

GENERAL INFORMATION or OTHER

EVENT NUMBER: 29328

LICENSEE: CANADIAN WORCESTER CONTROLS LTD
CITY: SCARBOROUGH REGION: 0
COUNTY: STATE:
LICENSE#: AGREEMENT:
DOCKET:

NOTIFICATION DATE: 09/13/95
NOTIFICATION TIME: 17:31 [ET]
EVENT DATE: 09/13/95
EVENT TIME: 00:00 []
LAST UPDATE DATE: 09/13/95

NOTIFICATIONS

NRC NOTIFIED BY: KOTACK
HQ OPS OFFICER: CHAUNCEY GOULD

VERN HODGE

NRR

EMERGENCY CLASS: NOT APPLICABLE
10 CFR SECTION:
NINF
CCCC 21.21

INFORMATION ONLY
UNSPECIFIED PARAGRAPH

EVENT TEXT

CANADIAN WORCESTER CONTROLS LTD REPORTED THAT IT SUPPLIED 3/4" BALL VALVES TO COMANCHE PEAK AND BRUNSWICK POWER PLANTS THAT WERE DEFECTIVE.

THE VALVES WHICH WERE SUPPLIED BY CANADIAN WORCESTER CONTROLS LTD (CWCL) CONTAIN BOLTING THAT ORIGINATED FROM A HEAT LOT CHARGE THAT CONTAINED A DEFECTIVE PRODUCT. THE SUSPECT MATERIAL IS A 3/8" - 16 SA 193 B7 HEX CAPSCREW PRODUCT MARKETING B7, C, TS6, S5. PRELIMINARY INVESTIGATION BY THE FASTENER SUPPLIER (CARDINAL INDUSTRIAL PRODUCTS) HAS REVEALED THAT AS MANY AS 25% OF THE FASTENERS FROM THE HEAT LOT CHARGE MAY HAVE MECHANICAL PROPERTIES BELOW THE SPECIFIED MINIMUM. A TEST BLANK FROM THE AFFECTED HEAT LOT WAS ORDERED BY CWCL AT THE TIME OF PURCHASE, AND THE SUBSEQUENT TESTING BY AN INDEPENDENT LAB PROVIDED RESULTS WHICH MEET THE MATERIAL SPECIFICATION REQUIREMENT.

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Worcester Controls

A BTR Company

13 September 1995

NRC Operations Centre
Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555
Facsimile No.: (301) 816-5151

FROM: Canadian Worcester Controls Ltd
Glenn Kotack, C.E.T.

SUBJECT: 10 CFR Part 21 Notification Reporting of Defects and Noncompliance

EQUIPMENT DESCRIPTION: 3/4" ASME Section III Class 2 Ball Valves

EQUIPMENT SUPPLIED BY: Canadian Worcester Controls Ltd.

NATURE OF DEFECT: The ball valves contain pressure boundary bolting which has been identified by our fastener supplier (Cardinal Industrial Products) as originating from a heat lot charge that contained defective product.

Notification of this defect was received September 12/1995 from B & G Manufacturing who purchased the name and certain assets of Cardinal Industrial Products, Limited Partnership. The defective product was processed and sold while the assets were owned by the former owners. Copy of the notification from B & G is attached.

LOCATION OF COMPONENTS: See attached for details.

CORRECTIVE ACTION: Has been initiated by Cardinal Industrial Products, Nuclear Division of B & G Manufacturing Co., Inc. and reported to the NRC as per attached notification.

Glenn Kotack, C.E.T.
Quality Assurance Manager

c.c: Authorized Inspection Agency
Ontario Ministry of Consumer and Commercial Relations
Pressure Vessels Safety Branch
Mr. Larry Calvert - ANIS

**Worcester Controls**

A BTR Company

13 September 1995

To: T.U. Electric Company
Skyway Tower
400 N. Olive Street, LB 81
Dallas, Texas 75021

Attention: Executive Vice President
Nuclear Engineering and Operations
c.c: Danny Leigh, Procurement Overview Supervisor

From: Glenn Kotack, Quality Assurance Manager

Subject: 10 CFR Part 21 Notification Reporting of Defects and Noncompliance

Location of Installation: Comanche Peak SES, Glen Rose, Texas

Item Affected: 3/4" ASME Section III Class 2, Ball Valves

P.O. & Item No.: S0139740 6S2 item 01 (TU #347941)

Quantity: 4 Serial Number N94-0114-9, -10, -11 & -12

Shipment Date: 8 December 1995

Please be advised that the above referenced valves that were supplied by Canadian Worcester Controls Ltd contain bolting that originated from a heat lot charge that contained defective product.

