



August 31, 2009

US Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-001

Mr. Juan Peralta
Chief, Quality and Vendor Branch 1
Division of Construction Inspection and Operational Programs
Office of New Reactors

Subject: **"REPLY TO A NOTICE OF NONCONFORMANCE"**
Nonconformance 99901356 / 2009-201-02

Dear Mr. Peralta,

I am writing in response to the **NOTICE OF NONCONFORMANCE # 99901356 / 2009-201-02** addressed to me in the NRC Inspection Report No. 9901356 / 2009-201.

In accordance with the instructions outlined within the subject Notice of Nonconformance, Flowserve Corporation, Raleigh, NC offers the following reply:

1. The reason for this nonconformance, as stated in the Flowserve Quality Problem Corrective Action Plan (QPCAP #516) issued during the NRC Inspection (see attached) and as a result of our review of the NRC Inspection Report Details paragraph 6.b where stated "In addition, the NRC inspectors noted that PIOP 36-40-10-14 does not provide adequate instructions to implement the requirements of section 15.1.4 of the QAM", the reasons rework instructions were not adequately specified and verified against the QAP, resulted from inadequate procedural instructions and training.
2. As stated in Flowserve QPCAP #516, the corrective steps that were taken at the time of the NRC Inspection were:
 - a. Training was provided to those people responsible for specifying work instructions; including the selection of welding procedures associated with weld repairs to be in accordance with those specified within the QAP (Quality Assurance Plan). This training was documented as evidenced on Training Record dated 7/07/2009 on subject QPCAP #516.

FLOWSERVE US INC.
FLOW CONTROL DIVISION

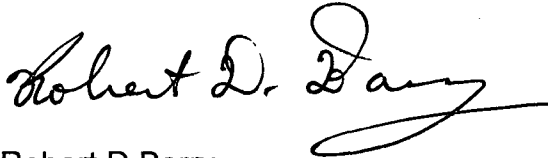
1900 S SAUNDERS
RALEIGH, NC 27603 USA

Telephone 919 831 0525
Facsimile: 919 831 3369
www.flowserve.com

JE09
JE19

- b. As a result of the review of NRC Inspection Report Details, it was deemed necessary to revise PIOP 36-40-10-14 to include specific instructions for responsible personnel to consult the applicable QAP for selection of applicable Drawings and Method Specifications including Welding Procedures. PIOP 36-40-10-15 was revised on 8/31/09 to include these instructions, and appropriate people were provided additional training in the revised PIOP instructions.
 - c. A review of 2009 Rejection Tickets associated with weld repair was performed to determine if other weld repairs had been performed using welding procedures other than those specified within the applicable QAP, none were found. This review was documented and provided to the NRC Inspection Team at the time. (Attached)
3. The corrective steps that have been taken as described in this response and Flowserve QPCAP #516 together with the revision of PIOP 36-40-10-15 and the additional training of responsible personnel has been implemented and will avoid further noncompliances.
4. The corrective steps concerning Notice of Nonconformance 99901356 / 2009-201-02 have been completed and are effectively implemented as of August 31, 2009.

Respectfully Submitted,



Robert D. Barry
Manager, Quality Assurance
Flowserve US Inc
Flow Control Division
Raleigh, NC 27603

Attachments:

- Flowserve Quality Problem Corrective Action Plan No 516 and supporting objective evidence.
- Flowserve PIOP 36-40-10-15 dated August 31, 2009, page 5 of 8 paragraph 3.1.2.1 and associated training record dated 8/31/09.



