Part 21 (PAR) Event # 46692

Rep Org: AUTOMATIC VALVE		**Notification Date / Time:** 03/23/2011 16:24 (EDT)	
Supplier: AUTOMATIC VALVE		**Event Date / Time:** 03/22/2011 (EDT)	
		Last Modification: 03/23/2011	
Region: 3		**Docket #:**	
City: NOVI		**Agreement State:** No	
County:		**License #:**	
State: MI			
NRC Notified by: KEVIN ARMSTRONG		**Notifications:** JOHN ROGGE	R1DO
HQ Ops Officer: PETE SNYDER		DANIEL RICH	R2DO
Emergency Class: NON EMERGENCY		PART 21 GROUP	EMAIL
10 CFR Section:			
21.21 UNSPECIFIED PARAGRAPH			

VALVE PLUNGER GUIDE MALFUNCTION

"Initial Concern: Valve, serial number 73386, does not consistently return to the closed position."

"Nature of the Defect: A dent in the plunger guide may prevent the valve from changing state.

"Number and Location of Components:
"Model: U0204GBBR-AA Quantity: 32 Customer: EXELON LIMERICK,
"Model: U0204GBBR-DEEL Quantity: 30 Customer: ALABAMA POWER FARLEY
"Model: U0204GBBR-DE Quantity: 4 Customer: ALABAMA POWER FARLEY
"Model: U0204FBBR-DE Quantity: 8 Customer: RALPH A. HILLER
"Model: U0204GBBR-DEL Quantity: 4 Customer: DRESSER MASONEILAN
"Model: U0204GBBR-DEP Quantity: 3 Customer: DRESSER MASONEILAN

"Advice to Purchasers:

"Any of the valves identified above may be inspected by removing the coil and checking the plunger guide for any defects. A dent which will prevent plunger movement is noticeable without magnification. It typically occurs approximately 0.10 inches from the base of the valve. Any valves thought to contain defects will be rebuilt or replaced by Automatic Valve."

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IE19
NRR

FAXED 3.23.11

NRC Operations Center 301-816-5151 (FAX)

10 CFR PART 21 Notification:

Automatic Valve Company
41444 Vincenti Court, Novi MI 48375
Contact: Kevin Armstrong, President, 248-474-6700 ext. 170

Basic Component Model Numbers:

U0204GBBR-AA, U0204GBBR-DEEL, U0204GBBR-DE, U0204FBBR-DE, U0204GBBR-DEP, U0204GBBR-DEL,

Nature of the Defect:

A dent in the plunger guide may prevent the valve from changing state.

Number and Location of Components:

Valve Model	Quantity	Customer
U0204GBBR-AA	32	EXELON LIMERICK
U0204GBBR-DEEL	30	ALABAMA POWER FARLEY
U0204GBBR-DE	4	ALABAMA POWER FARLEY
U0204FBBR-DE	8	RALPH A. HILLER
U0204GBBR-DEL	4	DRESSER MASONEILAN
U0204GBBR-DEP	3	DRESSER MASONEILAN

Corrective Action to Be Taken:

Please see attached report.

Advice to Purchasers:

Any of the valves identified above may be inspected by removing the coil and checking the plunger guide for any defects. A dent which will prevent plunger movement is noticeable without magnification. It typically occurs approximately 0.10 inches from the base of the valve. Any valves thought to contain defects will be rebuilt or replaced by Automatic Valve.

Date the Evaluation of the Defect was Complete: 03/22/2011

AUTOMATIC VALVE	NUMBER: D7174-003	Page 1 of 3
TITLE: CORRECTIVE ACTION	LOCN: I:\WORD\DOCUMENT\D7174003.DOC	DATE: 10-21-1999
SUBJ: CORRECTIVE ACTION	TYPE: FORM DEPT RESP: DQA	REV: F-CN8020

REQUIREMENTS:

NUMBER: 522

Type of Problem: Part **U0204GBBR-AA** Procedure Date: 03-14-2011

Who found Problem: Supplier Distributor ☒Customer

Company: Exelon Limerick Station **Contact Name:** Kevin Borek

Address: 3146 Sanatoga Rd, Pottstown PA kevinborek@exeloncorp.com

1. **Team Working on Problem:** Leader: Tom Troy Members:
Brian Bielat, Kelly Morris, Kevin Armstrong

2. **Describe Problem (Initial Concern and Symptoms):**.

Valve, serial number 73386, does not consistently return to the closed position.

Contain Symptom (Action):

Return rebuilt unit to the customer. Notify affected customers of the problem and inspection required. See Illustration 1 and Photograph 1.

