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Operations Management

Invensys Operations Management 26561 Rancho Parkway South Lake Forest, CA 92630 USA iom.invensys.com

February 11, 2013

U.S. Nuclear Regulatory Commission Document Control Desk 11555 Rockville Pike Rockville, Maryland 20852

Project:

PPS Replacement Project PG&E PO# 3500897372 Invensys SO# 993754

Reference:

1) PG&E Letter DCL-11-104, from James R. Becker (PG&E) to the Commissioners

and Staff of the NRC, dated October 26, 2011 (ML11307A331)

2) Invensys Operations Management Project Letter 993754-49T, from Roman Shaffer

to Mr. Scott Patterson, Pacific Gas & Electric, dated 12/07/2012

Subject:

Invensys Operations Management Submittal to Support License Amendment Request from PG&E for Replacement of the Eagle 21 Process Protection System at Diablo

Canyon Power Plant, Submittal to Support November 2012 NRC Audit

Dear Sir or Madam:

As one of the selected platform vendors for the Diablo Canyon Power Plant (DCPP) Process Protection System (PPS) Replacement, Invensys Operations Management is pleased to submit the documents listed in the table in Attachment 1 in accordance with DI&C-ISG-06 to support the DCPP License Amendment Request (LAR). The documents were requested by the U.S. Nuclear Regulatory Commission (NRC) during the November 2012 audit of Invensys Operations Management at its facility in Lake Forest, California.

Previously Invensys Operations Management provided proprietary documents to the staff directly through its SharePoint site to assist with the review and close-out of its report for the November 2012 audit (Reference 2). However, as with previous transmittals of project documentation (i.e., documents numbered with 993754-xx-xxx), Invensys Operations Management has provided hard copies to Pacific Gas & Electric for subsequent submittal to the staff for placement on the docket for the DCPP LAR review. The staff should have already received those project documents in a separate submittal from Pacific Gas & Electric.

Documents listed in the table in Attachment 1 may be designated with a "P" and/or "NP" suffix.

• A document with the "P" suffix contains proprietary information regarding the V10 Tricon Programmable Logic Controller as well as the processes and procedures utilized by Invensys Operations Management in the development of nuclear safety-related systems. The

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Triconex

Transmittal No. 993754-53T

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corresponding document with a "NP" suffix is the redacted version of the proprietary ("P")

If a document is designated with only a "P" suffix then it contains predominately proprietary information, and therefore Invensys Operations Management does not plan to submit a nonproprietary version because of its limited value to the public.

Because this submittal contains proprietary information from Invensys Operations Management, an Application for Withholding Proprietary Information from Public Disclosure is enclosed in compliance with the requirements of 10 CFR Part 2.390, as amended. Also enclosed is an affidavit that sets forth the basis on which the information identified as proprietary may be withheld from public disclosure.

Correspondence with respect to the proprietary aspects of the application for withholding or the Invensys Operations Management affidavit should reference 993754-53T and be sent to the Lake Forest, California, address shown above in the letterhead with attention to Mr. Roman Shaffer.

Sincerely,

Project Manager

Invensys Operations Management

cc:

Mr. Joseph Sebrosky - NRC Project Manager (CDs)

Mr. Kenneth J. Schrader – Pacific Gas & Electric (Letter Only)

Mr. Scott Patterson – Pacific Gas & Electric (Letter Only)

Mr. Mark Herschthal – Invensys – (Letter Only)

Enclosures:

As stated

Triconex

ATTACHMENT 1 Enclosure Listing

Enclosure Description	CD5*	CD6	[Ref. Project filename] [size MB]
Enclosure 1: Affidavit #993754-AFF-53T (for proprietary documents)	X	X	[DC049_ Affidavit_53T.pdf] [1.2]
Enclosure 2: Invensys DI&C-ISG-06 Documents (Nov 2012 Audit Rept)			
Product Discrepancy Report (PDR), IRTX 21105*	X		[DC050 PDR21105 P.pdf] [6.4]
Technical Advisory Bulletin (TAB) 183	X	X	[DC051_TAB183.pdf] [1.0]
Engineering Project Plan (EPP), V10.5.2, 9100346-001*	X		[DC052_EPP1052_P.pdf] [0.6]
V10.5.2 V&V Test Report, 1/14/2011*	X		[DC053_VVTR1052_P.pdf] [0.7]
Software Release Definition (SRD), V10.5.2, 6200003-226*	X		[DC054_SRD1052_P.pdf] [0.5]
Product Discrepancy Report (PDR), IRTX 22481*	X		[DC055_PDR22481_P.pdf] [5.2]
Product Alert Notice (PAN) 25	X	X	[DC056_PAN25.pdf] [1.1]
ARR 932 NSC Evaluation	X		[DC057_ARR932_NSCE_P.pdf] [1.0]
Engineering Project Plan (EPP), V10.5.3, 9100428-001*	X		[DC058_EPP1053_P.pdf] [0.4]
Tricon PAN 25 Master Test Report, 10/12/2011*	X		[DC059_TRPAN25_P.pdf] [0.5]
Software Release Definition (SRD), V10.5.3, 6200003-230*	X		[DC060 SRD1053 P.pdf] [0.5]
Product Alert Notice (PAN) 22	X	Х	[DC061 PAN22.pdf] [1.7]
Product Alert Notice (PAN) 24	X	X	[DC062_PAN24.pdf] [1.4]
Technical Advisory Bulletin (TAB) 147	X	X	[DC063_TAB147.pdf] [0.7]
Engineering Project Plan (EPP), TriStation V4.9, 9100359-001*	X		[DC064_EPP490_P.pdf] [0.6]
TriStation V4.9.0 Test Report, 5/16/2011*	X		[DC065_TS490TR_P.pdf] [1.1]
Software Release Definition (SRD), TriStation V4.9.0, 6200097-038*	X		[DC066_SRD490_P.pdf] [0.6]