1900 South Saunders Street
 P.O. Box 1961
 Raleigh, North Carolina 27603

Nº. 516

D. July 7, 2009
 SIZE & FIGURE NO.: 1.0 800 SW
 PART / VALVE NAME: Body
 PART / VALVE NUMBER: 041003899991200

QUALITY PROBLEM CORRECTIVE ACTION PLAN

TRACEABILITY NO.: N4668 / 20,23,27 REJECT TICKET NO.: 123341 & 120445 RESPONSIBLE DEPT.: Met. Process

INITIATED BY: Todd McKinney Assigned to: B. Carothers CODE MATERIAL ANI REVIEW _____

PROBLEM (to be completed by QA or responsible Department) Not Required - Reject Ticket Attached

Reject Ticket 120445 was written and issued for a weld repair on some bodies being manufactured to the 99912 QAP. The basemetal welding repair procedure specified in the 99912 QAP was P1-323N LR but the welding procedure listed on the Reject Ticket was for P1-321N LR. This error was identified during the NRC Inspection on July 7, 2009. Reject Ticket 123341 was written to disposition the bodies as Use-As-Is by Metallurgical Process Control.

Part 21 evaluation required Yes No Department Manager Signature: *B. Carothers* Date: 7/7/09

ROOT CAUSE and PROPOSED CORRECTIVE ACTION within 30 days, which is 8/7/09:

Rework instructions were not adequately verified against QAP which now references P1-323N, LR instead of P1-321N, LR

By: *B. Carothers* Date: 7/7/09

CORRECTIVE ACTION will be completed by 7/10/09 (to be completed by responsible Department):

Review QPCAP with all personnel responsible for developing welding instructions. Review all 2009 Reject Tickets associated with weld repairs against QAP requirements

By: *B. Carothers* Date: 7/8/09

REVIEW/TRAIN RESPONSIBLE INDIVIDUAL (If Applicable)

Training record and Reject Ticket review attached

Name of Responsible Individual Signature *B. Carothers* Date 7/9/09 By: _____ Date: _____

CONFIRMATION OF CORRECTIVE ACTION TAKEN to be verified by Q.A within 30 days of completion date, which is 8/10/09:

Training record & Reject Ticket review verified - considered satisfactory.

CORRECTIVE ACTION REVIEWED BY: *vic Saff* for RB Date 7-9-09

Manager, Quality Assurance or Designee

TRAINING RECORD

1900 South Saunders Street
Raleigh, NC 27603

Department : Met. Process Control Date : 7/7/2009
Due : 7/10/2009

Subject : QPCAP 516 - Welding Procedure verification between QAP and Reject Ticket instructions

During the NRC Inspection, it was identified that on Reject Ticket 120445 the welding procedure prescribed was not listed in the QAP for 99912. The welding procedure was listed as P1-321N LR on the Reject Ticket but the QAP only contained a procedure of P1-123N LR, P1-223N LR or P1-323N LR for use. Reject Ticket 123341 was written to disposition the items welded as Use-As-Is by Metallurgical Process Control after the finding had been made. It is very important that the instructions provided for rework meet those prescribed in the applicable QAP's to avoid a potential Quality Issue. Always verify the QAP instructions versus the instructions written on the Reject Ticket prior to issuance.

NAME	INITIAL / DATE
Daniel Mann	<i>Daniel Mann</i> 7-8-09
James Cobb	<i>James Cobb</i> 7/8/09
Bernie Carothers	<i>B Carothers</i> 7/7/09

Length of Session : _____ Self Review _____

Instructor : *T McKinney*
Todd McKinney, QC Supervisor

<u>Reject Ticket No</u>	<u>QAP No</u>	<u>Correct WPS USED</u>
123027	90891	YES
123040	90891	YES
123073	90891	YES
123085	48450	YES
123088	90891	YES
123095	90891	YES
123124	51244	YES
123126	51524	YES
123137	52023	YES
123138	52023	YES
123141	52023	YES
123142	90891	YES
123200	51917	YES
123203	90714	YES
123205	53196	YES
123206	52567	YES
123208	90714	YES
123234	52887	YES
123237	52733	YES
123241	45515	YES
123243	99901	YES
123245	99912	YES
123245	99912	YES
123258	90714	YES
123259	90714	YES
123260	90714	YES
123261	90713	YES
123262	90714	YES
123269	52822	YES
123272	52822	YES
123277	51509	YES
123280	53312	YES
123286	99901	YES
123288	51835	YES
123295	52777	YES
123298	52777	YES
123310	99913	YES
123401	50924	YES
123404	90891	YES
123417	90891	YES
123419	90891	YES
123443	90891	YES
123465	90891	YES
120549	50202	YES
120551	47485	YES
120558	50691	YES
120556	90714	YES
120567	90713	YES
120581	50796	YES
120582	50796	YES
120590	99914	YES
120591	99901	YES
120592	50722	YES
120596	99914	YES
120598	90713	YES
120970	49431	YES

