Part 21 (PAR) Event # 50284

Rep Org: VELAN INC.		**Notification Date / Time:** 07/18/2014 08:28 (EDT)	
Supplier: VELAN INC.		**Event Date / Time:** 07/17/2014 (EDT)	
		Last Modification: 07/18/2014	
Region:		**Docket #:**	
City: MONTREAL, CANADA		**Agreement State:** No	
County:		**License #:**	
State:			
NRC Notified by: VICTOR APOSTOLESCU		**Notifications:** THOMAS FARNHOLTZ	R4DO
HQ Ops Officer: VINCE KLCO		PART 21 GROUP	EMAIL
Emergency Class: NON EMERGENCY			
10 CFR Section:			
21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE			

PART 21 REPORT - NOTIFICATION OF DEFECTS ON 2 INCH BONNETS

The following information was received from Velan Inc by facsimile:

"SUBJECT NOTIFICATION: 2 INCH BONNETS, VELAN PART NUMBER 6943-014

"On May 16, 2014 [Velan] received notification from Westinghouse Electric Co. (WES) that 2 bonnets supplied by Velan to WES in early 2013 for installation at Comanche Peak exhibited the following issues:
- The bonnets were intended to be exact replacements for the bonnets built to drawing E73-020 Rev E (OEM is Velan) except for material change to SA-182 FXM-19. Bonnets were visually inspected when received at site. No issues were noted; both bonnets appeared to be identical.
- In April 2013, Unit 1 bonnet was installed in valve 1-8109. No issues were noted with the installation. The new bonnet was put into service.
-In April 2014, Unit 2 installation was scheduled to begin. After the disassembly of the valve, the old and new bonnets were compared. It was noted that the backseat dimensions are different between the 2 bonnets. The increase in backseat diameter on the new bonnet would cause the stem to not backseat. The decision was made to re-install the old bonnet and send the new bonnet back to the OEM, Velan.

"On June 10, 2014 the bonnet, identified in the last bullet above, arrived at Velan Plant 2.

"The review by the [Velan] Evaluation Committee was finalized on July 17 and concluded that:
-Four similar bonnets were delivered to WES on three different occasions in 1988 and early 90's
-The stem head diameter is 01.312 [inches] so, when opening, the stem may pass through the stem bore of the bonnet and not seat on the backseat.
-On opening, if the limit switches on the actuator do not function, the stem may enter the packing chamber. The

IE19
NRR

packing may be deformed and a leak may develop. Stem travel is limited by the disc contacting the bonnet and/or the end of the stem thread stopping on the actuator drive nut.
-If the actuator and packing flange nuts are removed, there is the potential for the stem to blow out of the valve.
-The packing chamber depth will result in more packing being installed in the valve. This may result in a higher packing friction load on the actuator when operating and reduce the actuator margin.
-The smaller packing chamber will not affect safety. A different diameter packing may be required. The gland bushing diameter (01.744 inches) is less than the packing chamber diameter and will work correctly.

"These bonnets were fabricated against ASME Sec. III for installation in Class 2 systems. Not knowing exactly the nature of the application we cannot determine if the [above identified] potential issues may pose a significant safety hazard and therefore we have informed WES by way of a similar letter."

****

VELAN

550 McArthur, Ville St-Laurent
Quebec, Canada H4T 1X8

DATE: July 18, 2014

PAGE: 1 of 2

FROM: Cathy Andrewsky

FAX: (301) 816-5151

PHONE: (514) 748-7748 ext 2203

TO: U.S. Nuclear Regulatory Commission

FAX: (514) 342-2311

ATTN.: Document Control Desk

SUBJECT: Notification
2 inch bonnets, Velan Part Number 8943-014

Gentlemen,

Please see attached notification from Victor Apostolescu.

Regards,

Cathy Andrewsky

Velan Inc.
Plant: 550 McArthur Street, Montreal, QC H4T 1X8 Canada
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July 18, 2014

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001

Attention: Document Control Desk, via fax 301-816-5151

Subject: NOTIFICATION
2 INCH BONNETS, VELAN PART NUMBER 8943-014

Gentlemen,

On May 16 2014 we received notification from Westinghouse Electric Co. (WES) that 2 bonnets supplied by Velan to WES in ealry 2013 for installation at Comanche Peak exhibited the following issues:

- The bonnets were intended to be exact replacements for the bonnets (item 2) built to drawing E73-020 Rev E (OEM is Velan) except for material change to SA-182 FXM-19. Bonnets were visually inspected when received at site. No issues were noted; both bonnets appeared to be identical.
- In April 2013, unit 1 bonnet was installed in valve 1-8109. No issues were noted with the installation. The new bonnet was put into service.
- In April 2014, Unit 2 installation was scheduled to begin. After the disassembly of the valve, the old and new bonnets were compared. It was noted that the backseat dimensions are different between the 2 bonnets. The increase in backseat diameter on the new bonnet would cause the stem to not backseat. The decision was made to re-install the old bonnet and send the new bonnet back to the OEM, Velan.

On June 10, 2014 the bonnet identified in the last bullet above arrived at Velan Plant 2.

The review by the Evaluation Committee was finalized on July 17 and concluded that:

- Four similar bonnets were delivered to WES on three different occasions in 1988 and early 90's
- *The stem head diameter is Ø1.312 so, when opening, the stem may pass through the stem bore of the bonnet and not seat on the backseat.*
- *On opening, if the limit switches on the actuator do not function, the stem may enter the packing chamber. The packing may be deformed and a leak may develop. Stem travel is limited by the disc contacting the bonnet and/or the end of the stem thread stopping on the actuator drive nut.*
- *If the actuator and packing flange nuts are removed, there is the potential for the stem to blow out of the valve.*
- *The packing chamber depth will result in more packing being installed in the valve. This may result in a higher packing friction load on the actuator when operating and reduce the actuator margin.*
- The smaller packing chamber will not affect safety. A different diameter packing may be required. The gland bushing diameter (Ø1.744") is less than the packing chamber diameter and will work correctly.

These bonnets were fabricated against ASME Sec. III for installation in Class 2 systems. Not knowing exactly the nature of the application we cannot determine if the potential issues in italics and underlined above may pose a significant safety hazard and therefore we have informed WES by way of a similar letter.

For any additional information on this matter please contact me at 514-748-7748 x 2134 or at victor.apostolescu@velan.com.

Sincerely yours,

Velan Inc.

Victor Apostolescu, Eng.
Vice President Quality Assurance

cc: Velan – T. Velan, I. Velan, G. Perez, Z. Palko