



**Flow Control Division**

*Anchor/Darling Valves  
BW/IP Valves  
Edward Valves  
Valtek Control Products  
Worcester Valves*

August 3, 2012

US Nuclear Regulatory Commission  
Document Control Desk  
11545 Rockville Pike  
Rockville, MD 20852-2746

Subject: USNRC 10CFR Part 21 Notification

Ref: Flowserve Evaluation Report No. 10 CFR 21-68

Seal Cap for Kerotest 3/4, 1, 1-1/2, and 2 Y-Type Globe Valves

Gentlemen,

This is to notify the US Nuclear Regulatory Commission, in accordance with the provisions of 10CFR-Part 21 of a deviation identified by Flowserve Corporation.

Background

On July 17, 2012, Duke Power – McGuire NPP notified Flowserve Corporation that they had attempted to install a Seal Cap supplied by Flowserve on a Kerotest 1-1500 Y-Type Globe Valve. They found that the Seal Cap could not be installed on the valve due to interference with the Valve Stem.

Discussion

The Seal Cap is used to contain leakage past the Valve Diaphragm. The Seal Cap fits over the Valve Stem after Handle removal and is screwed onto the Yoke until it contacts the top of the Body. It is then seal welded to the Body to create a leak tight cap. At this point the Seal Cap is considered pressure retaining.

Inspection of the Seal Cap revealed an inside flat bottom in lieu of the conical bottom shown on the drawing. The conical drill point allows clearance for the valve stem when the Seal Cap is installed on the valve. Review of a layout shows the Seal Cap with a Flat bottom cannot be completely installed whether the valve is open or closed.

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Conclusion

The Seal Cap with a flat bottom cannot be properly installed on the Kerotest Series R9900 size 1/2 to 2 Valves for which it was designed. The Valve Stem will prevent complete installation and the ability to seal weld the Seal Cap to the Body. The Seal Caps supplied would not be available at the Nuclear Power Plant site for an urgent repair if required.

The following Nuclear Power Plant Utilities were provide these Seal Caps without the conical shaped area.

TVA – Purchase Order# 00020077-00050 and 00020077-00018

First Energy – Purchase Order# 45108999, and 45254808

Alabama Power – Purchase Order# QP040387, QP040872 and QP060575

Duke Power – Purchase Order # NM18494 001, NM25245, 00108212 and 00124677.

Based on the above, the Nuclear Utilities need to be notified concerning this deviation so that an evaluation may be performed to determine if this constitutes a defect that could create a substantial safety hazard.

Respectfully submitted,



Robert D. Barry  
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