



**Pacific Gas and
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June 6, 2012

PG&E Letter DCL-12-050

10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2

Submittal of Phase 2 Documents for the License Amendment Request for Digital
Process Protection System Replacement

- References:
1. PG&E Letter DCL-11-104, "License Amendment Request 11-07, Process Protection System Replacement," dated October 26, 2011 (ADAMS Accession No. ML11307A331).
 2. Digital Instrumentation and Controls DI&C-ISG-06 Task Working Group #6: "Licensing Process Interim Staff Guidance," Revision 1, January 19, 2011 (ADAMS Accession No. ML110140103).
 3. NRC Letter "Diablo Canyon Power Plant, Unit Nos. 1 and 2 - Acceptance Review of License Amendment Request for Digital Process Protection System Replacement (TAC Nos. ME7522 and ME7523)," dated January 13, 2012.
 4. PG&E Letter DCL-12-030, "Response to Items Contained in NRC Acceptance Review of License Amendment Request for Digital Process Protection System Replacement," dated April 2, 2012 (ADAMS Accession No. ML12094A072).
 5. CS Innovations Letter "Submittal of Advanced Logic System Documents (Proprietary)," dated September 28, 2011 (ADAMS Accession No. ML11277A153).

Dear Commissioners and Staff:

In Reference 1, Pacific Gas and Electric (PG&E) submitted License Amendment Request (LAR) 11-07 to request NRC approval to replace the Diablo Canyon Power Plant Eagle 21 digital process protection system (PPS) with a new digital PPS that is based on the Invensys Operations Management Tricon Programmable Logic Controller, Version 10, and the CS Innovations, LLC (a Westinghouse Electric Company), Advanced Logic System (ALS). The LAR format and contents in

Attachments 7-15 to the Enclosure contain Proprietary Information
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Reference 1 are consistent with the guidance provided in Enclosure E and Section C.3, respectively, of Digital Instrumentation and Controls (I&C) Revision 1 of Interim Staff Guidance Digital I&C-ISG-06, "Licensing Process" (ISG-06) (Reference 2). In Reference 3, the NRC staff documented its acceptance of Reference 1 for review and requested further clarification be provided for nine items. PG&E's response to the staff's request for further clarification was submitted in Reference 4.

In Reference 3, the staff identified ISG-06 Phase 2 documents to support LAR 11-07 that need to be submitted. This letter submits the ISG-06 Phase 2 documents identified in Reference 3 to be submitted, except the following that will be submitted by July 31, 2012:

- Invensys Operations Management Tricon software safety analysis
- Invensys Operations Management Tricon verification and validation reports
- Invensys Operations Management Tricon test design specification
- Invensys Operations Management Tricon requirement traceability matrix
- Invensys Operations Management Tricon failure modes and effects analysis
- Invensys Operations Management Tricon system build document
- Invensys Operations Management Tricon as-manufactured logic diagrams
- Invensys Operations Management Tricon reliability analysis
- CS Innovations ALS seismic qualification test methodology
- CS Innovations ALS as-manufactured logic diagrams
- PG&E system level failure modes and effects analysis

Submittal of ISG-06 Phase 2 documents by July 31, 2012, was accepted by the staff during a public telephone call on May 16, 2012, and meets the ISG-06 Section C.4 guidance to submit ISG-06 Phase 2 documents 12 months prior to the staff expected LAR 11-07 approval date of October 31, 2013.

The Final Safety Analysis Report changes for the PPS replacement are contained in Attachment 2 to the Enclosure. The Technical Specification Bases changes for the PPS replacement are contained in Attachment 3 to the Enclosure. PG&E document "SCM 36-01, Revision 0, Diablo Canyon Power Plant Units 1 & 2 Process Protection System (PPS) Replacement Software Configuration Management Plan (SCMP)," which addresses in part ISG-06, Enclosure B, Item 1.10, Software Configuration Management Plan, is contained in Attachment 4 to the Enclosure. The remaining ISG-06 Phase 2 documents submitted by this letter are contained in Attachments 7 through 12 and Attachments 15 and 16 of the Enclosure.

