

Part 21 (PAR)

Event # 51496

<b>Rep Org:</b> CRANE NUCLEAR, INC.	<b>Notification Date / Time:</b> 10/23/2015 18:28 (EDT)
<b>Supplier:</b> CRANE NUCLEAR, INC.	<b>Event Date / Time:</b> 08/26/2015 (CDT)
	<b>Last Modification:</b> 10/23/2015
<b>Region:</b> 3	<b>Docket #:</b>
<b>City:</b> BOLINGBROOK	<b>Agreement State:</b> Yes
<b>County:</b>	<b>License #:</b>
<b>State:</b> IL	
<b>NRC Notified by:</b> JASON KLEIN	<b>Notifications:</b> MEL GRAY R1DO
<b>HQ Ops Officer:</b> DONG HWA PARK	PART 21/50.55 REACTORS EMAIL
<b>Emergency Class:</b> NON EMERGENCY	
<b>10 CFR Section:</b>	
21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE	

PART 21 REPORT - PRESSURE SEAL VALVE NONCOMPLIANCE

The following is a summary of a submitted facsimile:

"Pressure Seal Valve orders may potentially have misclassified material and non-destructive examination requirements for segment ring designs.

"Crane Nuclear 'Classification of Valve Parts', Procedure 03-107, provides guidance for appropriate material and NDE [Non Destructive Test] requirements for processing valve and valve part orders. The procedure is based on the ASME Code Case N-62, which is ASME B&PV Section III, 2015 Edition, Non-Mandatory Appendix HH 'Rules for Valve Internal and External Items'.

"A pressure seal valve segment ring requires the material to be purchased Safety Related, ASME B&PV Section II, Part D materials, and required NDE (reference Category 3 valve items per N-62). A segment ring may have been processed to material requirements not as pressure retaining material per NX-2000 of the Code resulting in the incorrect material specification and non-destructive examination specified.

"Limited to (1) CNI [Crane Nuclear, INC.] SO# 069000408, Dominion, Millstone. P.O. 954282 and Purchase Req. No. N90136-01- Quantity shipped = 1, Crane, 8", Fig. 55009-12CF8M-WE, Class 900, ASME Class 1, 1986 Ed.

"Should you have any questions regarding this matter, please contact Jason Klein, Engineering Manager at (630) 226-4953 or Rosalie Nava, Director of Safety and Quality at (630) 226-4940"

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NRR



**NUCLEAR**

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CRANE NUCLEAR, INC. 860 REMINGTON BOULEVARD BOLINGBROOK, IL. 60440

Date: October 23, 2015

Attn: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-001

Subject: 10 CFR Part 21 Investigation Report  
Notification of Pressure Seal Valve Segment Ring Material Compliance

Dear Sir or Madam:

This letter provides notification of the Crane Nuclear, Inc. investigation into ASME Boiler and Pressure Vessel Section III Code design Pressure Seal Valve orders with segment ring material compliance. The information required for this notification is provided below:

*(i) Name and address of the individual or individuals informing the Commission.*

Jason Klein  
Engineering Manager

Rosalie Nava  
Director Safety and Quality

Crane Nuclear  
860 Remington Blvd  
Bolingbrook, IL 60440

*(ii) Identification of the basic component supplied for such facility or such activity within the United States which may fail to comply or contains a potential defect*

Pressure Seal Valve orders may potentially have misclassified material and non-destructive examination requirements for segment ring designs.

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

Crane Nuclear  
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Bolingbrook, IL 60440

*(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.*

Crane Nuclear "Classification of Valve Parts", Procedure 03-107, provides guidance for appropriate material and NDE requirements for processing valve and valve part orders. The procedure is based on the ASME Code Case N-62, which is ASME B&PV Section III, 2015 Edition, Non-Mandatory Appendix HH "Rules for Valve Internal and External Items".

A pressure seal valve segment ring requires the material to be purchased Safety Related, ASME B&PV Section II, Part D materials, and required NDE (reference Category 3 valve items per N-62). A segment ring may have been processed to material requirements not as pressure retaining material per NX-2000 of the Code resulting in the incorrect material specification and non-destructive examination specified.



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

August 26<sup>th</sup>, 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.*

Limited to (1) CNI SO# 069000408, Dominion, Millstone, P.O. 954282 and Purchase Req. No. N90136-01- Quantity shipped = 1, Crane, 8", Fig. 55009-12CF8M-WE, Class 900, ASME Class 1, 1986 Ed.

*(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.*

Training was held for engineers involved in classification of components for pressure seal designs (integral yoke, retaining rings, and segment rings) completed 8/10/15.

A "where-used" was determined for all pressure seal valve design orders and completed 8/23/15. Crane also conducted a dual path search of the CNI drawing database to validate the order search.

Revised Crane Nuclear Procedure 03-107 to add figures reflecting configurations and clarify classifications completed 8/24/15. The segment ring classification was clarified as pressure retaining material with this revision.

CNI Design Report Reconciliation of the segment ring material for the order identified was completed 10/23/15.

*(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.*

Crane Nuclear has notified the customer of the issue identified.

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

Not applicable.

Should you have any questions regarding this matter, please contact Jason Klein, Engineering Manager at (630) 226-4953 or Rosalie Nava, Director of Safety and Quality at (630) 226-4940.

Regards,

Crane Nuclear, Inc.

Jason Klein  
Manager of Engineering