



Technology for Energy Corporation
10737 Lexington Drive
Knoxville, TN 37932
Telephone: (423) 966-5856

October 26, 1999

ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: 10 CFR Part 21 Interim Report

Gentlemen:

Pursuant to the requirements of Title 10 of the Code of Federal Regulations, Part 21, Section 21 (a) (2), Technology for Energy Corporation (TEC) hereby submits the attached interim report regarding 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. Such a determination cannot be made at this time. The attached interim report provides a summary of the evaluation results to date and further planned actions relative to evaluation for reportability in accordance with 10CFR21. The final determination of reportability will be made as soon as practical following completion of all tests. As required by 10CFR21, TEC will notify the NRC should the evaluation conclude that the potential defect could create a substantial safety hazard. Please contact me should you have any questions regarding this submittal.

Sincerely Yours,

A handwritten signature in black ink that reads 'R. D. Brenner'. The signature is written in a cursive, flowing style.

Ronald D. Brenner
President & CEO

Attachment

IE19/1

10 CFR 21 POTENTIAL DEFECT INTERIM REPORT

Description of Potential Defect:

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

Background Information:

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 confirmed 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 suggests 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.

Reference Documents: TEC Installation Instruction 160-I-07
 TEC Qualification Report 517-TR-03

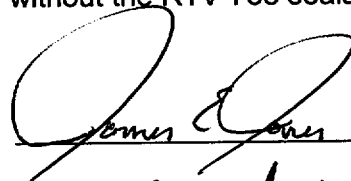
Evaluation Progress:

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.

Impact on Operating Plants:

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.

Prepared by:

 10/22/99

Reviewed by:

 10/25/99



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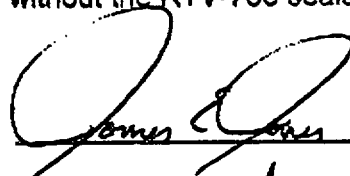
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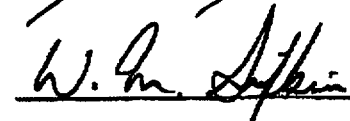
Impact on Operating Plants:

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Prepared by:

 10/22/99

Reviewed by:

 10/25/99

General Information or Other (GEN)

Event # 36350

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

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