part to the original part (when accessible) and list any differences.

N/A

b. Do these differences affect the functions of the part or its neighboring parts?

N/A

APPROVED

FEB 07 1986

BRAIDWOOD  
ON-SITE REVIEW

- c. Compare the part to the manufacturer's catalog and/or drawing. List any differences between make, model #, serial #, description, etc.

COMMERCIALY AVAILABLE BOLTS CAN REPLACE  
TELETYPE BOLTS PER CQD 31006 REV 0.

- d. Do any of these differences affect the functions of the part or it's neighboring parts?

N/A

**INFORMATION  
ONLY**

- e. Specify visual inspection requirements for receipt inspection (for purchase order).

QC TO VERIFY THE PARTS IN STORES UNDER  
SIN 807646 ARE IDENTIFIED AS MANUFACTURERS  
BOLT AND NUT PART NUMBER 3020-2235 AS  
REQUIRED BY CQD 31006 REV 0.

APPROVED  
FEB 07 1985

BRAIDWOOD  
ON-SITE REVIEW

B. Evaluation Results and Approval

**INFORMATION  
ONLY**

1. Acceptance/non-acceptance (check applicable).

This part is NOT acceptable to replace the S/R original.

This part IS acceptable to replace the S/R original conditional upon the following (receipt inspection, etc.): QC INSPECTION PER 3.C.

2. Technical Evaluation Committee Approval RAUline 8-28-86

Tech Staff Supervisor/Designee Jim 1/8/28/86

Q.C. Supervisor/Designee Pillison 8-28-86

Assist. Superintendent-Maintenance/Designee W. Poyett 8-28-86

(Final)

APPROVED  
FEB 07 1986

BRAIDWOOD  
ON-SITE REVIEW

4. Identify the people contacted to assist in the evaluation.  
Name, Organization, Phone Date Discussion

SEE CPD 31006 REVU

**INFORMATION  
ONLY**

APPROVED

FEB 07 1965

BRAIDWOOD  
ON-SITE REVIEW

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-01 SI 771F51

Fastener Description: SOCKET HEAD CAP SCREW 5/16-18 X 7/8 GR-8

Description of Sample Stock Location: 330-4B

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
502026 BR1001

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: SCI CORP.

QA Requirements Imposed on Vendor: SEE ATTACHED P.O. 502026 BR1001

Licensee Representative: ROBERT P. GEBHART

Signature

R.P. Gebhart

Date

12-21-07

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

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

5 RECEIVING COPY

Commonwealth Edison Company

SHIPMENT RELEASE

86-6066 (S) 6

EM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST
531	87130R	9		020		\$
REQUISITION NO.	REQUESTED BY					
RR 1760	M. MUSTAL					
TO BE USED FOR						
LIMITORQUE VLV OPERATORS EVAL 86-0118						

P.O. NO. 502026  
RELEASE BR 1001  
DATE 10/31/86

RECEIVED FROM

SCI CORPORATION  
812 E. BROADWAY  
STRAVATOR, IL 61364

RECEIVED AT

COMMONWEALTH EDISON CO.  
BRAIDWOOD NUCLEAR STATION  
E/S RT. 53, 1 1/2 MILES SO. RT. 113  
BRAIDWOOD, IL 60408  
ATTN: DAVE CLINE, STOREKEEPER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL./SHIPPING TICKET NO.
			10/20/86		

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
CONFIRMING ORDER DO NOT DUPLICATE					
THIS ITEM IS COMMERCIAL GRADE.					
1	50 EA. SOCKET HEAD CAP SCREW, CARBON STL CADMIUM PLATED 5/16" - 16 TPI 7/8" LONG GRADE 8	771F51	100	EA	" - 8-4
2	50 EA. SOCKET HEAD CAP SCREW, CARBON STEEL, GRADE 8, METRIC SIZE M8, STD. THREADS, 40MM LONG.	771G51	50	EA	
3	50 EA. HEX HEAD CAPSCREW, CARBON STL, CADMIUM PLATED, 3/8" - 16 TPI 1-1/4" LONG, GR5.	771B51	100	EA	
4	50 EA. HEX HEAD CAPSCREW, CARBON STL, CADMIUM PLATED, 1/2" - 13 TPI, 1-1/2" LONG, GR.5	771A52	50	EA	

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		



5 RECEIVING T. COPY

86-5066 (S)

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST
531	873308	9		020		\$
REQUISITION NO.	REQUESTED BY					
BR 1760	M. MUSTAL					
TO BE USED FOR						
LIMITORQUE VLV OPERATORS						
EVAL 86-0118						

P.O. NO. 502026  
 RELEASE BR 1001  
 DATE 10/31/86

RECEIVED FROM

SCI CORPORATION  
 812 E. BROADWAY  
 STREATOR, IL 61364

RECEIVED AT

COMMONWEALTH EDISON CO.  
 BRAIDWOOD NUCLEAR STATION  
 E/S RT. 53, 1 1/2 MILES SO. RT. 113  
 BRAIDWOOD, IL 60408  
 ATTN: DAVE CLINE, STOREKEEPER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL./SHIPPING TICKET NO.
			10/20/86		

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
50	EA. HEX HEAD GAP SCREW, CARBON STL., GRADE 5, CADMIUM PLATED, 5/16" - 18 TPI, 1-1/2" LONG	771B52	100	EA	11-12-MV
<p>QUALITY ASSURANCE DOCUMENTS AS SPECIFIED HEREIN ARE AN INTEGRAL PART OF THIS ORDER. ONE COPY OF THE SPECIFIED DOCUMENTS, REFERENCING THE PURCHASE ORDER NUMBER, IS REQUIRED WITH THE SHIPMENT OF MATERIAL. INVOICE PAYMENTS WILL BE WITHHELD UNTIL DOCUMENTATION IS RECEIVED.</p> <p>IF FOR ANY REASON THE MATERIAL OR PART NUMBERS DIFFER FROM THE PURCHASE ORDER, PLEASE STATE WHY ON THE DOCUMENTATION</p>					

RECEIVED AND CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ ENTERED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

5 RECEIVING

COPY

Commonwealth Edison Company

SHIPMENT RELEASE

86-6066 (S) 6

ITEM CLASS <b>531</b>	VENDOR NO. <b>87330B</b>	C.C. <b>9</b>	ITEM	FUNCT. OR ORDER <b>020</b>	SUB	ESTIMATED COST \$
REQUISITION NO. <b>RR 1760</b>	REQUESTED BY <b>M. MUSIAL</b>					
TO BE USED FOR <b>LIMITORQUE VLV OPERATORS EVAL 86-0118</b>						

P.O. NO. 502026  
RELEASE BR 1001  
DATE 10/31/86

RECEIVED FROM

SCI CORPORATION  
812 E. BROADWAY  
STREATOR, IL 61364

RECEIVED AT

COMMONWEALTH EDISON CO.  
BRAIDWOOD NUCLEAR STATION  
E/S RT. 53, 1 1/2 MILES SO. RT. 113  
BRAIDWOOD, IL 60408  
ATTN: DAVE CLINE, STOREKEEPER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED <b>10/20/86</b>	PRO NO.	DEL./SHIPPING TICKET NO.
---	--------	----------	----------------------------------	---------	--------------------------

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	<p>THE CONTRACTOR SHALL FURNISH COMMONWEALTH EDISON COMPANY WITH THE SHIPMENT, ANY SPECIAL INSTRUCTIONS NEEDED DURING HANDLING OR STORAGE OF THE SPARE PARTS, EQUIPMENT OR MATERIAL TO MAINTAIN QUALITY PRIOR TO INSTALLATION OR USE.</p> <p>BY ACCEPTANCE OF THIS ORDER AND UPON NOTIFICATION, THE VENDOR AGREES TO PROVIDE ACCESS TO HIS FACILITIES FOR QUALITY INSPECTION AND AUDIT WHEN REQUIRED BY THE PURCHASER.</p> <p>VENDOR SHALL SUPPLY A CERTIFICATE OF CONFORMANCE OR OTHER EQUIVALENT CERTIFICATION THAT CERTIFIES THE ITEMS SUPPLIED ARE</p>				

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		

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Commonwealth Edison Company

SHIPMENT RELEASE

86-5066 (S) 6

ITEM CLASS <b>531</b>	VENDOR NO. <b>87330B</b>	C.C. <b>9</b>	ITEM	FUNCT. OR ORDER <b>020</b>	SUB	ESTIMATED COST <b>\$</b>
REQUISITION NO. <b>BR 1760</b>	REQUESTED BY <b>M. MUSIAL</b>					
TO BE USED FOR <b>LIMITORQUE VLV OPERATORS EVAL 86-0118</b>						

P.O. NO. **502026**  
RELEASE **BR 1001**  
DATE **10/31/86**

RECEIVED FROM

SCI CORPORATION  
812 E. BROADWAY  
STREATOR, IL 61364

RECEIVED AT

COMMONWEALTH EDISON CO.  
BRAIDWOOD NUCLEAR STATION  
E/S RT. 53, 1 1/2 MILES SO. RT. 113  
BRAIDWOOD, IL 60408  
ATTN: DAVE CLINE, STOREKEEPER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED <b>10/20/86</b>	PRO NO.	DEL./SHIPPING TICKET NO.
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QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	<p><del>AS IDENTIFIED ON THE PURCHASE ORDER. WHERE THE PURCHASE ORDER DOES NOT SPECIFICALLY IDENTIFY THE SPECIFICATION, NATIONAL STANDARD OR CATALOG NUMBER TO WHICH THE ITEM IS MANUFACTURED, THE APPLICABLE CORRESPONDING REQUIREMENTS SHALL BE IDENTIFIED AND PROVIDED BY THE VENDOR IN SUPPORT OF THE CERTIFICATION. (ENVIRONMENTAL QUALIFICATION REPORT NUMBER(S) SHALL BE IDENTIFIED ON THE CERTIFICATION WHEN APPLICABLE).</del></p> <p><del>CERTIFICATES FURNISHED BY THE VENDOR SHALL BE ATTESTED TO BY THE VENDOR'S EMPLOYEE WHO IS RESPONSIBLE FOR ASSURING THAT THE</del></p>				

RECEIVED AND CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ ENTERED BY \_\_\_\_\_ DATE \_\_\_\_\_  
APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS <b>531</b>	VENDOR NO. <b>87330B</b>	C.C. <b>9</b>	ITEM	FUNCT. OR ORDER <b>020</b>	SUB	ESTIMATED COST \$
REQUISITION NO. <b>BR 1760</b>	REQUESTED BY <b>M. MUSIAL</b>					
TO BE USED FOR <b>LIMITORQUE VLV OPERATORS KVAL 86-0118</b>						

P.O. NO. **502026**  
 RELEASE **BR 1001**  
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**COMMONWEALTH EDISON CO.  
BRAIDWOOD NUCLEAR STATION  
E/S RT. 53, 1½ MILES SO. RT. 113  
BRAIDWOOD, IL 60408  
ATTN: DAVE CLINE, STOREKEEPER**

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED <b>10/20/86</b>	PRO NO.	DEL/SHIPPING TICKET NO.
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QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	<b>ITEMS MEET THE PURCHASE ORDER REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE THE CERTIFICATE OF CONFORMANCE FORM A-51-1/FORM A-51.4 (OR INCLUDE HIS CERTIFICATE).</b>				
	<b>ALL ITEMS ARE TO BE IDENTIFIED BY TAGGING OR MARKING WHICH IS TRACEABLE TO THE COMMONWEALTH EDISON CO. PURCHASE ORDER ITEM DESCRIPTION AND ASSOCIATED DOCUMENTATION.</b>				

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APPROVED	DATE		

Attachment 1

Fastener Testing Data Sheet

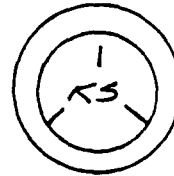
\*Sample ID# BR-08 SI 771A52

Fastener Description: HEX HEAD CAP SCREW 1/2-13 x 1 1/2 GR-5

Description of Sample Stock Location: 330-48

Material Specification as Documented by Licensee Records: SEE ATTACHED P.D.  
502026 BR 1001

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: SCI CORP

QA Requirements Imposed on Vendor: SEE ATTACHED P.D.