Blanchard
7/9/09

Reject Ticket No QAP No Correct WPS USED

121039 90892 YES
121045 50420 YES
121061 49882 YES
121062 50224 YES
121063 50694 YES
121065 90714 YES
121067 50488 YES
121070 51370 YES
121071 51355 YES
121072 50294 YES
121076 50294 YES
121077 49589 YES
121078 49882 YES
121085 50488 YES
121089 51370 YES
121093 52202 YES
121621 90713 YES
121626 50710 YES
121644 90713 YES
121645 90713 YES
121646 90713 YES
121647 90713 YES
121662 90714 YES
121693 90714 YES
121758 50883 YES
121769 50883 YES
121900 48088 YES
121901 90892 YES
121905 90892 YES
121941 91081 YES
121942 78312 YES
121953 91111 YES
121960 91111 YES
121966 52447 YES
121967 52447 YES
121982 49579 YES
121991 90713 YES
120224 49245 YES
120227 90891 YES
120230 90891 YES
120231 90891 YES
120244 51123 YES
120272 90891 YES
120273 90891 YES
120274 90891 YES
120276 90891 YES
120277 51677 YES

James CoBB

7-9-09

Reject Ticket No QAP No Correct WPS USED

123706 52924-01 Yes
123715 52924-01 Yes
123717 52924-01 Yes
123753 78322-01 Yes
123767 52924-01 Yes
123980 53475-01 Yes
122811 90812 Yes
122826 90891 Yes
122858 90713 Yes
122859 90714 Yes
122705 48505 Yes
122718 49431 Yes
122726 51272 Yes
122735 49431 Yes
122742 90891 Yes
122760 50924 Yes
122770 90891-03 Yes
122915 90891-03 Yes
122916 90891-03 Yes
122939 90891 Yes
122947 90891 Yes
122994 51272 Yes
122003 90713 Yes
122004 90713 Yes
122005 90714 Yes
122006 90714 Yes
122013 90713 Yes
122014 90713 Yes
122016 90713 Yes
122017 99901 Yes
122020 50202 Yes
122033 90713 Yes
122036 99901 Yes
122037 33192 Yes
122040 50202 Yes
122044 50713 Yes
122052 39915 Yes
122053 50224 Yes
122060 49180 Yes
122065 99901 Yes
122074 50270 Yes
122077 90713 Yes
122078 90713 Yes
122079 90713 Yes
122083 50270 Yes
122094 50836 Yes
122101 40285-01 Yes
122117 50294 Yes
122132 90714 Yes
122172 91111 Yes

Daniel W Mann 7-9-09

122348	90891	Yes
122500	90714	Yes
122503	99901-00	Yes
122509	99901	Yes
122510	99901	Yes
122511	99901	Yes
122527	52505	Yes
122535	90891	Yes
122536	90891	Yes
122537	90891	Yes
122538	90891	Yes
122544	99913	Yes
122559	42580	Yes
122565	90714	Yes
122567	51240	Yes
122579	39915	Yes
122580	90713	Yes
122581	90713	Yes
122582	90714	Yes
122588	99901	Yes
122592	51480	Yes
122597	90714	Yes
122598	90714	Yes
122599	90713	Yes
122664	51272	Yes
122692	49431	Yes

Daniel W Mann 7-9-09



Procedure No.	36-40-10-15
Effective Date	7/8/70
Revision Date	08/31/09

TITLE:
NONCONFORMING MATERIAL CONTROL - REJECTION
PROCEDURE, MATERIAL REVIEW BOARD INVOLVEMENT

PLANT INTERNAL OPERATING PROCEDURE

The master copy of this document resides in electronic format. Printed copies of this document are for convenience only.
Verify that the revision of this printed document matches the current revision of the electronic master before use.

