



**ENERTECH**

*Curtiss-Wright Flow Control Corporation*

*Solutions for Today...Standards of Tomorrow*  
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December 21, 2007

Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington DC 20555

**SUBJECT:** Enertech's conclusions for the initial notification provided October 24, 2007. for a potential 10CFR Part 21 reportable condition for Enertech cartridge solenoid valve.

Our 60 day evaluation has concluded that a 10 CFR Part 21 reportable condition does not exist regarding this issue. We have reached this conclusion on the following basis:

Our evaluation could not establish our valve has a defect, a deviation, or a departure from a technical requirement.

Enertech worked with SCE plant personnel to determine the cause of the 2 solenoid valves condition. The root cause of the failure of the inlet solenoid valve cartridges to operate was corrosion buildup at poppet flow orifice.

- Enertech was unable to duplicate the SONGS Unit 3 experience using valves that had been exposed to trapped hydraulic fluid with high water content for periods of 20-26 months. We inspected and tested valves in our inventory and valves previously shipped to other sites, resulting in no observed corrosion. Concluding the event did not have a common mode failure.
- The solenoid valve cartridge has been used by a significant number of nuclear utilities, including SONGS Unit 2, without identifying similar situations to those experienced at SONGS Unit 3.

Respectfully,

Kevin McKown  
General Manager  
Enertech, Curtiss-Wright Flow Control

LE19  
NRK

General Information or Other (PAR)

Event # 43748

<b>Rep Org:</b> ENERTECH	<b>Notification Date / Time:</b> 10/25/2007 19:10 (EDT)
<b>Supplier:</b> ENERTECH	<b>Event Date / Time:</b> 10/25/2007 (PDT)
	<b>Last Modification:</b> 12/21/2007
<b>Region:</b> 4	<b>Docket #:</b>
<b>City:</b> BREA	<b>Agreement State:</b> Yes
<b>County:</b>	<b>License #:</b>
<b>State:</b> CA	
<b>NRC Notified by:</b> KEVIN MCKOWN	<b>Notifications:</b> CHUCK CAIN R4
<b>HQ Ops Officer:</b> STEVE SANDIN	ROBERT HAAG R2
<b>Emergency Class:</b> NON EMERGENCY	VERN HODGE (email) NRR
<b>10 CFR Section:</b> 21.21 UNSPECIFIED PARAGRAPH	

POTENTIAL 10CFR PART 21 REPORTABLE CONDITION FOR ENERTECH CARTRIDGE SOLENOID VALVE

The following notification was received via fax:

"This submittal provides initial notification to your office that we have opened an evaluation for a potential reportable condition under 10CFR Part 21. Based on technical data provided by the San Onofre Power Plant, two (2) Enertech normally energized, normally open, cartridge solenoid valves, part number C9113S, installed on PME dump valves have not operated within the closure time design parameters. Upon investigation SCE determined higher than expected levels of contamination, internal oxidation and pitting collectively effected the valves response time. This valve was introduced to the industry in Dec 2004. Enertech is working closely with plant personnel to determine the cause of this condition, determine a resolution, and prepare a formal Evaluation Report within the next 50 days. If at any time during the evaluation process, a defect is discovered, we will provide an amended notification to this communication.

"No other Power Plants have reported similar problems to Enertech. The solenoid valve under evaluation has multiple safety related applications. The following plants will be contacted if a reportable condition exists: SCE, STP, KHNP, Entergy (Waterford), and Dominion (Surry)."

\*\*\* UPDATE FROM ENERTECH (MCKOWN) TO HUFFMAN VIA FAX AT 1845 EST ON 12/21/07 \*\*\*

"Our 60 day evaluation has concluded that a 10 CFR Part 21 reportable condition does not exist regarding this issue. We have reached this conclusion on the following basis:

"Our evaluation could not establish our valve has a defect, a deviation, or a departure from a technical requirement.

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"Enertech worked with SCE plant personnel to determine the cause of the 2 solenoid valves condition. The root cause of the failure of the inlet solenoid valve cartridges to operate was corrosion buildup at poppet flow orifice.

"Enertech was unable to duplicate the SONGS Unit 3 experience using valves that had been exposed to trapped hydraulic fluid with high water content for periods of 20-26 months. We inspected and tested valves in our inventory and valves previously shipped to other sites, resulting in no observed corrosion. Concluding the event did not have a common mode failure.

"The solenoid valve cartridge has been used by a significant number of nuclear utilities, including SONGS Unit 2, without identifying similar situations to those experienced at SONGS Unit 3."

R4DO (Pruett), R2DO (Shaeffer) and the Part 21 Coordinators (Hodge and Thorp via e-mail) have been notified

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