Licensee Representative: ROBERT V. GEBHART

Signature

Robert V. Gebhart

Date

12-21-87

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

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

5 RECEIVING T. COPY

86-5086 (S) 6

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST
531	87330R	9		020		\$
REQUISITION NO.	REQUESTED BY					
RR 1760	M. MUSIAL					
TO BE USED FOR						
LIMITORQUE VLV OPERATORS						
EVAL 86-0118						

P.O. NO. 502026  
 RELEASE BR 1001  
 DATE 10/31/86

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SCI CORPORATION  
 812 E. BROADWAY  
 STREATOR, IL 61364

RECEIVED AT

COMMONWEALTH EDISON CO.  
 BRAIDWOOD NUCLEAR STATION  
 E/8 RT. 53, 1 1/2 MILES SO. RT. 113  
 BRAIDWOOD, IL 60408  
 ATTN: DAVE CLINE, STOREKEEPER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL / SHIPPING TICKET NO
			10/20/86		

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
CONFIRMING ORDER DO NOT DUPLICATE					
THIS ITEM IS COMMERCIAL GRADE.					
1	50 EA. SOCKET HEAD CAP SCREW, CARBON STL. CADMIUM PLATED 5/16" - 18 TPI 7/8" LONG GRADE 8	771E51	100	EA	
2	50 EA. SOCKET HEAD CAP SCREW, CARBON STEEL, GRADE 8, METRIC SIZE M8, STD. THREADS, 40MM LONG.	771G51	50	EA	
3	50 EA. HEX HEAD CAPSCREW, CARBON STL. CADMIUM PLATED, 3/8" - 16 TPI 1-1/4" LONG, GR5.	771H51	100	EA	
4	50 EA. HEX HEAD CAPSCREW, CARBON STL. CADMIUM PLATED, 1/2" - 13 TPI, 1-1/2" LONG, GR.5	771A52	50	EA	

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST
531	873308			020		\$
REGISTRATION NO.	REQUESTED BY					
BR 1760	M. MUSIAL					
TO BE USED FOR						
LIMITORQUE VLV OPERATORS EVAL 86-0118						

P.O. NO. 502026  
RELEASE BR 1001  
DATE 10/31/86

RECEIVED FROM

SCI CORPORATION  
812 E. BROADWAY  
STREATOR, IL 61364

RECEIVED AT

COMMONWEALTH EDISON CO.  
BRAIDWOOD NUCLEAR STATION  
E/8 RT. 53, 1 1/2 MILES SO. RT. 113  
BRAIDWOOD, IL 60408  
ATTN: DAVE CLINE, STOREKEEPER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL. SHIPPING TICKET #
			10/20/86		

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
50	HA. HEX HEAD GAP SCREW, CARBON STL., GRADE 5, CADMIUM PLATED, 5/16" - 18 FPI, 1-1/2" LONG	771B52	100	EA	11-12-K1
<p>QUALITY ASSURANCE DOCUMENTS AS SPECIFIED HEREIN ARE AN INTEGRAL PART OF THIS ORDER. ONE COPY OF THE SPECIFIED DOCUMENTS, REFERENCING THE PURCHASE ORDER NUMBER, IS REQUIRED WITH THE SHIPMENT OF MATERIAL. INVOICE PAYMENTS WILL BE WITHHELD UNTIL DOCUMENTATION IS RECEIVED.</p> <p>IF FOR ANY REASON THE MATERIAL OR PART NUMBERS DIFFER FROM THE PURCHASE ORDER. PLEASE STATE WHY ON THE DOCUMENTATION</p>					

RECEIVED AND CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ ENTERED BY \_\_\_\_\_ DATE \_\_\_\_\_  
APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS 531	VENDOR NO. 873308	C.C. 9	ITEM	FUNCT. OR ORDER 020	SUB	ESTIMATED COST \$
REQUISITION NO. RR 1760	REQUESTED BY M. MUSIAL					
TO BE USED FOR LIMITORQUE VLV OPERATORS EVAL 86-0118						

P.O. NO. 502026  
RELEASE BR 1001  
DATE 10/31/86

RECEIVED FROM

SCI CORPORATION  
812 E. BROADWAY  
STREATOR, IL 61364

RECEIVED AT

COMMONWEALTH EDISON CO.  
BRAIDWOOD NUCLEAR STATION  
E/S RT. 53, 1 1/2 MILES SO. RT. 113  
BRAIDWOOD, IL 60408  
ATTN: DAVE CLINE, STOREKEEPER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED 10/20/86	PRO NO.	DEL. / SHIPPING TICKET NO.
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QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	<p>THE CONTRACTOR SHALL FURNISH COMMONWEALTH EDISON COMPANY WITH THE SHIPMENT, ANY SPECIAL INSTRUCTIONS NEEDED DURING HANDLING OR STORAGE OF THE SPARE PARTS, EQUIPMENT OR MATERIAL TO MAINTAIN QUALITY PRIOR TO INSTALLATION OR USE.</p> <p>BY ACCEPTANCE OF THIS ORDER AND UPON NOTIFICATION, THE VENDOR AGREES TO PROVIDE ACCESS TO HIS FACILITIES FOR QUALITY INSPECTION AND AUDIT WHEN REQUIRED BY THE PURCHASER.</p> <p>VENDOR SHALL SUPPLY A CERTIFICATE OF CONFORMANCE OR OTHER EQUIVALENT CERTIFICATION THAT CERTIFIES THE ITEMS SHIPPED ARE</p>				

RECEIVED AND CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_ ENTERED BY \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_



Commonwealth Edison Company

SHIPMENT RELEASE

CLASS <b>531</b>	VENDOR NO. <b>87330B</b>	C.C. <b>9</b>	ITEM	FUNCT. OR ORDER <b>020</b>	SUB	ESTIMATE COST <b>\$</b>
POSITION NO. <b>BR 1760</b>	REQUESTED BY <b>M. NUBIAL</b>					
BE USED FOR <b>LIMITORQUE VLV OPERATORS EVAL 86-0118</b>						

P.O. NO. **502026**  
RELEASE **BR 1001**  
DATE **10/31/86**

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**SCI CORPORATION  
812 E. BROADWAY  
STREATOR, IL 61364**

RECEIVED AT  
**COMMONWEALTH EDISON CO.  
BRAIDWOOD NUCLEAR STATION  
E/S RT. 53, 1 1/2 MILES SO. RT. 113  
BRAIDWOOD, IL 60408  
ATTN: DAVE CLINE, STOREKEEPER**

CARRIER

THE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED <b>10/20/86</b>	PRO NO.	DEL / SHIPPING TICKET NO.
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QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	<p><del>AS IDENTIFIED ON THE PURCHASE ORDER. WHERE THE PURCHASE ORDER DOES NOT SPECIFICALLY IDENTIFY THE SPECIFICATION, NATIONAL STANDARD OR CATALOG NUMBER TO WHICH THE ITEM IS MANUFACTURED, THE APPLICABLE CORRESPONDING REQUIREMENTS SHALL BE IDENTIFIED AND PROVIDED BY THE VENDOR IN SUPPORT OF THE CERTIFICATION. (ENVIRONMENTAL QUALIFICATION REPORT NUMBER(S) SHALL BE IDENTIFIED ON THE CERTIFICATION WHEN APPLICABLE).</del></p> <p><del>CERTIFICATES FURNISHED BY THE VENDOR SHALL BE ATTESTED TO BY THE VENDOR'S EMPLOYEE WHO IS RESPONSIBLE FOR ASSURING THAT THE</del></p>				

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE	IDENTITY <input type="checkbox"/>	

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS <b>531</b>	VENDOR NO. <b>87330B</b>	C.C. <b>9</b>	ITEM	FUNCT. OR ORDER <b>020</b>	SUB	ESTIMATED COST <b>\$</b>
REQUISITION NO. <b>BR 1760</b>	REQUESTED BY <b>M. MUSIAL</b>					
TO BE USED FOR <b>LIMITORQUE VLV OPERATORS KVAL 86-0118</b>						

P.O. NO. **502026**  
RELEASE **BR 1001**  
DATE **10/31/86**

RECEIVED FROM

**SCI CORPORATION  
812 E. BROADWAY  
STREATOR, IL 61364**

RECEIVED AT

**COMMONWEALTH EDISON CO.  
BRAIDWOOD NUCLEAR STATION  
R/S RT. 53, 1 1/2 MILES SO. RT. 113  
BRAIDWOOD, IL 60408  
ATTN: DAVE CLINE, STORKKEEPER**

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED <b>10/20/86</b>	PRO NO.	DEL / SHIPPING TICKET N
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QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	<p><b>ITEMS MEET THE PURCHASE ORDER REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE THE CERTIFICATE OF CONFORMANCE FORM A-51-1/FORM A-51.4 (OR INCLUDE HIS CERTIFICATE).</b></p> <p><b>ALL ITEMS ARE TO BE IDENTIFIED BY TAGGING OR MARKING WHICH IS TRACEABLE TO THE COMMONWEALTH EDISON CO. PURCHASE ORDER ITEM DESCRIPTION AND ASSOCIATED DOCUMENTATION.</b></p>				

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		

Attachment 1

Fastener Testing Data Sheet

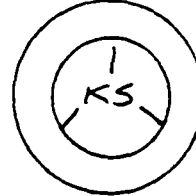
\*Sample ID# BR-09 51771H51

Fastener Description: HEX HEAD CAP SCREW 3/8"-16 X 1 1/4" GK 5

Description of Sample Stock Location: 330-48

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
502026 BR1001

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: SCI CORP.