- Document contains Invensys proprietary information. Non-proprietary version of proprietary document.
- - Document with no asterisk or P/NP notation is fully public (no proprietary information)

Notes:

- (a) CD#5 contains Proprietary Documents (among all files). CD#6 contains only Non-Proprietary Documents (publicly available).
- (b) Non-proprietary versions of proprietary documents not provided due to predominantly proprietary content.

TRICONEX PRODUCTS

PROJECT DOCUMENT TRANSMITTAL

TO: | **Date:** 02/11/2013

Transmittal No.: 993754-53T

U.S. Nuclear Regulatory Commission

Customer: PG & E

11555 Rockville Pike

Sales Order: 993754

11555 Rockville Pike

Rockville, Maryland 20852

Sales Order: 993754

Project Name: PPS R

Rockville, Maryland 20852 Project Name: PPS Replacement Project

ATTN: Document Control Desk

ITEMS TRANSMITTED:

Disk	Prints	Type	# Of	Document	Rev	Description	a looned
N-3 -			Sheets	Number	7 - 3	to be to the first of the second of the seco	FOT
		Hard Copy / CDs	3	N/A	N/A	Affidavit #993754-AFF-53T (for proprietary documents)	I
		Hard Copy / CDs	14	N/A	N/A	Completed Defect CR ID: IRTX#21105	I
		Hard Copy / CDs	3	9791006-183	1	Technical Advisory Bulletin #183	I
		Hard Copy / CDs	38	9100346-001	1.4	Tricon V10.5.2 Engineering Project Plan	I
		Hard Copy / CDs	23	N/A	1.1	Tricon V10.5.2 V&V Test Report	I
		Hard Copy / CDs	26	6200003-226	1.0	Tricon V10.5.2 Release Software Release Definition	I
		Hard Copy / CDs	11	N/A	N/A	Completed Defect CR ID: IRTX#22481	I
		Hard Copy / CDs	3	9791010-025	2	Product Alert Notice #25 – Potential Safety Issue	l
		Hard Copy / CDs	2	N/A	N/A	Nuclear Safety Committee Evaluation Form ARR 932 / PDR# 22481	l
		Hard Copy / CDs	25	9100428-001	1.2	Tricon PAN 25 Fix Engineering Project Plan	I
		Hard Copy / CDs	24	N/A	1.0	Tricon PAN25 Master Test Report	I
		Hard Copy / CDs	17	6200003-230	1.0	Tricon V10.5.3 Software Release Definition	1
		Hard Copy / CDs	5	9791010-022	3	Product Alert Notice #22 – Potential Safety Issue	1
		Hard Copy / CDs	4	9791010-024	0	Product Alert Notice #24 – Potential Safety Issue	I
		Hard Copy / CDs	2	9791006-147	1	Technical Advisory Bulletin #147	I
		Hard Copy / CDs	32	9100359-001	1.3	TriStation v4.9.0 and Safety Suite Apps Engineering Project Plan	Ī
		Hard Copy / CDs	31	N/A	0.4	TriStation 1131 V4.9.0 Test Report	I
		Hard Copy / CDs	23	6200097-038	1.2	TriStation 1131 v4.9.0.117 SRD Software Release Definition	1

^{*}R= Review A= Approval CR = Comment Resolution I = Information

■ TRICONEX PRODUCTSPROJECT DOCUMENT TRANSMITTAL

NOTE: RETURN ON OR BEFORE:	
Comments:	
ACKNOWLEDGEMENT REQUIRED (Y/N) N	
Project Engineer:	Date: 2/12/13
Please sign below and fax return to:	
Triconex Products	
Fax No.: (949) 638-8875	
ATTENTION: Roman Shaffer	
Received By:	Date:

AFFIDAVIT No. 993754-AFF-53T

Re: Request for Withholding from Public Disclosure per 10CFR2.390

STATE OF CALIFORNIA)
) ss
COUNTY OF ORANGE)

