

Part 21 (PAR)

Event # 46776

<b>Rep Org:</b> CURTISS WRIGHT FLOW CONTROL CO.	<b>Notification Date / Time:</b> 04/22/2011 12:46 (EDT)
<b>Supplier:</b> CURTISS WRIGHT FLOW CONTROL CO.	<b>Event Date / Time:</b> 04/22/2011 (CDT)
	<b>Last Modification:</b> 08/12/2011
<b>Region:</b> 1	<b>Docket #:</b>
<b>City:</b> HUNTSVILLE	<b>Agreement State:</b> Yes
<b>County:</b>	<b>License #:</b>
<b>State:</b> AL	
<b>NRC Notified by:</b> TONY GILL	<b>Notifications:</b> PART 21 GROUP
<b>HQ Ops Officer:</b> MARK ABRAMOVITZ	JONATHAN BARTLEY R2DO
<b>Emergency Class:</b> NON EMERGENCY	
<b>10 CFR Section:</b>	
21.21	UNSPECIFIED PARAGRAPH

POTENTIAL DEFECT IN SUBMERSIBLE VALVE POSITION SENSORS

"This letter is issued to provide notification of a potential defect in QualTech NP Top Potted Generation 3 Quick Disconnect Connector Pin Side assemblies installed on Topworx C7 and SV7 switches. All assemblies supplied prior to April 20, 2011 are potentially affected. These assemblies were supplied to Topworx [as] submergence qualified in accordance with our Test Report EGS-TR-23009-14. It was discovered during supplemental qualification testing that previously supplied assemblies may not properly seal against moisture intrusion if utilized in a submergence application.

"The recommended corrective action for existing assemblies is to pressure test and, if required, repair them. Corrective actions already implemented will be effective in preventing recurrence of this condition. Additionally, all future assemblies will be required to pass pressure testing prior to acceptance.

"It has been confirmed that all assemblies previously supplied are for use in Chinese Nuclear Power Plants and therefore, no US plants are affected." Most of the assemblies are still in this country and the remainder are in Switzerland awaiting shipment. All assemblies will be recalled and pressure tested.

\*\*\* UPDATE RECEIVED VIA FAX FROM TONY GILL TO JOE O'HARA AT 1545 ON 8/12/11 \*\*\*

"The purpose of this letter is to provide additional information concerning the status of all affected assemblies. As stated in the previous notifications all serial numbers affected by this defect have been identified and to date only 30 production units remain to be returned for testing/repair. We are still experiencing 100% success when repair is needed.

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Part 21 (PAR)

Event # 46776

"It was previously reported that 'all affected assemblies were for use in Chinese Nuclear Power Plants and therefore no US Plants are affected'. This is no longer a correct statement. Our customer, Topworx, notified us on August 9 that one of their customers, Flowserve, had supplied valve packages containing 16 of these assemblies to Pilgrim Station in Plymouth, MA. It has been reported to us that these assemblies were never installed and are in the process of being returned for testing/repair.

"These 16 assemblies are included in the 30 production units remaining to be tested/repared. It has been identified that 4 of the remaining assemblies are still in China and the other 10 were supplied to Flowserve.

"Additional information concerning these assemblies will be provided as it becomes available. A final letter will be issued once corrective actions for these 30 assemblies are complete."

Notified R1DO(Powell), Part 21 GRP via e-mail

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QualTech  
125 West Park Loop  
Huntsville, AL 35806  
Phone: 256.722.8500 • Fax: 256.722.8533  
www.scientech.com

FAX TRANSMITTAL

DATE: 8-12-11

TO: US NRC

FAX NO: 301-816-5151

FROM: Tony Gill

COMMENTS/INSTRUCTIONS: \_\_\_\_\_

Please see attached  
follow up letter.

Tony Gill 8-12-11  
256-426-4558 cell

TRANSMITTAL INCLUDES COVER SHEET PLUS 3 PAGE(S).



Huntsville Operations  
125 West Park Loop  
Huntsville, AL 35806  
256-722-8500

(File No.: QTHuntsville10CFR21-2011-01)

August 12, 2011

To whom it may concern:

On April 22, 2011 QualTech NP, Huntsville issued an initial notification letter to the Nuclear Regulatory Commission and our Customer Topworx concerning a potential defect in QualTech NP Top Potted Generation 3 Quick Disconnect Connector Pin Side assemblies installed on Topworx C7 and SV7 Switches. A copy of that letter and the May 24, 2011 follow up letter are attached for information.

The purpose of this letter is to provide additional information concerning the status of all affected assemblies.

As stated in the previous notifications all serial numbers affected by this defect have been identified and to date only 30 production units remain to be returned for testing/repair. We are still experiencing 100% success when repair is needed.

It was previously reported that "all affected assemblies were for use in Chinese Nuclear Power Plants and therefore no US Plants are affected". This is no longer a correct statement. Our customer, Topworx, notified us on August 9 that one of their customers, Flowserve, had supplied valve packages containing 16 of these assemblies to Pilgrim Station in Plymouth, MA. It has been reported to us that these assemblies were never installed and are in the process of being returned for testing/repair.