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GERHART

Signature

Date

12-21-87

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

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

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SHIPMENT RELEASE

86-5066 (S)

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST
533	873308	9		020		\$
REGISTRATION NO.	REQUESTED BY					
BR 1760	M. MISIAL					
TO BE USED FOR						
LIMITORQUE VLV OPERATORS EVAL 86-0118						

P.O. NO. 502026  
 RELEASE BR 1001  
 DATE 10/31/86

RECEIVED FROM	RECEIVED AT
SCI CORPORATION 812 E. BROADWAY STREATOR, IL 61364	COMMONWEALTH EDISON CO. BRAIDWOOD NUCLEAR STATION E/8 RT. 53, 1 1/2 MILES SO. RT. 113 BRAIDWOOD, IL 60408 ATTN: DAVE CLINE, STOREKEEPER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL./SHIPPING TICKET NO.
			10/20/86		

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
50	EA. HEX HEAD CAP SCREW, CARBON STL., GRADE 5, CADMIUM PLATED, 5/16" - 18 XPI, 1-1/2" LONG	771B52	100	EA	11-1K-KL
<p>QUALITY ASSURANCE DOCUMENTS AS SPECIFIED HEREIN ARE AN INTEGRAL PART OF THIS ORDER. ONE COPY OF THE SPECIFIED DOCUMENTS, REFERENCING THE PURCHASE ORDER NUMBER, IS REQUIRED WITH THE SHIPMENT OF MATERIAL. INVOICE PAYMENTS WILL BE WITHHELD UNTIL DOCUMENTATION IS RECEIVED.</p> <p>IF FOR ANY REASON THE MATERIAL OR PART NUMBERS DIFFER FROM THE PURCHASE ORDER, PLEASE STATE WHY ON THE DOCUMENTATION</p>					

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 APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS 531	VENDOR NO. 87330R	C.C. 9	ITEM	FUNCT. OR ORDER 020	SUB	ESTIMATED COST \$
REQUISITION NO. RR 1760	REQUESTED BY M. MUSIAL					
TO BE USED FOR LIMITORQUE VLV OPERATORS EVAL 86-0118						

P.O. NO. 502026  
RELEASE BR 1001  
DATE 10/31/86

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812 E. BROADWAY  
STREATOR, IL 61364

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COMMONWEALTH EDISON CO.  
BRAIDWOOD NUCLEAR STATION  
E/S RT. 59, 1 1/2 MILES SO. RT. 113  
BRAIDWOOD, IL 60408  
ATTN: DAVE CLINE, STOREKEEPER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED 10/20/86	PRO NO.	DEL. / SHIPPING TICKET NO.
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QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	<p>THE CONTRACTOR SHALL FURNISH COMMONWEALTH EDISON COMPANY WITH THE SHIPMENT, ANY SPECIAL INSTRUCTIONS NEEDED DURING HANDLING OR STORAGE OF THE SPARE PARTS, EQUIPMENT OR MATERIAL TO MAINTAIN QUALITY PRIOR TO INSTALLATION OR USE.</p> <p>BY ACCEPTANCE OF THIS ORDER AND UPON NOTIFICATION, THE VENDOR AGREES TO PROVIDE ACCESS TO HIS FACILITIES FOR QUALITY INSPECTION AND AUDIT WHEN REQUIRED BY THE PURCHASER.</p> <p>VENDOR SHALL SUPPLY A CERTIFICATE OF CONFORMANCE OR OTHER EQUIVALENT CERTIFICATION THAT CERTIFIES THE ITEMS SHIPPED ARE</p>				

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APPROVED	DATE		

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	ESTIMATED COST
531	87330R	9		020		\$
ACQUISITION NO.	REQUESTED BY					
RR 1760	M. MUSIAL					
TO BE USED FOR	LIMITORQUE VLV OPERATORS EVAL 86-0118					

P.O. NO. 502026  
RELEASE BR 1001  
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LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO.	DEL / SHIPPING TICKET NO.
			10/20/86		

QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
CONFIRMING ORDER DO NOT DUPLICATE					
THIS ITEM IS COMMERCIAL GRADE.					
1	50 EA. SOCKET HEAD CAP SCREW, CARBON STL. CADMIUM PLATED 5/16" - 18 TPI 7/8" LONG GRADE 8	771F51	100	EA	"1-17"
2	50 EA. SOCKET HEAD CAP SCREW, CARBON STEEL, GRADE 8, METRIC SIZE M8, STD. THREADS, 40MM LONG.	771G51	50	EA	
3	50 EA. HEX HEAD CAPSCREW, CARBON STL. CADMIUM PLATED, 3/8" - 16 TPI 1-1/4" LONG, GR5.	771H51	100	EA	
4	50 EA. HEX HEAD CAPSCREW, CARBON STL. CADMIUM PLATED, 1/2" - 13 TPI, 1-1/2" LONG, GR.5	771A52	50	EA	

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		

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86-6065 (S) 8

Commonwealth Edison Company

SHIPMENT RELEASE

CLASS 531	VENDOR NO. 87330E	C.C. 9	ITEM	FUNCT. OR ORDER 020	SUB	ESTIMATED COST \$
ACQUISITION NO. BR 1760	REQUESTED BY M. MUSIAL					
BE USED FOR LIMITORQUE VLV OPERATORS EVAL 86-0118						

P.O. NO. 502026  
RELEASE BR 1001  
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SCI CORPORATION  
812 E. BROADWAY  
STREATOR, IL 61364

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COMMONWEALTH EDISON CO.  
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CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED 10/20/86	PRO NO.	DEL/SHIPPING TICKET NO.
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QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	<p><del>AS IDENTIFIED ON THE PURCHASE ORDER. WHERE THE PURCHASE ORDER DOES NOT SPECIFICALLY IDENTIFY THE SPECIFICATION, NATIONAL STANDARD OR CATALOG NUMBER TO WHICH THE ITEM IS MANUFACTURED, THE APPLICABLE CORRESPONDING REQUIREMENTS SHALL BE IDENTIFIED AND PROVIDED BY THE VENDOR IN SUPPORT OF THE CERTIFICATION. (ENVIRONMENTAL QUALIFICATION REPORT NUMBER(S) SHALL BE IDENTIFIED ON THE CERTIFICATION WHEN APPLICABLE).</del></p> <p>CERTIFICATES FURNISHED BY THE VENDOR SHALL BE ATTESTED TO BY THE VENDOR'S EMPLOYEE WHO IS RESPONSIBLE FOR ASSURING THAT THE</p>				

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		

Commonwealth Edison Company

SHIPMENT RELEASE

ITEM CLASS <b>531</b>	VENDOR NO. <b>87330B</b>	C.C. <b>9</b>	ITEM	FUNCT. OR ORDER <b>020</b>	SUB	ESTIMATED COST <b>\$</b>
REQUISITION NO. <b>BR 1760</b>	REQUESTED BY <b>M. MUSIAL</b>					
TO BE USED FOR <b>LIMITORQUE VLV OPERATORS KVAL 86-0118</b>						

P.O. NO. **502026**  
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**SCI CORPORATION  
812 E. BROADWAY  
STREATOR, IL 61364**

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BRAIDWOOD NUCLEAR STATION  
E/S RT. 53, 1 1/2 MILES SO. RT. 113  
BRAIDWOOD, IL 60408  
ATTN: DAVE CLINE, STORKEKEEPER**

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED <b>10/20/86</b>	PRO NO.	DEL. / SHIPPING TICKET N
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QUANTITY	DESCRIPTION	STORES ITEM	QTY. RECD.	UNIT	ACCOUNTING USE
	<p><b>ITEMS MEET THE PURCHASE ORDER REQUIREMENTS. THE CONTRACTOR SHALL COMPLETE THE CERTIFICATE OF CONFORMANCE FORM A-51-1/FORM A-51.4 (OR INCLUDE HIS CERTIFICATE).</b></p> <p><b>ALL ITEMS ARE TO BE IDENTIFIED BY TAGGING OR MARKING WHICH IS TRACEABLE TO THE COMMONWEALTH EDISON CO. PURCHASE ORDER ITEM DESCRIPTION AND ASSOCIATED DOCUMENTATION.</b></p>				

RECEIVED AND CHECKED BY	DATE	ENTERED BY	DATE
APPROVED	DATE		



Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-29 51 780864

Fastener Description: HEX HEAD CAP SCREW  
7/8" x 3" 316 SS

Description of Sample Stock Location: 104 7C

Material Specification as Documented by Licensee Records: 316 SS  
SEE ATTACHED P.O. 501834 XX728

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: NON-SAFETY RELATED

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

Vendor: ACTION THREADED PRODUCTS

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart Date 12-21-87

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

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

COPY 5 - RECEIVING DEPT.

Commonwealth Edison Company

SHIPMENT RELEASE

4-30-85  
PIC REC. TKT 01773

ITEM CLASS	VENDOR NO.	C.C.	ITEM	FUNCT. OR ORDER	SUB	X
REQUISITION NO 076466		REQUISITION DATE		020		
TO BE USED FOR STOCK REPLENISHMENT		QUANTITY REQUIRED				

P.O. NO. 501834  
RELEASE XX728  
DATE 02/04/85

ACCOUNTING USE	

01745A  
ACTION THREADED PRODUCTS, INC  
7440 W 100TH PL  
BRIDGEVIEW, IL 60455

SHIP TO  
COMMONWEALTH EDISON CO.  
BRAIDWOOD STATION  
E/S RT 53, 1.5 MI S. RT 113  
BRAIDWOOD, ILLINOIS 60408

DATE		INVOICE
MO.	DAY	NUMBER
DUE DATE		CASH DISC. AMT.
MO.	DAY	

NONE	FOB.	SHIP VIA	DELIVERY REQUIRED	SHIPMENT PROMISED
STATE				
STATE & MUNICIPAL		TERMS OF PAYMENT	YOUR QUOTATION	BUYER
SERVICE %				

CARRIER UPS  
PRO NO  
ADJ / CLAIM NO

QUANTITY	DESCRIPTION	C.E. ITEM NO.	QTY RCD	UNIT	
PAGE 2					
25 EA	SCREW, CAP; HEX HEAD, 7/8-9 X 2, 316 STAINLESS STEEL DELIVERY REQUIRED BY 03/10/85	780864 EA			NEW (REQ: 075794)
25 EA	SCREW, CAP; HEX HEAD, 7/8-9 X 3, 316 STAINLESS STEEL DELIVERY REQUIRED BY 03/10/85	780866 EA			NEW (REQ: 075795)
25 EA	SCREW, CAP; HEX HEAD, 7/8-9 X 4, 316 STAINLESS STEEL DELIVERY REQUIRED BY 03/10/85	780867 EA	25	EA	NEW (REQ: 075796)
100 EA	WASHER, FLAT; 7/8 IN., 316 STAINLESS STEEL. DELIVERY REQUIRED BY 03/10/85	780869 EA			NEW (REQ: 075797)
100 EA	WASHER, LOCK; SPLIT, 5/8 IN., 316 STAINLESS STEEL. ACTION THREADED PART NUMBER: DELIVERY REQUIRED BY 03/10/85	780875 EA			NEW (REQ: 075798)
***** END OF ORDER *****					

COMPLETED

RECEIVED AND CHECKED BY <i>[Signature]</i>	DATE 4-29-85	ENTERED BY <i>[Signature]</i>	DATE 4-30-85
APPROVED <i>[Signature]</i>	DATE		

5 - RECEIVING DEPT.