Approved by: Title: President Date: 03.23.11

4. **Root Cause/s of Problem:** **10 CFR Part 21 Report Required: YES**

U0204GBBR-AA is a valve constructed with 3/8 inch NPT adaptors inserted into ¼ inch NPTF ports.

The adaptors are installed after the basic unit is built and tested. The adaptors are then leak checked; but the valve is not functionally re-tested after the installation of the adaptor.

The solenoid plunger guide was accidentally crimped when the adaptor fitting was installed.

The crimp in the plunger guide may interfere with the movement of the plunger. If the interference prevents the plunger from completing its full stroke, the valve will not return to its closed position. If this occurs, the valve will fail to close.

The failure was noted when Exelon staff tested the valve, prior to installation.

Approved by: Title President Date: 03.23.11

5. **Corrective Action:**

Install all fittings in the valve body prior to the installation of the plunger guide into the body.

Approved by: Title: President Date: 03.23.11

6. **Implementation:**

CN 9780 specifies the assembly order of the fittings into the valve body and plunger guide. This is done prior to assembly of the plunger guide into the body.

Approved by: Title: President Date: 03.23.11

7. **Corrective Action to System to Prevent Recurrence:**

Action, as taken, is systematic.

Approved by: Title: President Date: 03.23.11

8. **Verification (Describe):**

It was not possible to re-create the dent in the plunger guide when the fittings were installed prior to assembly of the plunger guide into the valve body.