The details of the suspect material is as follows:

3/8" - 16 SA 193 B7 Hex Capscrew

Product Marking B7, C, TS6, S5

The preliminary investigation by our fastener supplier has revealed that as many as 25% of the fasteners from the heat lot charge may have mechanical properties below the specified minimum.

A test blank from the affected heat lot was ordered by CWCL at the time of purchase and subsequent testing by an independent laboratory provided results which meet the material specification requirement (copy attached).

Glenn Kotack, C.E.T.
Quality Assurance Manager



Worcester Controls

A BTR Company

13 September 1995

To: Carolina Power and Light Company
Brunswick Plant
P.O. Box 10429
Southport, NC 28461

Attention: William R. Campbell
Site Vice President
c.c: Carl G. Hensley - Senior Vendor Surveillance Specialist
Troy Ellis - Purchasing Agent

From: Glenn Kotack, Quality Assurance Manager

Subject: 10 CFR Part 21 Notification Reporting of Defects and Noncompliance

Location of Installation: Brunswick Plant

Item Affected: 3/4" ASME Section III Class 2, Ball Valves

P.O. & Item No.: 8A4135CJ Item 01 (CP&L #740-509-23)

Quantity: 4 Serial Number N94-0121-1, -2, -3 & -4

Shipment Date: 31 March 1995

Please be advised that the above referenced valves that were supplied by Canadian Worcester Controls Ltd contain bolting that originated from a heat lot charge that contained defective product.

The details of the suspect material is as follows:

3/8" - 16 SA 193 B7 Hex Capscrew
Product Marking B7, C, TS9, S4

The preliminary investigation by our fastener supplier has revealed that as many as 25% of the fasteners from the heat lot charge may have mechanical properties below the specified minimum.

Glenn Kotack, C.E.T.
Quality Assurance Manager

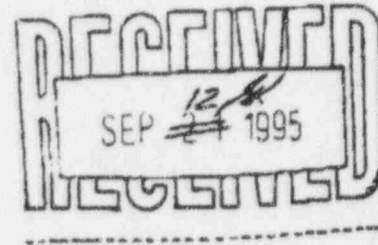


Home Office:

3067 Unionville Pike
Hartfield, PA 19440
215-822-1925

September 5, 1995

Canadian Worcester Controls
Glen Kotak, QA Manager
20 Mid Dominion Acres
Scarborough, Ontario Canada M1S 4A5



Dear Mr. Kotak:

As previously announced, on July 10, 1995, B&G Manufacturing Co., Inc. purchased the name and certain other assets of Cardinal Industrial Products, L.P. (Limited Partnership). B&G acquired these assets with plans of beginning its own nuclear fastener business under the Cardinal name at the Las Vegas location and of conducting new operations as a division of B&G.

B&G has recently learned of a defect in three heat lots of inventory that were processed and sold while the assets were owned and operated by the former owner. Because B&G values its relationship with you, B&G is disseminating these findings by means of the attached "10 CFR Part 21" notification to you as a purchaser of material from these lots (even though the products in question were processed and sold by the former owner and thus are not the responsibility of B&G).

Preliminary analysis suggests that a portion of the inventory lot in question was insufficiently heat treated at the Cardinal facility. The heat treating equipment, which B&G acquired, has not been and will not be utilized until we have fully investigated the situation; furthermore, we have suspended shipping any material that was heat treated at the facility.

B&G's customers know us for our excellent and reliable service, which we hope to bring to the nuclear fastener industry through our acquisition of the Cardinal assets. We are confident that our manufacturing experience and resources will make a difference.

Even though the obligation for statutory notifications remains with the former ownership (the limited partnership), B&G intends to investigate the situation thoroughly. We will keep you apprised of our progress and hope that we can earn your trust.

Sincerely yours,

A handwritten signature in cursive script that reads 'William A. Edmonds'.

William A. Edmonds
President

Supplier of:	Bolts - Nuts - Studs - Threaded Rods - Machined Specials		
Service Centers:	6870 N. Fathom St. Portland, OR 97217 503-286-6601	10231 General Dr. Orlando, FL 32824 407-857-5858	4660 Pine Timbers Houston, TX 77041 215-822-1925

Cardinal

INDUSTRIAL PRODUCTS

3873 West Oquendo • Las Vegas, Nevada 89118-3096
(702) 739-1868 • Fax (702) 739-1860

Date: September 5, 1995

Customers Name: Canadian Worcester Controls
20 Mid Dominion Acres, Scarborough
Ontario, Canada M1S 4A5

Attention: Glen Kotack, QA Manager

From: David Z. Hathcock, Quality Assurance Manager

Subject: 10 CFR Part 21 notification reporting of Defects and Noncompliance.