Commonwealth Edison Company

SHIPMENT RELEASE

PIC REC. TKT 01713

ASS 531	VENDOR NO. 01745A	C.C.	ITEM	FUNCT. OR ORDER	SUB	X
ATION NO 076466	REQUISITION DATE 02/04/85			020		
SED FOR K REPLENISHMENT	QUANTITY REQUIRED					

P.O. NO. 501834  
RELEASE XX728  
DATE 02/04/85

ACCOUNTING USE

01745A  
ACTION THREADED PRODUCTS, INC  
7440 W 100TH PL  
BRIDGEVIEW, IL 60455

SHIP TO  
**COMMONWEALTH EDISON CO.**  
BRAIDWOOD STATION  
E/S RT 53, 1.5 MI S. RT 113  
BRAIDWOOD, ILLINOIS 60408

INVOICE

DATE	NUMBER
MO. DAY	
DUE DATE	CASH DISC. AMT.
MO. DAY	

F.O.B.	SHIP VIA	DELIVERY REQUIRED	SHIPMENT PROMISED
TERMS OF PAYMENT	YOUR QUOTATION	BUYER	

CARRIER **UPS**

PRO NO.	ADI/CLAIM NO

QUANTITY	DESCRIPTION	C.E. ITEM NO.	QTY RCD	UNIT	
25 EA	SCREW, CAP; HEX HEAD, 5/8-11X 4 IN. STAINLESS STEEL 316 NON-MAGNETIC MOD:STAINLESS DRW: SER:5/8-11 X 4 DELIVERY REQUIRED BY 03/10/85	464925 EA	25	EA	NEW (REQ:075658)
100 EA	WASHER, FLAT; STAINLESS STEEL 316, 5/8 IN. NON-MAGNETIC MOD:STAINLESS DRW: SER:5/8 IN. ACTION THREADED PRODUCTS, INC PART NUMBER: DELIVERY REQUIRED BY 03/10/85	464957 EA	100	EA	NEW (REQ:075659)
100 EA	NUT, HEX HEAD; STAIN. STEEL SIZE 7/8-9 MOD:STAIN. STEEL DRW: SER:7/8-9 DELIVERY REQUIRED BY 03/10/85	536548 EA	100	EA	NEW (REQ:075730)
100 EA	WASHER, THRUST; FOR 'A' LAB VACUUM PUMP VACTORR PART NUMBER:532090 DELIVERY REQUIRED BY 03/10/85 ( CONTINUED ON PAGE 2 )	748872 780072 EA	100	EA	NEW (REQ:075793)

**PARTIAL**

RECEIVED AND CHECKED BY <i>A. Denny</i>	DATE 4-2-85	ENTERED BY <i>R. Rangel</i>	DATE 4-3-85
APPROVED <i>A. Denny</i>	DATE		

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-27 SI 507437

Fastener Description: SOCKET HEAD CAP SCREW  
3/8" X 1 1/2" GR 8 CS

Description of Sample Stock Location: 261

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
502054 XX91

Head Marking (Specification and Manufacturer): NONE

\*\*Class/Procurement Level: NON SAFETY RELATED

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

Vendor: MANUFACTURER'S BOLT & NUT

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart Date 12-21-87

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

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

OPY 5 - RECEIVING DEPT.

Commonwealth Edison Company

SHIPMENT RELEASE

PIC REC. TKT 00265

ITEM CLASS 531	VENDOR NO 56938A	CC	ITEM	FUNC OR ORDER	SUB
REQUISITION NO 029500	REQUISITION DATE 09/04/86			020	
TO BE USED FOR LOCK REPLENISHMENT		QUANTITY REQUIRED			

P.O. NO. 502056

RELEASE XX91

DATE 09/04/86

DATE		NUMBER
MO	DAY	
DUE DATE		CASH DISC. RATE
MO	DAY	

56938A  
 MANUFACTURERS BOLT & NUT  
 951 W THORNDALE AVE  
 BENSENVILLE, IL 60106

SHIP TO  
 COMMONWEALTH EDISON CO.  
 BRAIDWOOD STATION  
 E/S RT 53, 1.5 MI S. RT 113  
 BRAIDWOOD, ILLINOIS 60408

TAX	NONE	FOB	SHIP VIA	DELIVERY REQUIRED	SHIPMENT PAID
STATE				09/28/86	
STATE & MUNICIPAL		TERMS OF PAYMENT	SHIP QUOTATION	BUYER	
SERVICE	%				

UPS

QUANTITY	DESCRIPTION	CF ITEM NO	QTY ORDERED	UNIT	
100 EA	SCREW, CAP; SOCKET HEAD, 3/8 X 1-1/2 IN., GRADE 8, CARBON STEEL.	507437 EA	100	EA	105-26-I (REQ:017368)
100 EA	SCREW, CAP; HEX HEAD, 5/16-18 X 1/2 IN., STEEL, GRADE 5	530633 EA			302-26 (REQ:015265)
***** END OF ORDER *****					

COMPLETED

RECEIVED AND CHECKED BY <i>J. Blum</i>	DATE 12-17-86	PREPARED BY <i>R. Vignocchi</i>	DATE 12/19/86
APPROVED <i>D. Blum</i>	DATE 8/12/86		

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-28 51 462242

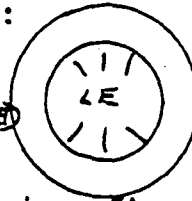
Fastener Description: 1/2"-20 x 4" CAP SCREW GR 2

Description of Sample Stock Location: 105 26 D

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
601832 BR 1001

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: ~~NON-SAFETY RELATED~~



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

Vendor: AMERICAN FASTENER

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT F. GEBHART

Signature Robert F. Gebhart Date 12-21-07

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

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

86-5065(S)

Commonwealth Edison Company

SHIPMENT RELEASE

5-2-84 0010

ITEM CLASS <b>531</b>	VENDOR NO. <b>03798</b>	C.C. <b>9</b>	ITEM	FUNCT. OR ORDER <b>020</b>	SUB	ESTIMATED COST <b>\$ .</b>
REQUISITION NO. <b>BR0797</b>	REQUESTED BY <b>M. Musial</b>					
TO BE USED FOR <b>Mech. Maint. Set-up</b>						

P.O. NO. **501832**  
 RELEASE **BR1001**  
 DATE **3/12/84**

RECEIVED FROM

**American Fastener Corp.**  
**1919 W. 19th St.**  
**Broadview, IL. 60153**

RECEIVED AT

**COMMONWEALTH EDISON CO.**  
**Braidwood Nuclear Station**  
**E/S Rt. 53 1/2 Miles So. Rt. 113**  
**Braidwood, IL 60408**  
**Attn: Dave Cline, Storekeeper**

ENTERED IN COMPUTER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PILO NO	UNIT SHIPPING INVOICE NO	
QUANTITY	DESCRIPTION	E/M	STORES ITEM	QTY REC'D	UNIT	ACCOUNTING U-I
1	100 ea. 1/2" -20 x 1" UNF, Cap Screw, Grade 8		462237			
2	100 ea. 1/2" -20 x 1 1/2" UNF " " " "		462238			
3	100 ea. 1/2" -20 x 2" UNF " " " "		462239			
4	100 ea. 1/2" -20 x 2 1/2" UNF " " " "		462240			
5	100 ea. 1/2" -20 x 3" UNF " " " "		462241			
6	100 ea. 1/2" -20 x 3 1/2" UNF " " " "		492782			
7	100 ea. 1/2" -20 x 4" UNF " " " "		462242			
8	100 ea. 9/16"-18 x 1" UNF " " " "		462243			
9	100 ea. 9/16"-18 x 1 1/2" UNF " " " "		462244			
10	100 ea. 9/16"-18 x 2" UNF " " " "		462245			
11	100 ea. 9/16"-18 x 2 1/2" UNF " " " "		462246			

**PARTIAL**  
**TEMPORARY FUNCTION-00000**

RECEIVED AND CHECKED BY

DATE

CHECKED BY

DATE

APPROVED

DATE

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-26 51462237

Fastener Description: 1/2"-20 x 1" UNF CAP SCREW GR8

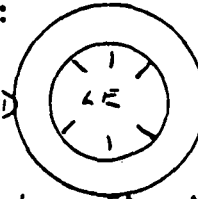
Description of Sample Stock Location: 26B

Material Specification as Documented by Licensee Records:

SEE ATTACHED P.O. 501832 3R100

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: NONE SAFETY RELATED



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

Vendor: AMERICAN FASTENERS

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT Y. GERHART

Signature

Robert Y. Gerhart

Date

12-21-87

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

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



5-2-84 20104

ITEM CLASS 531	VENDOR NO. 03798	C.C. 9	ITEM	FUNCT. OR ORDER 020	SUB	ESTIMATED COST \$ . . .
REQUISITION NO. BR0797	REQUESTED BY M. Musial					
TO BE USED FOR Mech. Maint. Set-up						

P.O. NO. 501832  
RELEASE BR1001  
DATE 3/12/84

RECEIVED FROM

American Fastener Corp.  
1919 W. 19th St.  
Broadview, IL. 60153

RECEIVED AT

COMMONWEALTH EDISON CO.  
Braidwood Nuclear Station  
E/S Rt. 53 1 1/2 Miles So. Rt. 113  
Braidwood, IL 60408  
Attn: Dave Cline, Storekeeper

ENTERED IN COMPUTER

CARRIER

LINE ITEM FROM CONTROLLING PURCHASE ORDER	F.O.B.	SHIP VIA	DATE REQUIRED	PRO NO	DET SHIPPING TICKET NO
---	--------	----------	---------------	--------	------------------------

LINE	QUANTITY	DESCRIPTION	E/N	STORES ITEM	QTY RECD.	UNIT	ACCOUNTING USE
1	100	ea. 1/2" -20 x 1" UNF, Cap Screw, Grade 8		462237			
2	100	ea. 1/2" -20 x 1 1/2" UNF " " " "		462238			
3	100	ea. 1/2" -20 x 2" UNF " " " "		462239			
4	100	ea. 1/2" -20 x 2 1/2" UNF " " " "		462240			
5	100	ea. 1/2" -20 x 3" UNF " " " "		462241			
6	100	ea. 1/2" -20 x 3 1/2" UNF " " " "		492782			
7	100	ea. 1/2" -20 x 4" UNF " " " "		462242			
8	100	ea. 9/16"-18 x 1" UNF " " " "		462243			
9	100	ea. 9/16"-18 x 1 1/2" UNF " " " "		462244			
10	100	ea. 9/16"-18 x 2" UNF " " " "		462245			
11	100	ea. 9/16"-18 x 2 1/2" UNF " " " "		462246			

**PARTIAL**  
TEMPORARY FUNCTION-00000

RECEIVED AND CHECKED BY: [Signature] DATE: 5-2-84  
APPROVED: [Signature] DATE: 5-2-84

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-25 51 454748

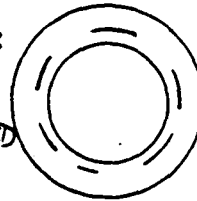
Fastener Description: HEX NUT 7/8"-14

Description of Sample Stock Location: 26 B

Material Specification as Documented by Licensee Records: ~~NONE~~ <sup>GR-8</sup> GR-8

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: NON-SAFETY RELATED



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

Vendor: UNKNOWN

QA Requirements Imposed on Vendor: NONE

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart

Date 12-21-07

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

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

PF1/PF13: HELP

MIT ENTER TO RETURN: 4444

PF2/PF14: NEWS

BAL SI 454748 STA 020

DATE 12/21/97

UNIT OF ISSUE => EA

DESCRIP=> NUT, HEX, GRADE 8, 7/8-14 UNF

NOTES =>

AUTHORIZATION => A	MIN/MAX => 25 / 100
PHYSICAL LOCATION => 426-01	LAST PURCHASE FRC => .24
SECONDARY LOCATION => 105-26-B	SHELF LIFE => 0 WEEK(S)
SUBSTITUTE SI =>	LAST PHYS. INV. => 08/05/86
LEAD TIME => 30	DATE LAST ACTIVE => 05/10/84
TRANSFER FROM LOC. =>	DATE LAST REVISE => 05/21/97
DATE LAST ORDERED => 04/16/84	P/M PERIOD => 0 WEEK(S)
EMERGENCY RESERVE => NONE	DATE LAST P/M => / /

HISTORY BASIS => QUARTERLY      SYSTEM AVERAGE PRICE => .304

ON-HAND	ON-ORD	ON-RSV	PERD-IN	PERD-OUT	IN-TRAN	SURPLUS	
75	0	0	0	0	0	0	
USE: CURR 1-FREV	2-FREV	3-FREV	4-FREV	5-FREV	6-FREV	7-FREV	8-FREV
0	0	0	0	0	0	0	0
ANNUAL USE:	0	INACTIVE RESERVATIONS.				0	

