

C&D TECHNOLOGIES, INC.

Power Solutions

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May 29, 2015

VIA FACSIMILE
Nuclear Regulatory Commission
Operations Center
301-816-5151

VIA REGULAR MAIL
Document Control Desk
US Nuclear Regulatory Commission
Washington, DC 20555-001

VIA OVERNIGHT DELIVERY
US Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2746

Subject: Interim Report – Inability to Complete 10CFR Part 21 Evaluation regarding cracking in KCR-13 Standby Battery Jars

The purpose of this letter is to provide the NRC a report in general conformity to the requirements of 10CFR Part 21.21 (a)(2). On March 4, 2015 C&D Technologies, Inc. ("C&D") was informed by Entergy Nuclear Northeast that a KCR-13 battery installed at the Indian Point Nuclear Energy Center had developed a crack in the polycarbonate jar material. This is the second KCR-13 at this site that has experienced a crack in the jar material. The jar is a safety related component with the primary function of containing electrolyte. The battery has not been returned to C&D for analysis, and analysis of the previous issue was inconclusive.

C&D is submitting this interim report to the NRC and notifying C&D's customers that use C&D KCR-13 batteries of this Interim report, and is initiating an action plan to evaluate the reported potential defect and determine whether it could pose a substantial safety hazard for any U.S. licensee using such batteries.

Required information as per 10CFR Part 21.21(d)(4) follows:

- (i) **Name and Address of the individual or individuals informing the Commission**
Armand Lauzon
President and Chief Executive Officer
C&D Technologies, Inc.
1400 Union Meeting Road
Blue Bell, PA 19422-0858
- (ii) **Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.**

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MLR

KCR-13 Batteries, manufactured in 2005, battery manufacturing date is on the label. Note: C&D has not completed its evaluation of the reported potential defect and whether it could pose a substantial safety hazard at any U.S. licensee using such batteries.

- (iii) ***Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.***

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- (iv) ***Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.***

The cracked jar has not been fully evaluated and may or may not indicate a potential defect which could create a substantial safety hazard.

- (v) ***The date on which the information of such defect or failure to comply was obtained.***

March 4, 2015

- (vi) ***In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for, being supplied for, or may be supplied for, manufactured or being manufactured for one or more facilities or activities subject to the regulations in this Part.***

KCR-13 batteries used at Nuclear Plants in 1E applications made in 2005

Utility	Plant Name	Battery Model	Qty of Batteries
Entergy	Indian Point	KCR-13 NUC	72
Xcel Energy	Monticello	KCR-13 NUC	62

- (vii) ***The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.***

Co-Current Actions underway to complete the evaluation:

- a) On receipt of the battery from Indian Point C&D will perform a failure analysis with the intent of determining the root cause of the cracking issue. Maximum time 30 days from receipt of the battery.
 - b) In conjunction with the licensees identified in section vi, C&D will recommend maintenance assessment of all KCR-13 batteries at these locations to determine their status, and specifically the presence of any evidence of potential defects via visual examination. For any cells exhibiting the presence of potential defect, C&D shall further recommend that they be returned for analysis. Estimated completion date of analysis is thirty (30) days from the receipt of the returned batteries.
- (viii) ***Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.***

U.S. Licensees using batteries possibility containing the alleged defect have been notified of the filing of this interim report with recommendations that they examine their batteries for any signs of problems. NOTE: A similar notification and advice was provided in December 2013 with the previous battery. C&D did not receive any reports of similar problems from other product users.

(ix) ***In the case of an early site permit, the entities to whom an early site permit was transferred.***

Not applicable

If you have any questions or wish to discuss this matter or this report, please contact:

Robert Malley
VP Operational Excellence
bmalley@cdtechno.com
(215) 619-7830

Sincerely



Armand Lauzon
President and Chief Executive Officer
C&D Technologies, Inc.

Attachment – C&D Letter to Users of KCR-13 batteries entitled "KCR Jar Crack Reported March 2015"

Cc: D. Anderson
J. Miller
R. Malley
S. DiMauro
L. Carson
J. Anderson

C&D TECHNOLOGIES, INC.

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Fax: (215) 619-7887

May 29, 2015

Customer Contact
Customer Address

Ref: KCR Jar Crack Reported March 2015

Dear Sir/Madam:

C&D Technologies is filing an interim report for an incident that occurred with a safety related product at Indian Point Energy Station.

On March 4, 2015 C&D Technologies was informed by Entergy Nuclear Northeast that a KCR-13 battery installed at the Indian Point Nuclear Energy Center had developed a crack in the polycarbonate jar material. This is the second KCR-13 with a polycarbonate crack at this location. The first was initially reported in October 2013, and reported to the NRC and users of the product. A return request has been made for the cell; however, it has not yet been received for analysis.

Appearance: No photograph is available for the newly reported cell. Verbal description of the cell indicates that its appearance is similar to the previously reported cell, which is shown on Figure 1. The crack in the newly reported cell extends further, past the low level line of the jar.



Figure 1

The customer has not reported any loss of electrolyte through the jar crack in the newly reported cell.

Site and Product History: The cell from the 2013 incident was analyzed by a third party engineering firm. Their report concluded that the crack was caused by environmental stress cracking; however, the chemical agent that accelerated the failure mechanism was not identified conclusively. Numerous Part 21 and field reports were distributed to industry with no other site reporting similar issues.

Previous research into product history has shown a very low incident of jar cracking after installation, around 15 parts per million.

Recommended Action: C&D recommends that users of KCR-13 cells in safety related applications inspect their battery cells for cracks in the clear polycarbonate jar material. Any batteries found with cracks should be replaced, and the cells returned to C&D for analysis. Requirements for visual inspection are described in our I&O manual for flooded products, available on the C&D website. C&D will communicate the need for inspection with the users of KCR-13 cells manufactured from 2004 to 2006.

Further Reporting: C&D is filing this interim report while the product return and testing process is underway. On completion of the report C&D will provide a final evaluation of the issue and file reports as required by regulation.

C&D Contacts: Further information on this issue can be obtained from:

Larry Carson – Nuclear Product Manager
Office Phone 215-775-1314
Email: lcarson@cdtechno.com

Robert Malley – VP Operational Excellence
Office Phone 215-619-7830
Email bmalley@cdtechno.com

Best Regards,



Larry Carson
Nuclear Product Manager
C&D Technologies, Inc.

cc: A. Lauzon – President and CEO
D. Anderson – VP General Counsel
J. Miller – VP Operations
R. Malley – VP Operational Excellence
J. Anderson – VP Engineering and New Technology
L. Carson – Nuclear Product Manager