

Part 21 (PAR)

Event # 50015

<b>Rep Org:</b> QUALTECH NP	<b>Notification Date / Time:</b> 04/09/2014 15:21 (EDT)
<b>Supplier:</b> QUALTECH NP	<b>Event Date / Time:</b> 04/09/2014 (CDT)
	<b>Last Modification:</b> 05/09/2014
<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> MATTHEW THELEN	<b>Notifications:</b> MALCOLM WIDMANN R2DO
<b>HQ Ops Officer:</b> STEVE SANDIN	JAMES DRAKE R4DO
<b>Emergency Class:</b> NON EMERGENCY	NRR PART 21 GROUP EMAIL
<b>10 CFR Section:</b> 21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE	

## PART 21 - POTENTIAL DEFECT IN GENERAL ELECTRIC TYPE CR120AD CONTROL RELAYS

The following information was received via fax:

"This letter is being issued by QualTech NP, Huntsville, AL, to provide an initial notification to the Nuclear Regulatory Commission and Nebraska Public Power District [NPPD] Cooper Nuclear Station concerning a potential defect in General Electric Type CR120AD control relays. A failure analysis revealed that the most likely initiator of the failure was a flaw or defect in the start wrap of the magnet wire. The flaw created an arc that involved windings directly beneath the start wrap which resulted in an open circuit on the coil windings. This failure is classified as infant mortality, which is similar to the failure mode identified in the 10 CFR part 21 30 day report (accession number 9706190261) dated June 12, 1997 submitted by GPU Nuclear.

"Investigation of documents dating back to 1997 revealed that the manufacturer issued an informal recommendation to detect infant mortality in these relays by performing burn-in testing and mechanical cycle aging of the relay. QualTech NP, in conjunction with NPPD, determined that the risk of infant mortality can be mitigated by subjecting these relays to a 100 hour burn-in and performance of 100 mechanical cycles prior to installation.

"It has been confirmed that only two orders, with two units each, for this particular relay are affected. Both orders have been shipped to Nebraska Public Power District as requested by purchase orders 4500149953 and 4500142705. All subject relays shall be subjected to a 100 hour bum-in and exposed to 100 mechanical cycles or returned to QualTech NP for replacement.

"Additional details will be provided in the formal written report. Please contact Matthew Thelen at 256-924-7441 (office) or mthelen@curtisswright.com for additional information.

IE19  
NRR

"Matthew Thelen  
Project Manager  
QualTech NP Huntsville Operations  
a business unit of Curtiss-Wright Flow Control Company  
<http://qualtechnp.cwfc.com>"

\* \* \* UPDATE AT 1707 EDT ON 05/09/14 FROM MATTHEW THELEN TO S. SANDIN VIA FAX \* \* \*

"(File No.: QTHuntsville 10CFR21-2014-01)

"To whom it may concern:

"This letter is being issued by QuaiTech NP, Huntsville Operations to provide a final notification to the Nuclear Regulatory Commission and Nebraska Public Power District (NPPD) Cooper Nuclear Station concerning a potential defect in General Electric Type CR120AD control relays.

"Replacement relays have been provided to NPPD. All required dedication procedures at QualTech NP have been revised to include a 100 hour burn-in and 100 mechanical cycles in an effort to detect infant mortality. No further actions are required at this time.

"This 10CFR part 21 file is closed."

Notified R2DO (Bonser), R4DO (Whitten) and NRR Part 21 Group via email.

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**CURTISS -  
WRIGHT****QualTech NP**  
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May 9, 2014

(File No.: QTHuntsville10CFR21-2014-01)

To whom it may concern:

This letter is being issued by QualTech NP, Huntsville Operations to provide a final notification to the Nuclear Regulatory Commission and Nebraska Public Power District (NPPD) Cooper Nuclear Station concerning a potential defect in General Electric Type CR120AD control relays.

Replacement relays have been provided to NPPD. All required dedication procedures at QualTech NP have been revised to include a 100 hour burn-in and 100 mechanical cycles in an effort to detect infant mortality. No further actions are required at this time.

This 10CFR part 21 file is closed.

Sincerely,



Matthew Thelen  
Project Manager  
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