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-11 51506B21

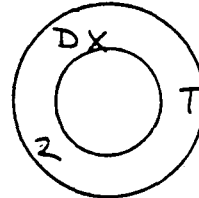
Fastener Description: HEAVY HEX NUT 1 1/8  
P/N 5617-4N

Description of Sample Stock Location: 323-25L

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O.  
273096

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SAFETY-RELATED



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

Vendor: JOSEPH OAT

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GEBHART

Signature Robert P. Gebhart Date 12-21-87

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

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

Attachment 1

Fastener Testing Data Sheet

\*Sample ID# BR-12 51 506B24

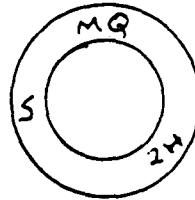
Fastener Description: HEAVY HEX NUT 1" P/N 5017-4N1

Description of Sample Stock Location: 506B24

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O. 273096

Head Marking (Specification and Manufacturer):

\*\*Class/Procurement Level: SAFETY RELATED



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

Vendor: JOSEPH OAT

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GERHART

Signature Robert P. Gerhart Date 12-21-87

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

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

ITEM CLASS <b>392</b>	VENDOR NO. <b>SEE BELOW</b>	C.C. <b>1</b>	ITEM	FUNCT. OR ORDER <b>020</b>	SUB.	QTY.	COST
REQUISITION <b>BR</b>	REQUESTED BY <b>C. Cherveney</b>	I. <b>A</b>					
TO BE USED FOR <b>Residual Heat Exchanger and Letdown Heat Exchanger Spare Parts</b>							
TOTAL							<b>11,650.00</b>

NUMBER  
**273096**

DATE  
**DEC 20 1982**

**67502A**  
JOSEPH OAT, INC  
CHEMICAL ENGINEERS & FABRICATORS  
2500 BROADWAY  
CAMDEN, NJ 08104

SHIP TO  
COMMONWEALTH EDISON CO.  
Braidwood Nuclear Generating Station  
E/S IL Rt. 53 1 1/2 miles south IL Rt. 113  
Braidwood, Illinois 60408  
Attn: Dave Cline, Storekeeper

TAX: <input type="checkbox"/> NONE <input checked="" type="checkbox"/> STATE <input type="checkbox"/> STATE & MUNICIPAL <input type="checkbox"/> SERVICE <input type="checkbox"/> CITY	F. O. B. <b>CAMDEN, N.J.</b>	SHIP VIA	DELIVERY REQUIRED <b>EARLIEST NORMAL</b>	SHIPMENT PROMISED <b>84 DAYS</b>
TERMS OF PAYMENT <b>Net 30</b>		YOUR QUOTATION <b>OAT E#6091</b>	BUYER-TEL. NO. (312) 294-3417 <b>G. ADAMAITIS</b>	

P. O. LINE ITEM	QUANTITY	DESCRIPTION	C. E. ITEM NO.
		<p><b>ENTERED IN COMPUTER</b></p> <p>THIS ORDER IS SAFETY RELATED TO CRF PART 21 IS APPLICABLE. (ITEMS 1, 2, 3, 6, 7 &amp; 8 ONLY)</p> <p>ITEMS 1, 2, 3, 6, 7, &amp; 8 REQUIRE DOCUMENTATION IN ACCORDANCE WITH ASME SECTION III 1974 EDITION INCLUDING NONE ADDENDA.</p> <p>ITEMS 4, 5, 9, &amp; 10 ARE NOT SAFETY RELATED TO CFR PART 21 IS NOT APPLICABLE.</p> <p>VENDOR TO SUPPLY DOCUMENTATION THAT HIS QUALITY ASSURANCE PROGRAM MEETS THE REQUIREMENTS OF ASME SECTION III, DIV. 1, SUBSECTION NCA, PARA 3800, CURRENT EDITION, CURPENT ADDENDA, AND THAT THE ITEMS SUPPLIED ON THIS PURCHASE ORDER WERE PROVIDED IN ACCORDANCE WITH THIS PROGRAM.</p> <p>PARTS BEING ORDERED ARE TO BE USED AS SPARE PARTS FOR W N.S.S.S. HT. EXCH. ORIGINALLY ORDERED FROM JOSEPH OAT PURCHASE ORDER 546-215351, 2, 3 &amp; 4 CAE, CBE, CCE &amp; CDE.</p>	

CARRIER	PRO. NO.	DEL/SHIPPING TICKET
QTY. REC'D.	UNIT	

SAFETY RELATED-DOCUMENTATION REQUIRED  
 DEPARTMENT MEMO (QC-MT; QA-TS) **RXX**  
 1Xcopy-Prod. Stores; 1Xcopy-F. Kofron  
 1Xcopy-L. C. Boyer, (G.S.O) Acct, Brwd  
 2Xcopy-R. Hoffman, Maint, Brwd  
 2 Xcopy - Dave Cline, Storekeeper, Brwd

Q.A. Dept. **12/10-21-82**  
 Joseph Oat Corp.  
 2500 Broadway  
 Drawer 10 (OEM VENDOR)  
 Camden, NJ 08104

Commonwealth Edison Company  
 POST OFFICE BOX 207 \* CHICAGO, ILLINOIS 60690  
**X-KOVITCH PRODUCTION**  
 STORES **RXX 12/15**  
**X-W. ECK**

COPIES TO BE MAILED TO ABOVE ADDRESS  
 SEP 20 1982

RECEIVED AND CHECKED BY **D**

APPROVED

LINE ITEM	QUANTITY	DESCRIPTION	C.I. (MIN)
<p>THESE SPARE PARTS ARE THOSE AS RECOMMENDED BY YOUR QUOTATION OAT E-5992 WITH ADDITIONS AND DELETIONS AS MEETS OUR REQUIREMENTS.</p>			
<p>BY ACCEPTANCE OF THIS ORDER AND UPON NOTIFICATION, THE VENDOR AGREES TO PROVIDE ACCESS TO HIS FACILITIES FOR QUALITY INSPECTION AND AUDIT WHEN REQUIRED BY THE PURCHASER.</p>			
<p>EACH PART TO BE TAGGED SHOWING CUSTOMER PURCHASE ORDER NUMBER, P.O. LINE ITEM, C.E. STORES ITEM NUMBER, AND A BRIEF DESCRIPTION OF ITEM.</p>			
<p>THE CONTRACTOR SHALL FURNISH COMMONWEALTH EDISON COMPANY, WITH THE SHIPMENT, ANY SPECIAL INSTRUCTIONS NEEDED DURING HANDLING OR STORAGE OF THE SPARE PARTS, EQUIPMENT OR MATERIAL TO MAINTAIN QUALITY PRIOR TO INSTALLATION OR USE.</p>			
<p>VENDOR TO CERTIFY THAT THE ITEMS/SERVICES SUPPLIED ON THIS PURCHASE ORDER WERE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF HIS CURRENTLY APPROVED QUALITY ASSURANCE MANUAL.</p>			
<p>Items 1, 2, 3, 6, 7, and 8 Documentation Requirements are as follows:</p>			
<p>1. CMTR on Flange Studs, Nuts and Plugs</p>			
<p>Items 4, 5, 9 and 10 Documentation Requirements are:</p>			
<p>1. CP-Certificate of Compliance to Material Spec and Grade</p>			
<p>The following items 1, 2, 3, 4, and 5 are for the RHR Heat Exchangers</p>			
1	5	<p>ea., Studs, Body Flange - 1 1/8" 8 UN x 19" Long Material SA-193-B7 Part No. 5617-4S <i>#150.00</i></p>	<p>506B20- 5 EA 4-16-83</p>
2	10	<p>ea., Nuts, Body Flange - 1 1/8" Heavy Hex Material SA-193-B7 Part No. 5617-4N <i>#50.00</i></p>	<p>506B21- 12 EA 4-16-83</p>
3	10	<p>ea., Plugs, Tube - Material SA-479-304 Part No. 5617-1 <i>#125.00</i></p>	<p>506B22- 10 EA 4-16-83</p>
4	4	<p>ea., Gasket, Shell Side - Spiral Wound .175" Thick x 43 11/16" I.D. x 45 3/16" O.D. Material 304 S.S. with Canadian Asbestos Filler Part No. 5617-2 <i>#300.00 (CONT)</i></p>	<p>494499- 4 EA 4-16-83</p>

*ALL EACH NET*

Attachment 1

Fastener Testing Data Sheet

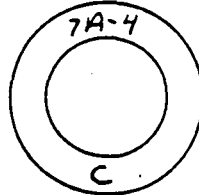
\*Sample ID# BR-13 51506852

Fastener Description: HEAVY HEX NUT 1 7/8"

Description of Sample Stock Location: HOLD CAGE

Material Specification as Documented by Licensee Records: SEE ATTACHED P.O. 269836

Head Marking (Specification and Manufacturer):



\*\*Class/Procurement Level: SAFETY RELATED

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

Vendor: ATLAS

QA Requirements Imposed on Vendor: SEE ATTACHED P.O.

Licensee Representative: ROBERT P. GEBHAERT

Signature Robert P. Gebhaert

Date 12-21-07

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

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



ENCLOSURE 3

Response to Item #5 of NRC Bulletin 87-02

DATA SUMMARY  
Byron Station

Sample ID	Mechanical Analysis				Chemical Analysis						
	Hardness Rc	UTS1	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr
BY-1 Bolt	30.0	NS	NS	NS	0.30	0.70	.013	.013	NS	NS	NS
BY-2 Nut	25.0	NS	NS	NS	0.44	0.72	.014	.014	0.24	0.01	0.10
BY-3 Bolt	30.7	NS	NS	NS	0.35	NS	.017	.019	NS	NS	NS
BY-4 Nut	24.0	NS	NS	NS	0.33	0.72	.013	.015	NS	NS	NS
BY-5 Bolt	35.0	NS	NS	NS	0.40	NS	.019	.023	NS	NS	NS
BY-6 Nut	26.3	NS	NS	NS	0.19	0.78	.013	.010	NS	NS	NS
BY-7 Bolt	37.0	NS	NS	NS	0.39	NS	.019	.021	NS	NS	NS
BY-8 Nut	24.3	NS	NS	NS	0.36	0.79	.017	.021	NS	NS	NS
BY-9 Bolt	34.3	NS	NS	NS	0.41	NS	.019	.016	NS	NS	NS
BY-10 Nut	28.7	NS	NS	NS	0.45	0.80	.018	.019	NS	NS	NS
BY-11 Bolt	34.3	NS	NS	NS	0.35	NS	.008	.016	NS	NS	NS
BY-12 Nut	28.7	NS	NS	NS	0.15	0.46	.059	.036	NS	NS	NS
BY-13 Bolt	35.3	NS	NS	NS	0.39	NS	.009	.017	NS	NS	NS
BY-14 Nut	31.7	NS	NS	NS	0.23	0.88	.014	.009	NS	NS	NS
BY-15 Nut	24.7	NS	NS	NS	0.39	NS	.014	.024	NS	NS	NS
BY-16 Nut	30.7	NS	NS	NS	0.46	NS	.014	.027	NS	NS	NS
BY-17 Stud	23.7	NS	NS	NS	0.40	0.83	.020	.020	0.25	0.13	1.02
BY-18 Nut	24.7	NS	NS	NS	0.12	0.27	.013	.016	0.39	NS	11.50
BY-19 Bolt	30.7	NS	NS	NS	0.45	0.86	.011	.013	0.28	0.14	0.95
BY-20 Stud	30.7	NS	NS	NS	0.40	0.80	.012	.014	0.28	0.13	1.08

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

NS = Not Specified.