The CS Innovations document "6116-00000, Revision 2, Diablo Canyon PPS Management Plan," is contained in Attachment 13 to the Enclosure, and supersedes "6116-00000, Revision 1, Diablo Canyon PPS Management Plan," which was submitted in Reference 4.

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The CS Innovations document “6116-00005, Revision 1, Diablo Canyon PPS System Test Plan,” is contained in Attachment 14 to this Enclosure, and supersedes “6116-00005, Revision 0, Diablo Canyon PPS System Test Plan,” which was submitted in Reference 5.

This letter contains CS Innovations, LLC (“CS Innovations”) documents contained in Attachments 7 through 14 to the Enclosure that contain information proprietary to CS Innovations. Accordingly, Attachment 5 to the Enclosure includes a CS Innovations authorization letter, Affidavit AFF6116-00053-3, an accompanying affidavit, a Proprietary Information Notice, and a Copyright Notice. The affidavit is signed by CS Innovations, the owner of the information. The affidavit sets forth the basis on which the CS Innovations proprietary information contained in Attachments 7 through 14 to the Enclosure may be withheld from public disclosure by the Commission, and it addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR 2.390 of the Commission’s regulations. PG&E requests that the CS Innovations proprietary information be withheld from public disclosure in accordance with 10 CFR 2.390. Correspondence with respect to the copyright or proprietary aspects of the application for withholding related to the CS Innovations proprietary information or the CS Innovations affidavit provided in Attachment 5 to the Enclosure should reference CS Innovations Affidavit AFF6116-00053-3 and be addressed to Scott Roberts, Director, CS Innovations, LLC, 7400 E Tierra Buena Lane, Suite 101, Scottsdale, AZ 85260-1795.

This letter contains a document contained in Attachment 15 to the Enclosure that contains information proprietary to Westinghouse Electric Company LLC (“Westinghouse”). Accordingly, Attachment 6 to the Enclosure includes a Westinghouse authorization letter, CAW-12-3485, an accompanying affidavit, a Proprietary Information Notice, and a Copyright Notice. The affidavit is signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the Westinghouse proprietary information contained in Attachment 15 to the Enclosure may be withheld from public disclosure by the Commission, and it addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR 2.390 of the Commission’s regulations. PG&E requests that the Westinghouse proprietary information be withheld from public disclosure in accordance with 10 CFR 2.390. Correspondence with respect to the copyright or proprietary aspects of the application for withholding related to the Westinghouse proprietary information or the Westinghouse affidavit provided in Attachment 6 to the Enclosure should reference Westinghouse Letter CAW-12-3485, and be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

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If you have any questions, or require additional information, please contact Tom Baldwin at (805) 545-4720.

This information does not affect the results of the technical evaluation or the significant hazards consideration determination previously transmitted in Reference 1.

This letter satisfies in part commitment #1 of Attachment 1 to the Enclosure of Reference 1.

This communication contains regulatory commitments (as defined by NEI 99-04). The regulatory commitments are contained in Attachment 1 to the Enclosure.

I state under penalty of perjury that the foregoing is true and correct.

Executed on June 6, 2012.

Sincerely,

A handwritten signature in blue ink, appearing to read 'James R. Becker', with a large, stylized flourish extending to the right.

James R. Becker
Site Vice President

kjse/4328 SAPN 50271918

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cc: Diablo Distribution

cc/enc: Gary W. Butner, Branch Chief, California Department of Public Health

Elmo E. Collins, NRC Region IV

Michael S. Peck, NRC, Senior Resident Inspector

Joseph M. Sebrosky, NRR Project Manager

Alan B. Wang, NRR Project Manager

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**Submittal of Phase 2 Documents for the License Amendment Request for
Digital Process Protection System Replacement**

In Pacific Gas and Electric (PG&E) Letter DCL-11-104, "License Amendment Request 11-07, Process Protection System Replacement," dated October 26, 2011, PG&E submitted License Amendment Request (LAR) 11-07 to request NRC approval to replace the Diablo Canyon Power Plant (DCPP) Eagle 21 digital process protection system (PPS) with a new digital PPS that is based on the Invensys Operations Management Tricon Programmable Logic Controller, Version 10, and the CS Innovations, LLC (a Westinghouse Electric Company), Field Programmable Gate Array (FPGA) based Advanced Logic System (ALS). The LAR 11-07 format and contents are consistent with the guidance provided in Enclosure E and Section C.3, respectively, of Digital Instrumentation and Controls (I&C) Revision 1 of Interim Staff Guidance Digital I&C-ISG-06, "Licensing Process" (ISG-06).

