Invensys
Operations Management

Letter No. NRC-V10-09-001

September 9, 2009

United States Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001

Subject: Nuclear Safety-Related Qualification of the Tricon TMR Programmable Logic Controller (PLC) – Update to Qualification Summary Report Submittal and "Application for Withholding Proprietary Information from Public Disclosure"

References:

1. NRC Safety Evaluation Report, "Review of Triconex Corporation Topical Reports 7286-545, Qualification Summary Report and 7286-546, Amendment 1 to Qualification Summary Report, Revision 1 (TAC No. MA8283)" (ADAMS Accession Number ML013470433), dated December 11, 2001
2. Letter, J. Polcyn (Invensys) to NRC, June 1, 2009, subject; NRC Safety Evaluation Report, "Review of Triconex Corporation Topical Reports 7286-545, Qualification Summary Report, and 7286-546, Amendment 1 to Qualification Summary Report, Revision 1."
3. NRC Office of New Reactors, Quality & Vendor Branch Inspection Report (ADAMS Accession Number ML082460540)

The purpose of this letter is to transmit Triconex Topical Report 7286-545-1-P, Revision 1, and associated V10 SER support documentation, for NRC review in updating our currently approved Triconex Safety Evaluation Report (Reference 1). This package is assembled and submitted with the enclosures identified in Attachment 1. This submittal is consistent with our Phase 0 meeting and subsequent teleconferences with the NRC Staff over the past few months following the issue of our notification letter to you on June 1, 2009 (Reference 2).

The Triconex Topical Report, Rev 1, provides a detailed summary of the differences between the previously NRC approved Tricon PLC Version 9 and the Tricon PLC Version 10 nuclear safety-related qualification testing program carried out in accordance with the requirements of EPRI TR-107330, "Generic Requirements Specification for Qualifying a Commercially Available PLC for Safety-Related Applications in Nuclear Power Plants". The NRC approved the qualification approach outlined in EPRI TR-107330 in a Safety Evaluation Report (SER) issued on July 30, 1998. The Triconex Topical Report Rev 1 documents compliance with the EPRI document with the exception that the EMI/RFI qualification was done in accordance with the more updated NRC Regulatory Guide 1.180, Rev 1.

The Triconex Topical Report, Rev 1, along with the additional documents enclosed, provide the basis for our request for NRC issuance of an SER approving the use of the Invensys Tricon PLC V10 in safety-related applications in nuclear power plants.

Attachment 1 of this letter provides the contents of this submittal and the proprietary status of each document.

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For informational and support purposes, Invensys would also like to identify that a comprehensive inspection of the Invensys QA Program implementation was performed in our Irvine, CA facility during May 2008 by the Quality & Vendor Branch of the NRC Office of New Reactors. This inspection addressed a detailed assessment of the product development, manufacturing and qualification processes of the Tricon V10 PLC platform and the project specific application development program for safety-related systems as defined by the Project Procedure Manual (Enclosure 3, Invensys Integration Project Procedures Manual – NTX-SER-09-21, Rev 0). This inspection is identified as Reference 3 of this letter.

Invensys is also providing this letter as our "Application for Withholding" pursuant to the provisions of Paragraph (b) (1) of Section 2.390 of the NRC regulations. This submittal contains commercial strategic information proprietary to Invensys and customarily held in confidence. As previously identified in this letter, the proprietary material for which this withholding is requested has been specifically identified. In accordance with 10 CFR Section 2.390, Affidavit No. TCXNRC-09-01 accompanies this transmittal and sets forth the basis for which the identified proprietary information may be withheld from public disclosure. Accordingly, it is respectfully requested that the specified information which is proprietary to Invensys be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the NRC's regulations.

We look forward to meeting with you at your convenience to discuss the Triconex Topical Report and associated enclosures. In addition to the documents submitted, other associated project records and data are available at the Invensys Irvine, CA office for your review.