DATA SUMMARY  
Byron Station

Sample ID	Mechanical Analysis				Chemical Analysis						
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr
BY-A Bolt	NS	144,995	134,080	NS	0.40	0.78	.014	.011	0.28	0.15	0.96
BY-B Bolt	27.3	NS	NS	NS	0.42	0.87	.011	.023	0.23	0.15	0.93
BY-C Nut	26.7	NS	NS	NS	0.42	0.87	.009	.026	0.24	0.13	0.94
BY-D Bolt	NS	136,340	120,050	NS	0.39	0.84	.011	.023	0.23	0.13	0.95
BY-E Bolt	NS	152,570	134,725	NS	0.44	0.90	.013	.015	0.24	0.16	0.86
BY-F Nut	30.0	NS	NS	NS	0.45	NS	.013	.020	NS	NS	NS
BY-G Nut	28.0	NS	NS	NS	0.40	0.87	.010	.025	0.32	0.17	1.00
BY-H Nut	30.3	NS	NS	NS	0.48	NS	.014	.028	NS	NS	NS
BY-J Nut	31.7	NS	NS	NS	0.48	NS	.011	.028	NS	NS	NS
BY-K Bolt	NS	149,320	136,690	NS	0.43	0.85	.018	.031	0.26	0.13	0.90
BY-L Stud	NS	147,955	132,720	NS	0.41	0.85	.012	.022	0.24	0.17	1.00
BY-M Nut	28.7	NS	NS	NS	0.43	NS	.018	.014	NS	NS	NS
BY-N Stud	NS	138,650	125,570	NS	0.41	0.95	.019	.017	0.26	0.13	1.00
BY-O Nut	28.7	NS	NS	NS	0.43	NS	.019	.014	NS	NS	NS
BY-Q Stud	NS	149,320	137,500	NS	0.40	0.98	.009	.018	0.28	0.17	0.98
BY-R Nut	24.0	NS	NS	NS	0.12	0.28	.030	.018	0.39	NS	11.76
BY-S Stud	NS	163,255	148,780	NS	0.45	1.08	.009	.023	0.32	0.14	1.04
BY-T Nut	29.7	NS	NS	NS	0.48	NS	.008	.028	NS	NS	NS
BY-U Stud	NS	141,605	132,330	NS	0.40	0.98	.008	.025	0.29	0.14	1.02
BY-V1 Nut	24.0	NS	NS	NS	0.46	NS	.018	.032	NS	NS	NS
BY-V2 Nut	25.7	NS	NS	NS	0.47	NS	.015	.028	NS	NS	NS

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

NS = Not Specified.

DATA SUMMARY  
LaSalle County Station

Sample ID	Mechanical Analysis				Chemical Analysis						
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr
L-1 Bolt	NS	142,750	124,775	NS	0.41	0.95	.016	.013	0.28	0.23	1.06
L-1 Nut	27.7	NS	NS	NS	0.43	0.94	.017	.013	0.28	0.23	1.03
L-2 Bolt	NS	32,300	NS	19,200	0.41	0.88	.011	.021	NS	NS	NS
L-2 Nut	29.3	NS	NS	NS	0.44	NS	.013	.016	NS	NS	NS
L-3 Bolt	NS	33,950	NS	19,200	NS	NS	.012	.015	NS	NS	NS
L-3 Nut	91.7 Rb	NS	NS	NS	0.05	0.35	.028	.014	0.04	0.02	0.14
L-4 Bolt	NS	148,965	136,420	NS	0.40	0.91	.011	.020	0.17	0.19	0.95
L-5 Stud	NS	146,200	133,370	NS	0.45	0.87	.008	.021	NS	NS	NS
L-6 Bolt	NS	32,800	NS	19,200	0.41	0.92	.014	.018	NS	NS	NS
L-6 Nut	29.7	NS	NS	NS	0.44	NS	.012	.015	NS	NS	NS
L-7 Stud	NS	151,955	138,760	NS	0.44	0.87	.007	.026	0.25	0.15	1.04
L-7 Nut	28.3	NS	NS	NS	0.45	NS	.017	.031	NS	NS	NS
L-8 Bolt*	NS	87,520	40,530	NS	0.019	0.76	.031	.003	0.34	1.83*	16.54
L-9 Bolt	NS	48,100	NS	28,400	0.44	0.75	.022	.016	NS	NS	NS
L-10 Screw											
A	37.7*	NS	NS	NS	0.36	NS	.012	.010	NS	NS	NS
B	38.0*	NS	NS	NS	0.36	NS	.012	.009	NS	NS	NS
C	36.7*	NS	NS	NS	0.37	NS	.008	.009	NS	NS	NS
L-11 Stud	NS	142,080	132,580	NS	0.37	0.91	.013	.028	0.24	0.16	1.05
L-12 Bolt	35.7	NS	NS	NS	0.38	NS	.015	.023	NS	NS	NS
L-13 Bolt	35.3	NS	NS	NS	0.40	NS	.015	.018	NS	NS	NS
L-13 Nut	25.0	NS	NS	NS	0.41	NS	.009	.025	NS	NS	NS
L-14 Bolt	88.0 Rb	NS	NS	NS	0.04	1.23	.037	.022	0.43	0.24	19.00
L-14 Nut	27.3	NS	NS	NS	0.44	NS	.027	.018	NS	NS	NS
L-15 Bolt	37.3	NS	NS	NS	0.42	NS	.015	.021	NS	NS	NS
L-15 Nut	27.3	NS	NS	NS	0.41	NS	.020	.019	NS	NS	NS
L-16 Bolt	36.3	NS	NS	NS	0.43	NS	.011	.016	NS	NS	NS
L-16 Nut	27.0	NS	NS	NS	0.41	NS	.019	.015	NS	NS	NS

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

\* = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

NS = Not Specified.  
0900s-6

DATA SUMMARY  
LaSalle County Station

Sample ID	Mechanical Analysis				Chemical Analysis							
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr	
L-17 Bolt												
A	34.3	NS	NS	NS	0.38	NS	.017	.014	NS	NS	NS	
B	33.3	NS	NS	NS	0.39	NS	.015	.014	NS	NS	NS	
C	33.0	NS	NS	NS	0.38	NS	.012	.014	NS	NS	NS	
L-17 Nut												
A	25.0	NS	NS	NS	0.45	NS	.013	.013	NS	NS	NS	
B	25.3	NS	NS	NS	0.44	NS	.010	.017	NS	NS	NS	
C*	89.0 Rb*	NS	NS	NS	0.46	NS	.012	.013	NS	NS	NS	
L-18 Bolt	37.7	NS	NS	NS	0.22	0.94	.018	.014	NS	NS	NS	0045
L-18 Nut	27.0	NS	NS	NS	0.42	NS	.019	.026	NS	NS	NS	
L-19 Bolt*	35.3	NS	NS	NS	0.21*	NS	.013	.012	NS	NS	NS	
L-19 Nut	29.7	NS	NS	NS	0.42	NS	.015	.029	NS	NS	NS	
L-20 Bolt	35.0	NS	NS	NS	0.39	NS	.010	.015	NS	NS	NS	
L-21 Stud	32.7	NS	NS	NS	0.45	0.90	.008	.028	0.30	0.14	0.97	
L-21 Nut	24.0	NS	NS	NS	0.40	NS	.022	.036	NS	NS	NS	

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

NS = Not Specified.

**DATA SUMMARY**  
Dresden Station

Sample ID	Mechanical Analysis				Chemical Analysis						
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr
DN-1 Bolt	30.7	NS	NS	NS	0.36	NS	.012	.027	NS	NS	NS
DN-1 Nut	30.0	NS	NS	NS	0.42	NS	.022	.024	NS	NS	NS
DN-2 Bolt	32.7	NS	NS	NS	0.39	NS	.018	.012	NS	NS	NS
DN-2 Nut	95.0 Rb	NS	NS	NS	0.07	0.36	.021	.012	<0.05	<0.03	<0.05
DN-3 Bolt	27.7	NS	NS	NS	0.33	NS	.010	.012	NS	NS	NS
DN-3 Nut	92.7 Rb	NS	NS	NS	0.12	0.36	.014	.015	<0.05	<0.03	0.10
DN-4 Bolt	24.7	NS	NS	NS	0.33	NS	.017	.010	NS	NS	NS
DN-4 Nut	80.3 Rb	NS	NS	NS	0.24	0.67	.014	.015	0.28	<0.03	0.21
DN-5 Bolt	25.0	NS	NS	NS	0.39	NS	.018	.024	NS	NS	NS
DN-5 Nut	30.0	NS	NS	NS	0.48	0.80	.020	.005	0.22	<0.03	0.10
DN-6 Bolt	24.7	NS	NS	NS	0.46	NS	.016	.010	NS	NS	NS
DN-6 Nut	30.3	NS	NS	NS	0.44	0.74	.018	.011	0.21	<0.03	0.10
DN-7 Stud	28.0	NS	NS	NS	0.42	0.77	.017	.013	0.25	0.20	0.87
DN-7 Nut	34.7	NS	NS	NS	0.42	NS	.016	.032	NS	NS	NS
DN-8 Stud	31.0	NS	NS	NS	0.41	0.83	.012	.022	0.22	0.17	0.87
DN-8 Nut	28.3	NS	NS	NS	0.44	NS	.017	<.005	NS	NS	NS
DN-9 Stud	31.0	NS	NS	NS	0.40	0.86	.010	.020	0.18	0.20	0.94
DN-9A Nut	26.3	NS	NS	NS	0.46	NS	.027	.034	NS	NS	NS
DN-9B Nut	26.7	NS	NS	NS	0.45	NS	.029	.036	NS	NS	NS
DN-10 Stud	29.7	NS	NS	NS	0.41	0.58	.010	.017	0.30	0.50	1.05

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

NS = Not Specified.

DATA SUMMARY  
Dresden Station

Sample ID	Mechanical Analysis				Chemical Analysis						
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr
DS-1 Stud	NS	138,000	120,000	NS	0.44	0.97	.018	.012	0.25	0.20	0.91
DS-2 Bolt	88.0 Rb	NS	NS	NS	NS	NS	.013	.016	NS	NS	NS
DS-2 Nut	27.6	NS	NS	NS	0.33*	NS	.021	.012	NS	NS	NS
DS-3 Bolt*	NS	139,000	125,000	NS	0.40	0.60*	.040	.028	0.18	0.15	0.89
DS-3 Nut	28.0	NS	NS	NS	0.43	NS	.021	.009	NS	NS	NS
DS-4 Bolt	NS	70,500	NS	39,250	0.48	0.99	.021	.021	NS	NS	NS
DS-4 Nut	26.0	NS	NS	NS	0.45	NS	.017	.036	NS	NS	NS
DS-5 Bolt	NS	48,300	NS	21,760	0.48	0.74	.029	.035	NS	NS	NS
DS-5 Nut	29.7	NS	NS	NS	0.43	NS	.023	.012	NS	NS	NS
DS-6 Bolt	NS	27,700	NS	19,200	0.36	NS	.046	.023	NS	NS	NS
DS-6 Nut	27.7	NS	NS	NS	0.46	NS	.023	.023	NS	NS	NS
DS-7 Bolt	NS	159,000	145,000	NS	0.48	0.81	.019	.020	0.27	0.18	1.03
DS-7 Nut	27.0	NS	NS	NS	0.44	NS	.018	.034	NS	NS	NS
DS-8 Stud*	NS	129,000	102,000*	NS	0.39	0.78	.020	.019	0.24	0.18	0.93
DS-8A Nut	32.0	NS	NS	NS	0.44	NS	.012	.028	NS	NS	NS
DS-8B Nut	33.0	NS	NS	NS	0.45	NS	.012	.021	NS	NS	NS
DS-9 Bolt	NS	10,975	NS	6,600	0.40	NS	.039	.023	NS	NS	NS
DS-9 Nut	32.7	NS	NS	NS	0.48	NS	.019	.028	NS	NS	NS
DS-10A Blt	NS	62,500	45,900	NS	0.13	0.51	.020	.029	0.18	<0.03	0.07
DS-10B Blt	NS	62,100	56,800	NS	0.09	0.53	.012	.018	<0.05	<0.03	<0.05
DS-10A Nut	71.0 Rb	NS	NS	NS	0.22	0.41	.013	.015	0.24	<0.03	0.06
DS-10B Nut	72.0 Rb	NS	NS	NS	0.22	0.71	.016	.011	0.22	<0.03	<0.05

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

NS = Not Specified.

