

Distribution ZZZZ  
per Ray Wharton

Project 709  
Nuclear 1E Qualification of the TRICON TMR Programmable Logic  
Controller (PLC) - Triconex Corporation Proprietary Information

Ray Wharton.....1 Ltr & Encl  
Files 01.....1 Ltr & Encl  
Jerry Mauck.....1 LtL& Encl  
Paul Loeser.....1 Ltr & Encl  
Alvin Bryant.....1 Ltr & Encl

PDR.....Ltr Only!!!!



Triconex Corporation

15091 Bake Parkway  
Irvine, CA 92618  
United States of America

Telephone + 1 949 699 2100  
Facsimile + 1 949 768 6601

March 21, 2000

Document Control Desk  
United States Nuclear Regulatory Commission  
Washington, DC 20555

Subject: Nuclear 1E Qualification of the TRICON TMR Programmable Logic  
Controller (PLC) – Triconex Corporation Proprietary Information

Reference: Project Number 709

Gentlemen:

Over the past two years, Triconex has worked with EPRI, representatives of nuclear utilities, contractors, and NRC staff in seeking qualification of the Triconex TRICON, a commercially available PLC for safety-related applications in nuclear power plants. We have attempted to keep the NRC abreast of our intentions and progress in qualifying the TRICON. Our objective has been to address both the nuclear power industry and NRC needs and concerns so that planning, implementation, and regulatory review can be accomplished in a predictable and efficient manner that maintains safety standards.

In accordance with EPRI TR-107330 "Generic Requirements Specification for Qualifying a Commercially Available PLC for Safety-Related Applications in Nuclear Power Plants", Triconex has:

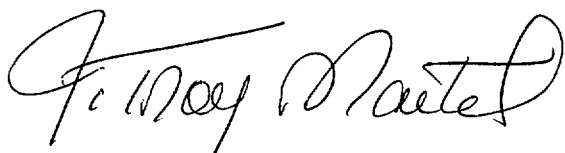
- Established Quality Assurance policies, programs and procedures in compliance with 10CFR50 Appendix B,
- Submitted a set of equipment for qualification testing,
- Developed test procedures,
- Conducted qualification testing at an independent national laboratory,
- And currently analyzing the data and composing summary reports.

In conforming with our stated intention of keeping the NRC informed of the qualification progress through status meetings and by submitting supporting information and draft reports as they are developed during the course of the qualification effort, we submit the enclosed documents for your review. We plan to submit additional information as it becomes available. Please note that these documents are considered Triconex Proprietary material as identified in the attached affidavit. The affidavit, in accordance with 10CFR Part 2.790(b), and endorsed by an officer of the Triconex Corporation, requests the NRC to withhold these documents from public review.

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See attached  
Dist.*

In closing, we believe that past interactions with the NRC staff during the planning stages has been constructive and beneficial. We continue to seek NRC staff input. Our next meeting is scheduled for March 23 and 24, 2000 at MPR Associates offices in Alexandria, VA. Should you have any questions regarding these documents, please contact me at (281) 360-6401 or Mr. Mitch Albers, the MPR Associates Project Manager at (703) 519-0200.

Sincerely,

A handwritten signature in cursive script, reading "J. Troy Martel". The signature is fluid and elegant, with a large initial "J" and a long, sweeping underline.

J. Troy Martel, P.E.  
Triconex Nuclear Qualification Project Director

cc. w/o enclosures

L. Raynard Wharton, NRC  
J. Mauck, NRC  
J. Naser, EPRI  
W. Sotos, STPNOC  
M. Albers, MPR  
T. Hurst, Hurst Tech.  
W. Burke, Foxboro  
M. Fortinti, Foxboro  
M. Phillips, Triconex  
G. McDonald, Triconex  
Nuclear Qualification File


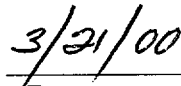
**Attachment 1 – Enclosure List, Triconex Letter to NRC dated 3/21/00  
(re: Proprietary Information)**

**REQUEST FOR WITHHOLDING FROM PUBLIC DISCLOSURE & AFFIDAVIT**

Enclosures to this Letter include the documents listed below, which specifically apply to the TRICON PLC Nuclear Qualification Project and are considered to be proprietary. Each of these documents is specifically designated as "TRICONEX PROPRIETARY."

In accordance with 10 CFR Part 2.790(b), it is requested that these documents be withheld in their entirety from public disclosure on the basis of Part 2.790(a)(4). These documents describe the details of Triconex equipment undergoing IE qualification testing and further describe the Triconex approach and procedures for implementing a program to qualify the equipment. The Triconex Corporation has expended a considerable amount of its resources to qualify the TRICON PLC controller as a highly reliable system for providing digital upgrades to aging nuclear power plant I&C systems. Disclosure of information in these documents would cause substantial harm to the competitive position of the Triconex Corporation, as there are other competing companies who wish to qualify digital PLC controllers for safety related application in nuclear power plants. Competing firms could use this information to benefit their own equipment qualification efforts and/or product design.

Signed:

 _____ Michael P. Phillips Director, Business Development TRICONEX CORPORATION	 _____ Date
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**Attachment 1 – Enclosure List, Triconex Letter to NRC dated 3/21/00 (cont.)**  
**(re: Proprietary Information)**

DOCUMENTS ENCLOSED (TO BE WITHHELD FROM PUBLIC DISCLOSURE PER 2.790)

<u>Item</u>	<u>Document Description</u>	<u>Document Number</u>	<u>Rev</u>
1.	Master Test Plan	7286-500	Rev 2
2.	Master Configuration List	7286-540	Rev 19
3.	Software Quality Assurance Plan	7286-537	Rev 2
4.	Set-up & Check-out Test Procedure	7286-502	Rev 2
5.	Operability Test Procedure	7286-503	Rev 2
6.	Prudency Test Procedure	7286-504	Rev 2
7.	Environmental Test Procedure	7286-506	Rev 0
8.	Seismic Test Procedure	7286-507	Rev 0
9.	EMI/RFI Test Procedure	7286-510	Rev 1
10.	Surge Withstand Test Procedure	7286-508	Rev 1
11.	1E/Non 1E Isolation Test Procedure	7286-509	Rev 0
12.	TSAP Validation Test Procedure	7286-513	Rev 0