- I, Michael Kieu, being duly sworn, hereby say and depose:
 - I am Director of Safety and Critical Control Development at Invensys, and as such I have been specifically
 delegated the function of reviewing company proprietary information sought to be withheld from public
 disclosure in connection with the nuclear safety related qualification of the TRICON Programmable Logic
 Controller (PLC) system and am authorized to apply for its withholding on behalf of Invensys.
 - 2. The information sought to be withheld is contained in the document(s) described below:
 - (1) Product Discrepancy Report (PDR) IRTX 21105
 - (2) Engineering Project Plan (EPP) V10.5.2, 9100346-001
 - (3) V10.5.2 V&V Test Report, 1/14/2011
 - (4) Software Release Definition (SRD) V10.5.2, 6200003-226
 - (5) Product Discrepancy Report (PDR) IRTX 22481
 - (6) ARR 932 NSC Evaluation, 8/11/2011
 - (7) Engineering Project Plan (EPP) V10.5.3, 9100428-001
 - (8) Tricon PAN 25 Master Test Report, 10/12/2011
 - (9) Software Release Definition (SRD) V10.5.3, 6200003-230
 - (10) Engineering Project Plan (EPP) TriStation V4.9, 9100359-001
 - (11) TriStation V4.9.0 Test Report, 5/16/2011
 - (12) Software Release Definition (SRD) TriStation V4.9.0, 6200097-038

The indicated documents contain information considered to be proprietary. Proprietary material in the enclosed documents are indicated by brackets [] or other markings as required by 10CFR2.390(b)(1)(i)(B). As indicated in the associated Transmittal letter, non-proprietary versions of the documents may be provided, consistent with their level of proprietary content.

This information is documentation associated with ongoing upgrade and maintenance of qualification of the Tricon PLC and support for a Tricon System customer application project.

- I am making this affidavit in conformance with the provisions of 10CFR Part 2.390 of the Commission's
 regulations and in conjunction with the Invensys Triconex application for withholding accompanying this
 Affidavit.
- 4. I have personal knowledge of the criteria and procedures utilized by Invensys in designating information as a trade secret, privileged, or as confidential commercial or financial information. Some examples of categories of information which fit into the definition of proprietary information are:

- a) Information which discloses process, method, or apparatus, including supporting data and analyses, where prevention of its use by Invensys Triconex's competitors without license or contract from Invensys constitutes a competitive economic advantage over other companies in the industry.
- b) Information, which if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product.
- c) Information which reveals cost or price information, production capacities, budget levels, or commercial strategies of Invensys, its customers, its partners, or its suppliers.
- d) Information which reveals aspects of past, present, or future Invensys Triconex customer-funded development plans or programs, of potential commercial value to Invensys.
- e) Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.
- f) Information obtained through Invensys Triconex actions which could reveal additional insights into Nuclear safety related PLC equipment qualification processes and regulatory proceedings, and which are not otherwise readily obtainable by a competitor.

Information to be withheld is considered to be proprietary based on the reasons set forth in paragraphs 4(a), (b) and (f) above.

5. These documents describe the details of Triconex equipment which has undergone nuclear qualification testing. Product design and development details are also represented. Invensys Triconex is the first manufacturer of a PLC to fully implement the requirements set forth in the EPRI TR-107330, which has been endorsed by the Commission in an SER. Invensys Triconex has expended a significant amount of money and effort involving numerous contractors over a 12 year time period to develop and implement an ongoing successful approach to its qualification and test program. Information developed relating to test plans, approaches, equipment, specific problems encountered, licensing perspectives, and lessons learned has significant value because of the resources expended to successfully accomplish this process and the usefulness of this knowledge to potential competitors.

Specific test data showing compliance with requirements and demonstrating technical capability of the equipment has substantial commercial value because it provides the basis for qualifying Triconex equipment to be sold for safety-related digital upgrades to nuclear plants. Existing options for digital upgrades in the nuclear industry are limited. We believe that ongoing successful nuclear qualification upgrades of the Invensys Triconex products, already well known in non-nuclear applications, will continue to give Invensys a competitive advantage in this field.

Disclosure of information in these documents would cause substantial harm to the competitive position of the Invensys, as there are other competing companies who wish to develop, qualify, and sell digital control systems for safety related application in nuclear power plants. Competing firms could use our experience, successful approaches, and technical information to facilitate their own equipment qualification efforts and/or product design without compensating Invensys.

- 6. Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Invensys.

- (ii) The information is of a type customarily held in confidence by Invensys and not customarily disclosed to the public. Invensys has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitute Invensys policy and provide the rational basis required.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10CFR Part 2.390, it is to be received in confidence by the Commission.
- (iv) This information is not readily available in public sources.
- (v) Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Invensys, because it would enhance the ability of competitors to provide similar design of PLC or qualify similar equipment using similar project methods, equipment, testing approach, contractors, or licensing approaches. As described in section 5, this information is the result of considerable expense to Invensys and has great value in that it will assist Invensys in providing Triconex digital upgrade equipment and services to a new, expanding markets not currently served by the company.

Michaelo

Director of Safety and Critical Control Development

7. The foregoing statements are true and correct to the best of my knowledge, information, and belief.

Invensys

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State of California County of	Subscribed and sworn to (or affirmed) before me on this
CINDIE A. POWER Commission # 2000784 Notary Public - California Orange County My Comm. Expires Jan 9, 2017	michael Kieu, Name of Signer proved to me on the basis of satisfactory evidence to be the person who appeared before me. Signature Cinduc Content Public

Place Notary Seal Above