

General Information or Other (GEN)

Event # 36350

<b>Rep Org:</b> TECHNOLOGY for ENERGY CORP. <b>Licensee:</b> TECHNOLOGY for ENREGY CORP.	<b>Notification Date / Time:</b> 10/26/1999 13:48 (EDT) <b>Event Date / Time:</b> 10/26/1999 13:48 (EDT) <b>Last Modification:</b> 03/06/2000
<b>Region:</b> 2 <b>City:</b> KNOXVILLE <b>County:</b> <b>State:</b> TN	<b>Docket #:</b> <b>Agreement State:</b> Yes <b>License #:</b>
<b>NRC Notified by:</b> JEFF LOLLAR <b>HQ Ops Officer:</b> JOHN MackINNON <b>Emergency Class:</b> NON EMERGENCY <b>10 CFR Section:</b> 21.21                      UNSPECIFIED PARAGRAPH	<b>Notifications:</b> MARK LESSER                      R2 VERN HODGE    NRR DAVID LEW    R1 MIKE JORDAN    R3 DAVID LOVELESS                                        R4

RTV SEALANT USED IN THE TEC VALVE FLOW MONITORING SYSTEM CANNOT BE DEMONSTRATED TO MEET THE CONTAINMENT QUALIFICATION CONDITIONS.

10 CFR Part 21 Interim Report submitted by Technology for Energy Corporation (TEC), located in Knoxville, TN.

TEC is reporting a potential defect in Valve Flow Monitoring Systems provided by TEC to the nuclear power industry. Further evaluation is required to determine if the subject condition constitutes a defect as defined in 10CFR21.3.

The RTV-738 sealant used in the TEC Valve Flow Monitoring System cannot be demonstrated to meet the containment qualification conditions.

During discussions with customers concerning the application of RTV-738 sealant at the accelerometer connection to hardline cable, it was discovered that the recommended installation procedure was not specified during the qualification test (1980). One witness to the qualification test confirm that the RTV-738 was present but further stated it had been removed and replaced between qualification stages (aging, irradiation, seismic, and LOCA). Records cannot confirm if this was the test condition, but a set of cable resistance measurements suggest the RTV-738 was removed in order to perform the resistance testing. This uncertainty impacts the qualified life of the Valve Flow Monitoring System since the accelerometer to hardline cable could be exposed to LOCA conditions and the RTV-738 is applied to seal the junction between these components. Internal Corrective Action Report # 0026 has been initiated to track this condition.

After confirming that documentation was not available to conclusively demonstrate the qualified test conditions, a new qualification test plan was generated and has started. This testing is designed to demonstrate if the accelerometer to hardline cable junction can be qualified not only using RTV-738, but also without RTV-738 and with Raychem heat shrink. Thermal aging is complete without failure and irradiation is now underway. The full test is expected to be completed by December 10, 1999 with the final LOCA testing phase scheduled to start on November 8, 1999.

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There have been no reported failures of the accelerometer to hardline cable junction except due to physical damage during outages. Therefore, no action is recommended at this time pending verification of the qualified assembly both with and without the RTV-738 sealant.

\*\*\* UPDATE AT 1508 EST ON 12/13/99 BY RONALD BRENNER TO FANGIE JONES \*\*\*

"Technology for Energy Corporation has been advised that accident simulation testing of accelerometer/hardline cable junctions by Wyle Laboratories will not be completed until December 23, 1999. The NRC will be notified of any further change in the status of this testing.

The R1DO (Clifford Anderson), R2DO (Al Belisle), R3DO (Gary Shear), R4DO (Phil Harrell) and NRR Part 21 (Vern Hodge) have been notified.

\*\*\*\*\* UPDATE AT 1017 ON 03/06/00 VIA FACSIMILE FROM RONALD BRENNER TO LEIGH TROCINE \*\*\*\*\*

The following text is a portion of a facsimile received from Technology for Energy Corporation:

"Subject: NRC Event Report Number 36350"

"In an October 26, 1999, Interim Report, Technology for Energy Corporation (TEC) notified the NRC that TEC was evaluating a potential defect involving a hardline cable/accelerometer junction (the Junction) in the TEC Model 1414 Valve Flow Monitoring (VFM) System. The purpose of TEC's evaluation was to determine if the use of Dow Coming RTV738 Sealant (RTV738) at the Junction constituted a defect as defined in 10CFR21.3."

"TEC has completed its final determination of reportability. A full range of thermal aging, radiation aging, seismic testing, and LOCA testing demonstrated that the RTV738 protected the Junction in a harsh environment. Therefore, TEC concludes that the use of the RTV738 in its Model 1414 VFM System has been demonstrated to meet the qualification conditions as delineated in TEC Report Number 517-TR-03, Revision 2, dated December 1, 1981."

"Based on this evaluation, TEC concludes the following:

- 1. The Junction configuration does not create a substantial safety hazard, and no industry corrective action is required.
- 2. There is no evidence of a defect as defined in 10CFR21.3.
- 3. TEC's evaluation pertaining to subject event is hereby closed."

The NRC operations officer notified the R1DO (Cranston), R2DO (Wert), R3DO (Lanksbury), R4DO (Loveless), and NRR (Hodge).

(Contact the NRC operations officer for a contact address and telephone number.)

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#36350  
UPDATE

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TO: John MacKinnon  
FAX: 301-816-5151  
FROM: Ron Brenner  
DATE: 3-6-00  
PAGES: 2, includes cover page



Technology for Energy Corporation  
10737 Lexington Drive  
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Telephone: 865-966-5856

March 6, 2000

ATTN: John MacKinnon Phone: 301-816-5100  
Document Control Desk Fax: 301-816-5151  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: NRC Event Report Number 36350

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2. There is no evidence of a defect as defined in 10CFR21.3.
3. TEC's evaluation pertaining to subject event is hereby closed.

Please contact me should you have questions regarding this subject.

Sincerely Yours,

A handwritten signature in black ink, appearing to read 'R. Brenner', written in a cursive style.

Ronald D. Brenner  
President & CEO