

December 17, 2004

MEMORANDUM TO: Robert Gramm, Chief, Section 2  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

FROM: Bo Pham, Project Manager, Section 2 **/RA/**  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF MEETING HELD ON NOVEMBER 18, 2004, WITH THE  
INVENSYS/TRICONEX CORPORATION REGARDING PRODUCT  
QUALIFICATION MAINTENANCE

On November 18, 2004, the Invensys/Triconex Corporation and other interested stakeholders, met with the NRC staff to discuss the programs and processes being applied at Triconex to maintain the qualification and NRC approval of their triple modular redundant programmable logic controller system.

Triconex's concern is that there are numerous standards for electromagnetic interference/radio frequency interference (EMI/RFI) testing methodology that they must meet. There are two requirements that Triconex tests under. One is TÜV, which uses the International Electrotechnical Commission (IEC) standards for EMI/RFI testing. The other is the NRC endorsed Electric Power Research Institute (EPRI) TR-107330 and TR-102323, which use MIL-STD 461/462 testing methodology. Triconex expressed that testing was becoming onerous with these two standards in place.

Triconex stated that the issuance of Regulatory Guide (RG) 1.180, Rev. 1, "Guidelines for Evaluating Electromagnetic and Radio-Frequency Interference in Safety-Related Instrumentation and Control Systems," allows for EMI/RFI testing using either IEC or MIL-STD test methodologies. Since IEC test methodology will now meet both the TÜV and NRC requirements, Triconex plans to use the IEC test methodology for all future EMI/RFI testing. Triconex confirmed that the qualification requirements would be as required by RG 1.180, Rev. 1. Triconex also confirmed that all other testing would continue to be in accordance with EPRI TR-107330 as endorsed and performed in the Triconex safety evaluation report. The NRC staff agreed that RG 1.180, Rev. 1, stated that EMI/RFI test methods are in accordance with IEC standards or MIL-STD 461/462, which are both acceptable. The NRC staff understands Triconex's approach, and does not object as long as the requirements of Title 10 of the *Code of Federal Regulations* and the recommendations of EPRI TR-107330 (as endorsed and performed in the Triconex safety evaluation report) and RG 1.180, Rev. 1 are met.

R. Gramm

-2-

At the conclusion of the meeting, the staff thanked the Invensys/Triconex Corporation for its participation. An attendance list is provided in the attachment. The slides used during the meeting are available in ADAMS under accession number ML043240022.

Project No. 709

Attachment: Meeting Attendees

cc w/att: See next page

R. Gramm

-2-

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cc w/att: See next page

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PDIV-2 Reading

RidsNrrAdpt (BSheron)

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RidsNrrDlpmLpdiv-2 (RGramm)

RidsNrrPMBPham

RidsNrrLAEPeyton

RidsOgcRp

RidsAcrcAcnwMailCenter

EMarinos

PLoeser

JWalker

TMensah

**PACKAGE: ML043380119**

**MEETING SLIDES: ML043240022**

**MEETING NOTICE: ML043080425**

**ACCESSION NO: ML043380096**

**NRC-001**

OFFICE	PDIV/PM	PDIV-2/PM	PDIV-2/LA	EEIB/SC	PDIV-2/SC
NAME	JWalker:mp	BPham	EPeyton	EMarinos	RGramm
DATE	12/9/04	12/13/04	12/9/04	12/13/04	12/17/04

**OFFICIAL RECORD COPY**

**MEETING ATTENDEES**

**MEETING WITH THE INVENSYS/TRICONEX CORPORATION**

**NOVEMBER 18, 2004**

**INVENSYS/TRICONEX**

J. Murray  
C. Scott  
E. Quinn

**NRC**

E. Marinos  
P. Loeser  
B. Pham  
J. Walker

**OTHER**

C. Doyel, Florida Power & Light  
P. Lipple, Framatome ANP  
R. Torok, Electric Power Research Institute

Triconex Corporation

Project No. 709

cc:

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