Page 5 of 8

- 3.1.2.1 If the decision is to rework, an Inspector will consult with Manufacturing Engineering and/or Metallurgical Process Control to determine necessary drawings, manufacturing specifications, welding procedures, operations, sequences and departments involved for rework of the nonconforming material. The QAPs shall be consulted for the selection of applicable manufacturing specifications and drawings as required.
- 3.1.2.2 For a 'use-as-is' disposition there must be a written Engineering justification given on the Reject Ticket (Exhibit I).
- 3.1.2.3 In-process material must have an accompanying job order packet containing a Reject Ticket, Manufacturing Route Card and the product drawing. Exception: Manufacturing Route Cards are not required for parts that are rejected in the following areas; Receiving/Receiving Inspection, Stores, Assembly, Test, or Shipping since Route Cards for individual parts rejected in these areas are the responsibility of the Supervisor of the area in which the rework begins. Drawings are not required when rework instruction are explicit, such as: Remove all burrs.
- 3.1.2.4 For Code Items ("N"/"U"/"PP"/"NR"/"R") the Reject Ticket will be presented to the Authorized Nuclear Inspector/Authorized Inspector for his review, concurrence, and assignment of any hold or witness points.



TRAINING RECORD

Department: Metallurgical Process Control Date: 08/31/2009

Subject: Revision to PIOP 36-40-10-15 dated 08/31/09 – Page 5 of 8 paragraph 3.1.2.1

Added clarification to consult QAP for selection of applicable manufacturing

Specifications and drawings including welding procedures.

Print Name

Bernie Carothers

James Cobb

Daniel Mann

Initial and Date

Bernie Carothers 8/31/09

James Cobb 8-31-09

Daniel W Mann 8-31-09

Duration of Training: 10 minutes

Instructor: R.D. Day 8/31/09

TRAINING RECORD

1900 South Saunders Street
Raleigh, NC 27603

Department : <u>INSPECTION</u>	Date : <u>8/31/2009</u>
	Due : <u>8/31/2009</u>
Subject : <u>PIOP 36-40-10-15 - Writing rework instructions after checking QAP</u>	
<p>During the NRC Inspection a non-conformance was found in relation to a weld repair being performed with a different procedure than what was listed in QAP 99912. It is very important that anytime we issue rework instructions that we use the QAP, associated drawings and procedures for the particular item we are having reworked. PIOP 36-410-10-14 has been revised to address this in paragraph 3.1.2.1. This procedure will be issued in the coming days and everyone needs to be familiar with the contents. Paragraph 3.1.2.1 will now read, "If the decision is to rework, an Inspector will consult with Manufacturing Engineering and/or Metallurgical Process Control to determine necessary drawings, manufacturing specifications, weld procedures, operations, sequences and departments involved for rework of the non-conforming material. The applicable QAP shall be consulted for the selection of applicable manufacturing specifications and drawings as required."</p>	
NAME	INITIAL / DATE
Samuel Encarnacion	SE 8-31-09
Mike Roberson	MR 8/31/09
Donnie Harper	DH 8/31/09
Jeny Faddil	W/A by Ed:1-4
Jason Thompson	JT 8/31/09
David Craddock	DKC 8-31-09
Mary Jo Hedgbeth	MJH 8/31/09
Scott Rehl	SR 8/31/09
James Vacanti	JV 8/31/09
Patricia Miller	PM 8-31-09
Karen Hay	KH 8-31-09
LaTisha Williams	LW 8.31.09
Donald Raby	DR 8/31/09

Length of Session : Self-Review

Instructor : 
Todd McKinney - QC Supervisor