Correspondence with respect to this transmittal should be directed to the following:

Mr. Brian Haynes
Project Manager
Invensys Operations Management
15345 Barranca Parkway
Irvine, CA 92618

If there are any other questions regarding this submittal or any of its enclosures, please contact me at (713) 329-8478. Thank you for your cooperation and support in this effort.

Sincerely,

John Polcyn

John Polcyn
Vice President and Chief Nuclear Officer
Invensys Operations Management

cc: Ms. Stacey Rosenberg, Branch Chief - NRR
Mr. Eric Bowman, Project Manager - NRR
Mr. William Kemper, Branch Chief - NRR

Attachment/Enclosures

LTR: NRC-V10-09-001

ATTACHMENT 1
Enclosure Listing

CD#1 - Proprietary	*[CD filename]*
Enclosure 1: Affidavit for Proprietary Documents in the Submittal	
- Affidavit #TCXNRC-09-01	*[001E1_Affidavit.pdf]*
Enclosure 2: TRICONEX TOPICAL REPORT 7286-545-1-P, Revision 1, including	
- Cover Page, Contents, and Abstract	*[002E2_TR_R1_Cover_P.pdf]*
- Differences between the Tricon V9.52.1 System and the Tricon V10.2.4 System – NTX-SER-09-05, Rev 0*	*[003E2_DifferencesV9V10_P.pdf]*
- EQ Summary Report 9600164-545, Rev 3*	*[004E2_EQSummaryRep_P.pdf]*
Appendix A*	*[005E2_EQSR_AppA_P.pdf]*
Appendix B*	*[006E2_EQSR_AppB_P.pdf]*
Appendix C*	*[007E2_EQSR_AppC_P.pdf]*
Enclosure 3: V10 SER Support Documents & Process Improvements	
- Software Qualification Report (SQR) – 9600164-535, Rev 1*	*[008E3_SQR_P.pdf]*
- Critical Digital Review (CDR) – 9600164-539, Rev 1*	*[009E3_CDR_P.pdf]*
- SER Maintenance Process – NTX-SER-09-20, Rev 0	*[010E3_SERMaint.pdf]*
- Invensys Integration Project Procedures Manual – NTX-SER-09-21, Rev 0*	*[011E3_PPM_P.pdf]*
Enclosure 4: Tricon Application Guidance	
- Invensys Position on ISG-2 and ISG-4 – NTX-SER-09-10, Rev 0	*[012E4_ISG24_P.pdf]*
- Invensys Position on ISG-1(LTR) – 7286-545-2-P, Rev 0*	*[013E4_ISG1_CyberLTR_P.pdf]*

CD #2 - Non Proprietary	*[CD filename]*
Enclosure 5: Non-proprietary versions of Proprietary Documents above	
TRICONEX TOPICAL REPORT 7286-545-1-NP, Revision 1, including	
- Cover Page, Contents, and Abstract	*[014E5_TR_R1_Cover_NP.pdf]*
- Differences between the Tricon V9.52.1 System and the Tricon V10.2.4 System – NTX-SER-09-05, Rev 0**	*[015E5_DifferencesV9V10_NP.pdf]*
- EQ Summary Report 9600164-545, Rev 3**	*[016E5_EQSummaryRep_NP.pdf]*
Appendix B**	*[017E5_EQSR_AppB_NP.pdf]*
Appendix C**	*[018E5_EQSR_AppC_NP.pdf]*
- Software Qualification Report (SQR) – 9600164-535, Rev 1**	*[019E5_SQR_NP.pdf]*
- Invensys Integration Project Procedures Manual – NTX-SER-09-21, Rev 0**	*[020E5_PPM_NP.pdf]*
- Invensys Position on ISG-1 (LTR) – 7286-545-2-NP, Rev 0**	*[021E5_ISG1_CyberLTR_NP.pdf]*

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*) Document Contains Invensys Proprietary material

**) Non-proprietary version of Proprietary document (redacted)

Note: Non-Proprietary Versions of the EQ Summary Report, Appendix A and the Critical Digital Review are not provided due to their predominantly proprietary content.