DATA SUMMARY  
Quad Cities Station

Sample ID	Mechanical Analysis				Chemical Analysis						
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr
QS-1 Bolt	NS	147,000	135,000	NS	0.42	0.91	.013	.035	0.31	0.21	1.01
QS-1 Nut	27.7	NS	NS	NS	0.49	NS	.009	.018	NS	NS	NS
QS-2 Stud*	NS	135,000	115,000	NS	0.42	0.68*	.040	.030	0.22	0.17	1.00
QS-2 Nut	28.0	NS	NS	NS	0.40	0.74	.014	.032	0.28	0.21	NS
QS-3 Stud	NS	141,000	132,000	NS	0.41	0.88	.016	.018	0.23	0.16	0.97
QS-3 Nut	28.0	NS	NS	NS	0.45	NS	.019	.013	NS	NS	NS
QS-4 Stud	NS	142,000	132,000	NS	0.36	0.74	.023	.011	0.25	0.19	0.96
QS-4 Nut	28.0	NS	NS	NS	0.43	NS	.014	.026	NS	NS	NS
QS-5 Bolt	NS	129,000	116,000	NS	0.39	0.80	.016	.019	0.25	0.19	1.02
QS-5 Nut	30.0	NS	NS	NS	0.43	NS	.015	.020	NS	NS	NS
QS-6 Bolt	NS	127,000	116,000	NS	0.42	0.80	.020	.038	0.20	0.16	0.95
QS-6 Nut*	27.0	NS	NS	NS	0.37*	NS	.014	.008	NS	NS	NS
QS-7 Bolt	NS	149,000	138,000	NS	0.40	0.89	.010	.025	0.26	0.21	1.02
QS-7 Nut	30.3	NS	NS	NS	0.46	NS	.021	.015	NS	NS	NS
QS-8 Bolt	NS	147,000	133,000	NS	0.42	0.90	.014	.027	0.27	0.16	1.04
QS-8 Nut	29.3	NS	NS	NS	0.40	NS	.024	.019	NS	NS	NS
QS-9 Bolt	NS	146,000	137,000	NS	0.47	0.79	.010	.013	0.19	0.16	0.80
QS-9 Nut	31.3	NS	NS	NS	0.44	NS	.025	.019	NS	NS	NS
QS-10 Bolt	NS	150,000	136,000	NS	0.42	0.94	.011	.028	0.27	0.22	1.02
QS-10 Nut	27.7	NS	NS	NS	0.47	NS	.022	.015	NS	NS	NS

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

<sup>1</sup> = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

NS = Not Specified.



DATA SUMMARY  
Quad Cities Station

Sample ID	Mechanical Analysis				Chemical Analysis						
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr
QN-1 Bolt	30.0	NS	NS	NS	0.44	0.78	.010	.021	0.21	0.20	0.86
QN-1 Nut	28.3	NS	NS	NS	0.42	NS	.022	.023	NS	NS	NS
QN-2 Bolt	31.7	NS	NS	NS	0.39	0.82	.007	.015	0.24	0.17	1.04
QN-2 Nut	29.3	NS	NS	NS	0.48	NS	.013	.018	NS	NS	NS
QN-3 Bolt	29.7	NS	NS	NS	0.39	0.74	.018	.015	0.19	0.20	0.87
QN-3 Nut	26.0	NS	NS	NS	0.45	NS	.016	.012	NS	NS	NS
QN-4 Bolt*	28.0	NS	NS	NS	0.11*	0.84	.013	.011	0.21	0.18	0.93
QN-4 Nut	30.0	NS	NS	NS	0.42	NS	.028	.030	NS	NS	NS
QN-5 Bolt	28.0	NS	NS	NS	0.41	0.92	.023	.014	0.23	0.15	1.00
QN-5 Nut	26.3	NS	NS	NS	0.43	NS	.009	.031	NS	NS	NS
QN-6 Stud	29.7	NS	NS	NS	0.43	0.86	.019	.027	0.25	0.23	0.87
QN-6 Nut	28.3	NS	NS	NS	0.42	NS	.015	.024	NS	NS	NS
QN-7 Stud	26.7	NS	NS	NS	0.44	0.88	.013	.019	0.24	0.18	1.07
QN-7 Nut	24.7	NS	NS	NS	0.48	NS	.019	.019	NS	NS	NS
QN-8 Stud	32.0	NS	NS	NS	0.40	0.82	.021	.027	0.21	0.15	0.86
QN-8 Nut	26.3	NS	NS	NS	0.44	NS	.008	.028	NS	NS	NS
QN-9 Stud	26.3	NS	NS	NS	0.41	0.86	.010	.015	0.25	0.16	0.93
QN-9 Nut	28.0	NS	NS	NS	0.44	NS	.013	.008	NS	NS	NS
QN-10 Stud	28.7	NS	NS	NS	0.44	0.83	.019	.020	0.21	0.22	0.94
QN-10 Nut	27.7	NS	NS	NS	0.43	NS	.016	.022	NS	NS	NS

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

S = Not Specified.

DATA SUMMARY  
Zion Station

Sample ID	Mechanical Analysis				Chemical Analysis						
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lbF)	C	Mn	P	S	Si	Mo	Cr
ZIN01 Stud	30.7	NS	NS	NS	0.39	0.89	.012	.012	0.20	0.15	0.89
ZIN01A Nut	24.0	NS	NS	NS	0.42	NS	.028	.030	NS	NS	NS
ZIN01B Nut	24.8	NS	NS	NS	0.41	NS	.029	.030	NS	NS	NS
ZIN02 Stud	30.3	NS	NS	NS	0.39	0.88	.013	.011	0.21	0.15	0.88
ZIN02A Nut	25.3	NS	NS	NS	0.41	NS	.031	.030	NS	NS	NS
ZIN02B Nut	25.3	NS	NS	NS	0.41	NS	.030	.030	NS	NS	NS
ZIN03 Stud	31.0	NS	NS	NS	0.41	0.80	.013	.023	0.25	0.15	0.86
ZIN03A Nut	25.3	NS	NS	NS	0.43	NS	.009	.025	NS	NS	NS
ZIN03B Nut	27.2	NS	NS	NS	0.41	NS	.017	.030	NS	NS	NS
ZIN04 Stud	30.0	NS	NS	NS	0.40	0.81	.009	.022	0.24	0.16	0.89
ZIN04A Nut	26.3	NS	NS	NS	0.42	NS	.029	.043	NS	NS	NS
ZIN04B Nut	25.0	NS	NS	NS	0.43	NS	.011	.025	NS	NS	NS
ZIN05 Stud	26.0	NS	NS	NS	0.42	0.91	.019	.014	0.20	0.15	0.98
ZIN05A Nut	25.2	NS	NS	NS	0.42	NS	.030	.046	NS	NS	NS
ZIN05B Nut	24.3	NS	NS	NS	0.42	NS	.029	.044	NS	NS	NS
ZIN06 Stud	28.7	NS	NS	NS	0.41	0.87	.012	.008	0.25	0.15	0.78
ZIN06A Nut	25.7	NS	NS	NS	0.40	NS	.028	.031	NS	NS	NS
ZIN06B Nut	26.3	NS	NS	NS	0.41	NS	.029	.032	NS	NS	NS
ZIN07 Stud	27.7	NS	NS	NS	0.42	0.84	.020	.008	0.19	0.15	0.91
ZIN07A Nut	27.0	NS	NS	NS	0.48	NS	.011	.036	NS	NS	NS
ZIN07B Nut	26.3	NS	NS	NS	0.47	NS	.009	.037	NS	NS	NS
ZIN08 Stud	28.7	NS	NS	NS	0.43	0.89	.016	.009	0.20	0.15	0.95
ZIN08A Nut	27.2	NS	NS	NS	0.48	NS	.009	.036	NS	NS	NS
ZIN08B Nut	28.3	NS	NS	NS	0.47	NS	.008	.037	NS	NS	NS

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

S = Not Specified.

DATA SUMMARY  
Zion Station

Sample ID	Mechanical Analysis				Chemical Analysis						
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr
ZIN09 Stud	26.7	NS	NS	NS	0.40	0.83	.020	.018	0.25	0.15	0.96
ZIN09A Nut	27.7	NS	NS	NS	0.40	NS	.018	.018	NS	NS	NS
ZIN09B Nut	27.0	NS	NS	NS	0.48	NS	.014	.037	NS	NS	NS
ZIN10 Stud	26.3	NS	NS	NS	0.40	0.82	.023	.019	0.26	0.15	0.97
ZIN10A Nut	27.3	NS	NS	NS	0.48	NS	.014	.038	NS	NS	NS
ZIN10B Nut	26.7	NS	NS	NS	0.39	NS	.005	.025	NS	NS	NS
ZIN11 Nut	29.7	NS	NS	NS	0.05	1.07	.028	.007	0.32	0.16	18.11
ZIN12 Nut	30.3	NS	NS	NS	0.05	1.33	.025	.007	0.43	0.23	18.11
ZIN13 Nut	30.3	NS	NS	NS	0.05	1.09	.029	.007	0.33	0.18	18.01
ZIN14 Nut	26.3	NS	NS	NS	0.49	NS	.005	.046	NS	NS	NS
ZIN15 Nut	25.7	NS	NS	NS	0.50	NS	.015	.046	NS	NS	NS
ZIN16 Nut	26.0	NS	NS	NS	0.49	NS	.009	.046	NS	NS	NS
ZIN17 Stud	NS	139,425	124,815	NS	0.37	0.87	.012	.016	0.25	0.16	0.97
ZIN18 Stud	NS	146,115	130,075	NS	0.39	0.86	.009	.017	0.26	0.17	0.94
ZIN19 Stud	NS	153,635	139,600	NS	0.44	0.85	.027	.021	0.24	0.16	0.89
ZIN20 Stud	NS	140,530	129,330	NS	0.39	0.85	.017	.025	0.23	0.12	0.83
ZIN21 Stud	NS	140,355	127,775	NS	0.43	0.86	.014	.024	0.28	0.15	0.88
ZIN21A Nut	29.7	NS	NS	NS	0.45	NS	.022	.016	NS	NS	NS
ZIN21B Nut	27.7	NS	NS	NS	0.43	NS	.017	.032	NS	NS	NS
ZIN22 Stud	NS	137,750	125,320	NS	0.42	0.81	.012	.021	0.25	0.16	0.91
ZIN22A Nut	24.0	NS	NS	NS	0.41	NS	.017	.031	NS	NS	NS
ZIN22B Nut	24.0	NS	NS	NS	0.41	NS	.029	.031	NS	NS	NS
ZIN23 Stud	NS	151,560	138,435	NS	0.45	0.89	.012	.026	0.33	0.20	1.01
ZIN23A Nut	27.7	NS	NS	NS	0.46	NS	.014	.029	NS	NS	NS
ZIN23B Nut	25.0	NS	NS	NS	0.42	NS	.011	.021	NS	NS	NS

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

\* = Not Specified.