- 1) Reference: Description 3/8-16 x 1 1/16 A193 B7 Hex CapScrew
Purchase order C4868 Line Item 1 Qty. 100
Product Marking B7.C.TS9.S4 Shipment Date 2/20/95
- 2) Reference: Description 3/8-16 x 7/8 A193 B7 Hex CapScrew
Purchase order C4846 Line Item 2 Qty. 100
Product Marking B7.C.TS6.S5 Shipment Date 11/28/94
- 3) Reference: Description 3/8-16 x 1 A193 B7 Hex CapScrew
Purchase order C4846 Line Item 3 Qty. 50
Product Marking B7.C.TS6.S5 Shipment Date 11/28/94
- 4) Reference: Description 3/8 x 6 A193 B7 Hex CapScrew-Blank
Purchase order C4857 Line Item 1 Qty. 1
Product Marking B7.C.TS5.S5 Shipment Date 11/28/94

Please be advised that the above referenced fasteners that were supplied to you by Cardinal Industrial Products L.P. originated from a heat lot charge that contained defective product.

Page 2 of 2

This discrepancy was discovered during a customer's receipt inspection. B&G Manufacturing Co., Inc's Cardinal Industrial Products division, which earlier this year purchased certain assets from Cardinal Industrial Products, L.P. including the name, has conducted an preliminary internal investigation which has confirmed that as many as 25% of the fasteners from the heat lot charge may have mechanical properties below the specified minimums.

Early indications suggest that the discrepancies resulted from inadequate heat treatment. A comprehensive investigation is being conducted to determine the exact cause of the problem. We will provide a detailed report within sixty (60) days.

This notification is provided by B&G as a service to its current customers who may have purchased this product from the prior owner, so that you can conduct an evaluation to determine if this product defect creates a substantial safety hazard in accordance with 10 CFR Part 21 paragraph 21.21 (a)(1)(ii) and (b)(1). We have reported this problem to the Nuclear Regulatory Commission (NRC) Inquiries may be directed to me at (702) 739-1966, Fax (702) 739-1960.

cc: customer file



Cambridge

materials testing limited

1177 Franklin Blvd,
Cambridge, Ont. N1R 7W4
Tel: (519) 621-6600 Fax: (519) 621-6082

Laboratory No. 116035-1994

Date: December 16, 1994

Report for: Canadian Worcester Controls
Attention: Eric de Souza

Customer P.O.# : 5070

Specimen:

3/8" Dia. x 6" Lg Hex Head Cap Screw Blank, Heat Code: TS6
Material: ASME SA193 B7, C.E.D.: 1983 Edition, Summer 1984
Addenda Thru to 1992 Edition 1993 Addenda

Chemical Test Results

	RESULT	SA193 Grade B7 SPECIFICATION
Total Carbon	0.40 %	0.37 - 0.49%
Manganese	0.86 %	0.65 - 1.10%
Phosphorus	0.020 %	0.035% maximum
Sulphur	0.013 %	0.040% maximum
Silicon	0.25 %	0.15 - 0.35%
Chromium	0.94 %	0.75 - 1.20%
Molybdenum	0.21 %	0.15 - 0.25%



ER
Dec 28/94

The above analysis satisfies the chemical composition limits of ASME SA193 grade B7 steel.

Chemical analysis performed according to ASTM E1019-93, E1097-93 (modified) and E1479-92.

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Cambridge Materials Testing Limited

Per

Eric de Souza

QUALITY ASSURANCE MANAGER

Per

E. Moly

TECHNICIAN



Cambridge

materials testing limited

1177 Franklin Blvd,
Cambridge, Ont. N1R 7W4
Tel: (519) 621-6600 Fax: (519) 621-6062

Laboratory No. 116035-1994

Date: December 16, 1994

Report for: Canadian Worcester Controls
Attention: Eric de Souza

Customer P.O.# : 5070

Specimen:

3/8" Dia. x 6" Lg Hex Head Cap Screw Blank, Heat Code: TS6
Material: ASME SA193 B7, C.E.D.: 1983 Edition, Summer 1984
Addenda Thru to 1992 Edition 1993 Addenda

Tensile Test Results

	RESULT	SA193 Grade B7 (2-1/2" Dia & under) <u>SPECIFICATION</u>
Specimen Diameter:	0.242 in.	
Yield Strength (0.2% offset):	147,000 psi	105,000 minimum
Ultimate Tensile Strength:	152,000 psi	125,000 minimum
Elongation in 1 in.:	16 %	16 minimum
Reduction of Area:	62 %	50 minimum

Testing performed according to ASTM A370-92.



CR
DEC 28/94

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Per Jesse Huance QUALITY ASSURANCE MANAGER
Per Pat TECHNICIAN