These 16 assemblies are included in the 30 production units remaining to be tested/repared. It has been identified that 4 of the remaining assemblies are still in China and the other 10 were supplied to Flowserve.

Additional information concerning these assemblies will be provided as it becomes available. A final letter will be issued once corrective actions for these 30 assemblies are complete.

If you require additional details or would like to discuss this further please contact me at 256-722-8500 ext. 131 (office), 256-426-4558 (cell) or [tgill@curtisswright.com](mailto:tgill@curtisswright.com).

Sincerely,

A handwritten signature in black ink, appearing to read 'Tony Gill', is written over a horizontal line.

Tony Gill  
Quality Assurance Manager  
QualTech NP, Huntsville Operations  
a business unit of Curtiss-Wright Flow Control Company  
<http://qualtechnp.cwfc.com>



Huntsville Operations  
125 West Park Loop  
Huntsville, AL 35806  
256-722-8500

(File No.: QTHuntsville10CFR21-2011-01)

May 24, 2011

To whom it may concern:

On April 22, 2011 QualTech NP, Huntsville issued an initial notification letter to the Nuclear Regulatory Commission and our Customer Topworx concerning a potential defect in QualTech NP Top Potted Generation 3 Quick Disconnect Connector Pin Side assemblies installed on Topworx C7 and SV7 Switches. A copy of that letter is attached for information. Based on the initial notification and investigations since, the following conclusions are provided.

All serial numbers affected by this defect have been identified and approximately half of those have been repaired with 100% success. The remaining assemblies are in process of being returned and it is expected that all affected assemblies will be repaired or replaced within the next sixty days.

The identified probable causes for the potential defect have been corrected. The assembly instruction was revised to properly define the setscrew sealing process and it is now a requirement that 100% of completed assemblies are post production tested to verify pressure integrity. These implemented corrective actions will be effective in preventing recurrence of this condition.

It has been confirmed that all assemblies previously supplied are for use in Chinese Nuclear Power Plants and therefore no US Plants are affected.

If you require additional details or would like to discuss this further please contact Tony Gill at 256-722-8500 ext. 131 (office), 256-426-4558 (cell) or [tgill@curtisswright.com](mailto:tgill@curtisswright.com) for additional information.

Sincerely,

Kurt Mitchell  
General Manager  
QualTech NP, a business unit of Curtiss-Wright Flow Control Company  
Office 301.854.3432  
<http://qualtechnp.cwfc.com>  
[kmitchell@curtisswright.com](mailto:kmitchell@curtisswright.com)



Huntsville Operations  
125 West Park Loop  
Huntsville, AL 35806  
256-722-8500

(File No.: QTHuntsville10CFR21-2011-01)

April 22, 2011

To whom it may concern:

This letter is issued to provide notification of a potential defect in QualTech NP Top Potted Generation 3 Quick Disconnect Connector Pin Side assemblies installed on Topworx C7 and SV7 Switches. All assemblies supplied prior to April 20, 2011 are potentially affected. These assemblies were supplied to Topworx as submergence qualified in accordance with our Test Report EGS-TR-23009-14. It was discovered during supplemental qualification testing that previously supplied assemblies may not properly seal against moisture intrusion if utilized in a submergence application.

Investigations revealed two probable causes for the potential defect. The primary cause was due to inadequate assembly instructions concerning setscrew sealing. A secondary cause was post production testing did not require verification of pressure integrity for this type of connector/switch assembly.

One hundred thirty six assemblies with the potential defect were still in inventory at our facility. All one hundred thirty six were pressure tested to verify pressure integrity. Thirty two were found to be leaking and required repair. A repair instruction was generated and thirty one were repaired (one was rejected due to a visual defect). All thirty one repaired assemblies passed the pressure test confirming the instruction was adequate to fix the leak. Additionally, the affected assembly instruction was revised to better define and control the set screw sealing process and an additional 50 assemblies were built using the revised instruction. All fifty of these assemblies passed the pressure test confirming that the revised instruction was effective in preventing the leakage.

The recommended corrective action for existing assemblies is to pressure test and if required repair them in the same manner as those identified above. Corrective actions already implemented will be effective in preventing recurrence of this condition. Additionally, all future assemblies will be required to pass pressure testing prior to acceptance.

It has been confirmed that all assemblies previously supplied are for use in Chinese Nuclear Power Plants and therefore no US Plants are affected.

Additional details will be provided in the formal written report. Please contact Tony Gill at 256-722-8500 ext. 131 (office), 256-426-4558 (cell) or [tgill@curtisswright.com](mailto:tgill@curtisswright.com) for additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kurt Mitchell', is written over a light blue horizontal line.

Kurt Mitchell  
General Manager  
QualTech NP, a business unit of Curtiss-Wright Flow Control Company  
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