DATA SUMMARY  
Zion Station

Sample ID	Mechanical Analysis				Chemical Analysis						
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lbF)	C	Mn	P	S	Si	Mo	Cr
ZIN24 Bolt	26.0	NS	NS	NS	0.31	NS	.025	.007	NS	NS	NS
ZIN25 Bolt	26.0	NS	NS	NS	0.31	NS	.024	.007	NS	NS	NS
ZIN26 Bolt	25.0	NS	NS	NS	0.31	NS	.022	.007	NS	NS	NS
ZIN27 Nut	29.0	NS	NS	NS	0.43	NS	.024	.018	NS	NS	NS
ZIN28 Nut	33.7	NS	NS	NS	0.44	NS	.029	.031	NS	NS	NS
ZIN29 Nut	28.8	NS	NS	NS	0.44	NS	.024	.017	NS	NS	NS
ZIN30 Nut	28.7	NS	NS	NS	0.45	NS	.018	.035	NS	NS	NS
ZIN31 Nut	25.2	NS	NS	NS	0.41	NS	.023	.014	NS	NS	NS
ZIN32 Nut	27.7	NS	NS	NS	0.49	NS	.010	.047	NS	NS	NS

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

NS = Not Specified.

DATA SUMMARY  
Braidwood Station

Sample ID	Mechanical Analysis				Chemical Analysis							
	Hardness Rc	UTS1	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr	
BR-1 Scrw	NS	188,795	155,300	NS	0.37	NS	.012	.010	NS	NS	NS	
BR-2 Scrw	NS	199,405	186,475	NS	0.38	NS	.008	.021	NS	NS	NS	
BR-3 Bolt	NS	140,715	123,940	NS	0.36	NS	.007	.020	NS	NS	NS	
BR-4 Scrw	92.7	NS	NS	NS	.018	1.28	.022	.006	0.60	0.49	18.01	9.86
BR-5 Bolt	NS	125,890	104,300	NS	0.30	NS	.012	.016	NS	NS	NS	
BR-6 Bolt	NS	133,790	115,200	NS	0.30	NS	.017	.017	NS	NS	NS	
BR-7 Bolt	NS	146,560	126,800	NS	0.45	0.81	.009	.027	0.25	0.14	0.82	
BR-8 Bolt	NS	123,320	99,455	NS	0.33	NS	.013	.018	NS	NS	NS	
BR-9 Bolt	NS	141,720	125,060	NS	0.33	NS	.012	.012	NS	NS	NS	
BR-10 Bolt	28.7	NS	NS	NS	0.43	0.79	.018	.010	0.21	0.13	1.01	
BR-11 Nut	29.7	NS	NS	NS	0.47	NS	.017	.022	NS	NS	NS	
BR-12 Nut	24.3	NS	NS	NS	0.51	NS	.024	.028	NS	NS	NS	
BR-13 Nut	24.7	NS	NS	NS	0.42	NS	.015	.027	NS	NS	NS	
BR-14 Nut	27.7	NS	NS	NS	0.43	NS	.016	.014	NS	NS	NS	
BR-15 Nut	27.3	NS	NS	NS	0.43	NS	.019	.014	NS	NS	NS	
BR-16 Nut	27.7	NS	NS	NS	0.43	NS	.023	.014	NS	NS	NS	
BR-17 Nut	27.3	NS	NS	NS	0.43	NS	.019	.014	NS	NS	NS	
BR-18 Nut	26.7	NS	NS	NS	0.43	NS	.015	.014	NS	NS	NS	
BR-19 Bolt	30.0	NS	NS	NS	0.33	NS	.023	.019	NS	NS	NS	
BR-20 Bolt	25.0	NS	NS	NS	0.33	NS	.023	.021	NS	NS	NS	
BR-21 Scrw	89.7 Rb	NS	NS	NS	.029	0.54	.020	.002	0.24	2.03	16.24	10.68
BR-22 Nut	26.3	NS	NS	NS	.080	1.12	.032	.016	0.32	0.32	18.07	8.74
BR-23 Nut	90.3 Rb	NS	NS	NS	0.07	0.38	.021	.011	0.03	0.01	0.02	
BR-24 Nut	85.3 Rb	NS	NS	NS	0.07	0.37	.022	.011	0.04	0.01	0.01	

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

NS = Not Specified.

DATA SUMMARY  
Braidwood Station

Sample ID	Mechanical Analysis				Chemical Analysis							
	Hardness Rc	UTS <sup>1</sup>	0.2% YS (ksi)	Proof-Load (lb F)	C	Mn	P	S	Si	Mo	Cr	
BR-25 Nut	27.3	NS	NS	NS	0.45	NS	.013	.017	NS	NS	NS	
BR-26 Bolt	37.0	NS	NS	NS	0.31	NS	.008	.009	NS	NS	NS	
BR-27 Scrw	36.3	NS	NS	NS	0.38	NS	.017	.018	NS	NS	NS	
BR-28 Bolt	36.0	NS	NS	NS	0.37	NS	.008	.013	NS	NS	NS	
BR-29 Bolt	92.7 Rb	NS	NS	NS	0.04	1.35	.026	.018	0.46	2.21	17.09	12.42

Note: UTS-Ultimate Tensile Strength; YS-Yield Strength; Proofload-Length Measurement Method (ASTM F606 and SAE J429h); C-Carbon; Mn-Manganese; P-Phosphorus; S-Sulfur; Si-Silicon; Mo-Molybdenum; Cr-Chromium.

An asterisk denotes properties found out of specification.

1 = For wedge tension tests, tensile strength is given in pounds of force, for machined tensile specimens, tensile strength is given in pounds per square inch.

NS = Not Specified.

January 12, 1988

The following are specific comments pertaining to individual samples which did not conform to a characteristic defined by the original Material Specification.

Dresden 1

1. Sample DS-2 - Sample DS-2 is a safety-related ASTM A194 2H nut which has a carbon content of 0.33% which is lower than the 0.40% specified. Carbon content is controlled primarily to strengthen this material. There were no adverse consequences caused by this lower carbon content because the mechanical properties are well within the specification. Consequently, the lower carbon content does not have an adverse effect on fitness for use.
2. Sample D3 - Sample D3 is a safety-related ASTM A193 Grade B7 bolt with manganese content tested at 0.60%. The Material Specification requires the manganese content to be 0.65 to 1.10% with a permitted product variation of  $\pm 0.04\%$ . Manganese is an alloying element which is present primarily to strengthen the bolting material. The mechanical properties were tested and found to exceed the minimum requirements of the Material Specification. Therefore, the variation in manganese content does not have an adverse effect on fitness for use.
3. Sample DS-8 - Sample DS-8 is a safety-related ASTM A192 Grade B7 stud with slightly lower yield strength. The specification requires 105 ksi minimum yield and 125 ksi minimum tensile strength; the test results indicate 102 ksi yield and 129 ksi tensile strength. Since the actual tensile strength is greater than the minimum and the actual minimum yield is only 3% less than specified, there is no safety significance.

Quad Cities - 1

1. Sample QS-2 - Sample QS-2 is a safety-related stud specified as A320 L7 material. The manganese content was tested at 0.68%. The Material Specification requires a range of 0.75 to 1.00% with a product variation of  $\pm 0.04\%$ . Manganese is an alloying element which is present primarily to strengthen the bolting material. The mechanical properties were tested and found to exceed the minimum requirements of the Material Specification. Therefore, the variation in manganese content does not have an adverse effect on fitness for use.

2. Sample QS-6 - Sample QS-6 is a safety-related ASTM A194 2H nut with carbon content tested at 0.37%. The Material Specification calls for a minimum carbon content of 0.40%. The carbon content is controlled primarily to strengthen this material. There were no adverse consequences caused by this lower carbon content because the mechanical properties meet the specification requirements. Consequently, the lower carbon content does not have an adverse effect on fitness for use.
3. Sample QN-4 - Sample QN-4 is a non-safety-related bolt. The carbon content was tested as 0.11%. The Material Specification calls for a carbon content range of 0.37 to 0.49%. The mechanical properties conform with the Material Specification requirements. Consequently, the lower carbon content does not have an adverse effect on fitness for use.

LaSalle

1. Sample L-8 - Sample L-8 is a safety-related ASTM A193 B8M bolt with molybdenum content tested as 1.83%. The Material Specification calls for a molybdenum content range of 2.00% to 3.00% with a permitted product variation of 0.10%. Molybdenum is an effective alloying element which increases the harden ability of steel. Because the mechanical properties were in accordance with the Material Specification, the lower molybdenum content does not have an adverse effect on the fitness for use.
2. Sample L-10 - Sample L-10 is a set of three safety-related ASTM A574 cap screws with a tested average hardness reading of 37.5 Rc. The Material Specification requires a minimum hardness reading of 39 Rc. The tested average hardness reading is less than 4% of the minimum required by the Material Specification. This difference would have no safety significance. The tested screws are 1/4" in diameter. Inconsistencies with hardness testing results for small diameter bolting materials is common due to the limitation of the testing technique.
3. Sample L-17 - Sample L-17 is a set of non-safety-related ASTM A194 2H nuts. One of these three nuts had a hardness reading tested at 89.0 Rb where the Material Specification calls for hardness requirement of 24 to 38 Rc. The chemical properties conform with the Material Specification. The tested Rockwell hardness value converts to approximate tensile strength of 89,000 ksi. Consequently, these nuts have been judged as being fit for use. Because these are designated as non-safety-related, there is no safety significance.
4. Sample L-19 - Sample L-19 is a non-safety-related ASTM A354 Grade BD bolt with carbon content tested as 0.21%. The Material Specification calls for a carbon content by product analysis of 0.28% to 0.55%. The mechanical properties of the tested bolt met the minimum requirements of the Material Specification. Consequently, the lower carbon content does not have an adverse effect on the fitness for use.



SAFETY RELATED FASTENER SUPPLIERS:

1. SCI Streator IL
2. ITT Hammel-Dahl/ Conflow Corp., Wardwick RI
3. Joliet Valve, Minooka IL 60447
4. Midland Pipe and Supply Co., Cicero IL 60650
5. Manufacturers Bolt & Nut, Bensenville IL 60106
6. ACIMET Mfg, Cleveland OH
7. Cardinal Industrial Products, Las Vegas NV
8. Crane Co., Carol Stream, IL
9. Fabsco, Calumet Pk., IL
10. Texas Bolt, Houston TX
11. Standard Equipment And Supply Co., Hammond In
12. Wilkens Pipe & Supply, Moline IL
13. Action Threaded Products, Bridgeview IL
14. Westinghouse, Indianapolis IN
15. Babcock & Wilcox, Lynchburg VA
16. Joseph Oat, Camden NJ
17. Energy Steel & Supply Co., Rochester MI
18. Crosby Valve and Gage Co., Wrentham MA
19. Mosoneilan Div. Dresser Industries
20. Posi Seal, North Stoningham CN
21. Victor Products
22. Rockwell International

ENCLOSURE 4

Response to Item #6 of NRC Bulletin 87-02

Item #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.

Response

Based on the results of the test program and the review of current procedures for inspection and control. Commonwealth Edison feels that no further action should be taken. Edison believes that fasteners used in the plant meet the requirements and the operability of safety related plant components is not affected.

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SAFETY RELATED FASTENER SUPPLIERS:

1. SCI Streator IL
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22. Rockwell International