Approved by: Title: President Date: 03.23.11

AUTOMATIC VALVE	NUMBER: D7174-003	Page 2 of 3
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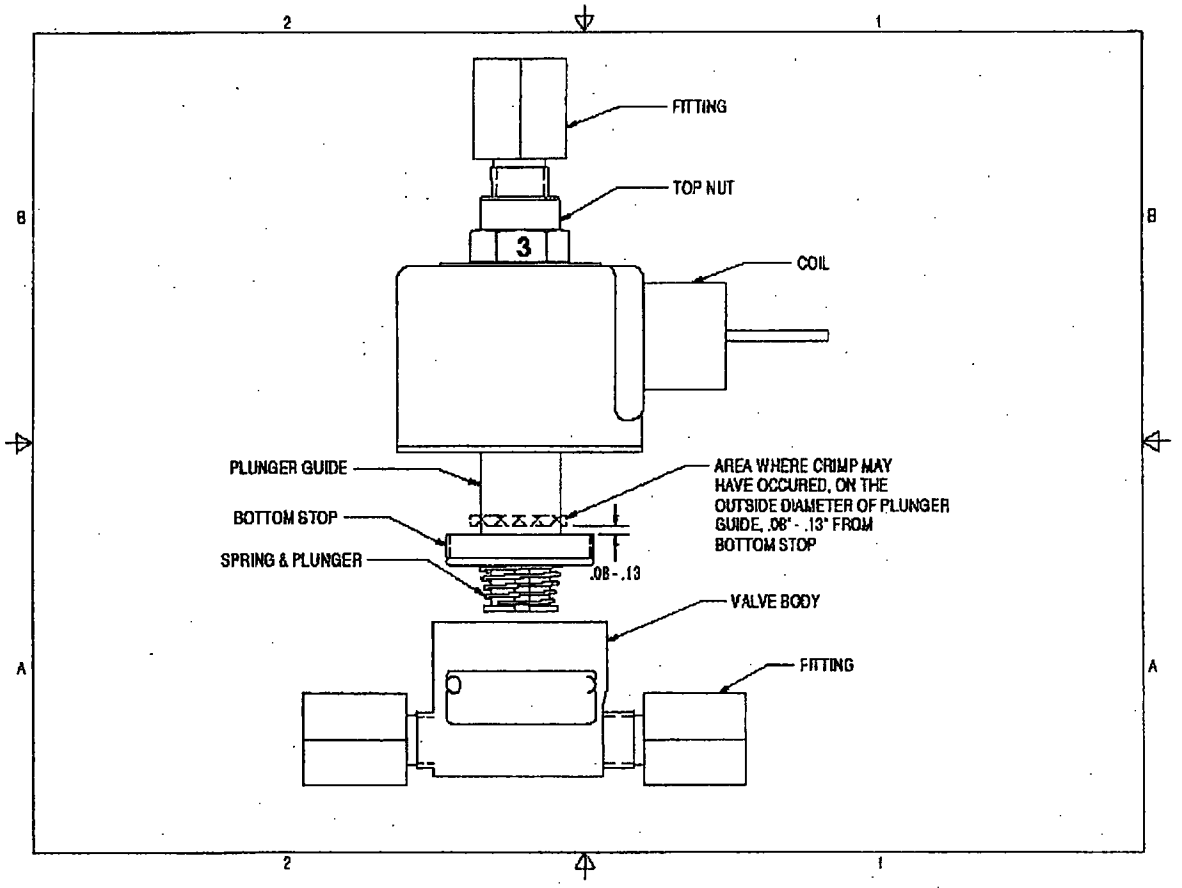
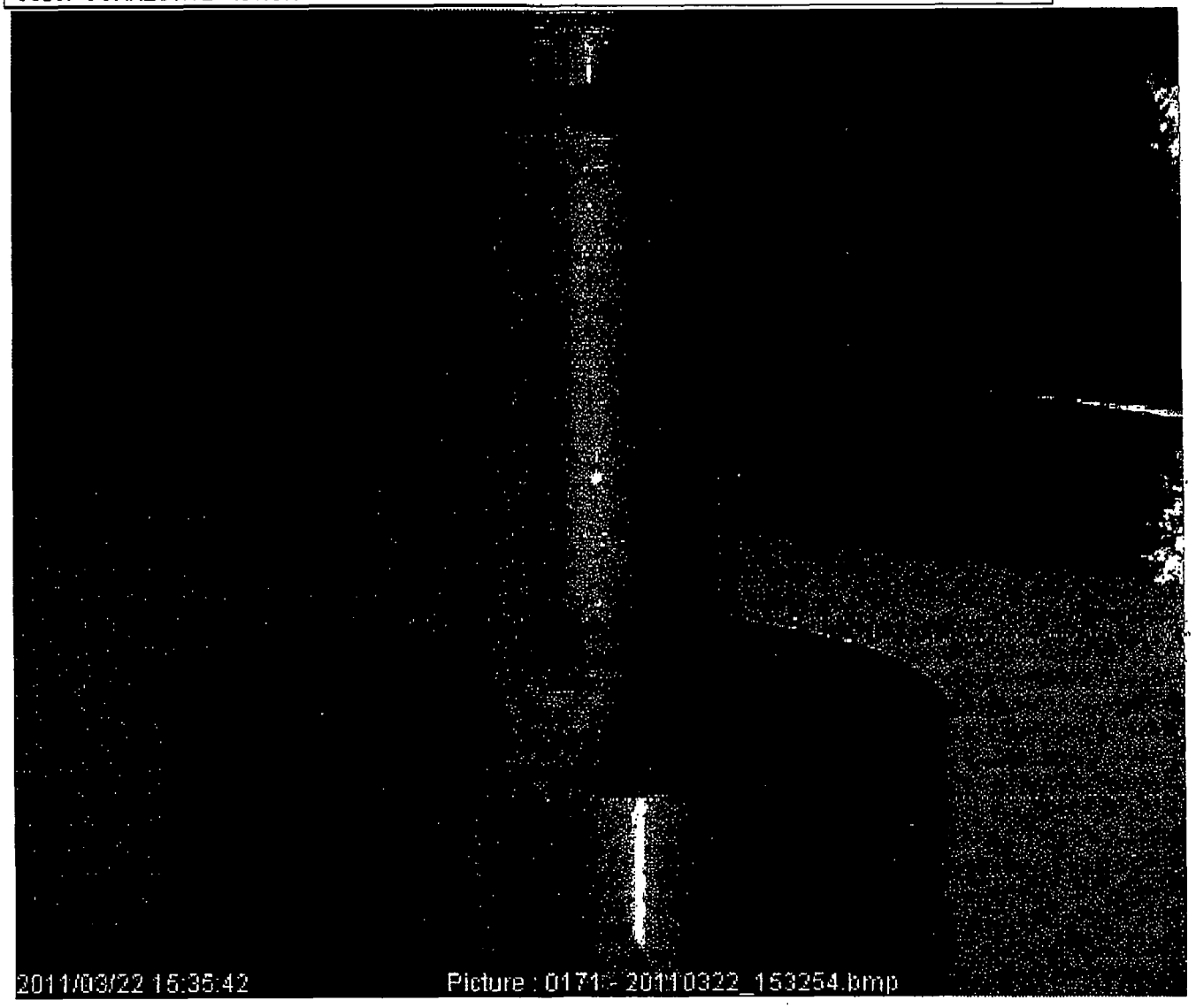
SUBJ: CORRECTIVE ACTION	TYPE: FORM DEPT RESP: DQA	REV: F-CN8020

Illustration 1: Pictorial of Valve showing Area where damage was noted:





Photograph 1 – Showing crimp in plunger guide.