The staff documented its acceptance of LAR 11-07 for review in the NRC Letter "Diablo Canyon Power Plant, Unit Nos. 1 and 2 - Acceptance Review of License Amendment Request for Digital Process Protection System Replacement (TAC Nos. ME7522 and ME7523)," dated January 13, 2012, and requested further clarification be provided for nine items. PG&E's response to the staff's request for further clarification was submitted in PG&E Letter DCL-12-030, "Response to Items Contained in NRC Acceptance Review of License Amendment Request for Digital Process Protection System Replacement," dated April 2, 2012.

In PG&E Letter DCL-11-104, PG&E stated the Final Safety Analysis Report (FSAR) changes and Technical Specification (TS) Bases changes would be submitted at a later date (commitment #3 of Attachment 1 to the Enclosure of Letter DCL-11-104). The FSAR and TS Bases changes are contained in Attachments 2 and 3 to the Enclosure of this letter, respectively.

In the NRC letter dated January 13, 2012, the staff identified ISG 06 Phase 2 documents to support LAR 11-07 that need to be submitted. This letter submits the ISG-06 Phase 2 documents identified in Reference 3 to be submitted, except the following that will be submitted by July 31, 2012:

- Invensys Operations Management Tricon software safety analysis
- Invensys Operations Management Tricon verification and validation reports
- Invensys Operations Management Tricon test design specification
- Invensys Operations Management Tricon requirement traceability matrix
- Invensys Operations Management Tricon failure modes and effects analysis
- Invensys Operations Management Tricon system build document
- Invensys Operations Management Tricon as-manufactured logic diagrams
- Invensys Operations Management Tricon reliability analysis
- CS Innovations ALS seismic qualification test methodology

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CS Innovations ALS as-manufactured logic diagrams
PG&E system level failure modes and effects analysis

PG&E document "SCM 36-01, Revision 0, Diablo Canyon Power Plant Units 1 & 2 Process Protection System (PPS) Replacement Software Configuration Management Plan (SCMP)" is contained in Attachment 4 to this Enclosure. The purpose of this SCMP is to establish and document a process of change control and for software configuration management for the PPS replacement from the time the equipment arrives at the offsite PG&E Project Integration and Test Facility and for the remainder of its life cycle following installation at DCP. The SCMP document SCM 36-01, Revision 0, addresses in part ISG-06, Enclosure B, Item 1.10, Software Configuration Management Plan.

The CS Innovations document "6116-00000, Diablo Canyon PPS Management Plan" has been revised to Revision 2 to reflect the creation of the document "6116-00003, Revision 0, Diablo Canyon PPS V&V Plan." The CS Innovations document "6116-00000, Revision 2, Diablo Canyon PPS Management Plan," is contained in Attachment 13 to this Enclosure, and supersedes "6116-00000, Revision 1, Diablo Canyon PPS Management Plan," which was submitted in PG&E Letter DCL-12-030, "Response to Items Contained in NRC Acceptance Review of License Amendment Request for Digital Process Protection System Replacement," dated April 2, 2012 (Agencywide Documentation Access and Management System (ADAMS) Accession No. ML12094A072).

The CS Innovations document "6116-00005, Diablo Canyon PPS System Test Plan" has been revised to Revision 1. The CS Innovations document "6116-00005, Revision 1, Diablo Canyon PPS System Test Plan," is contained in Attachment 14 to this Enclosure, and supersedes "6116-00005, Revision 0, Diablo Canyon PPS System Test Plan," which was submitted by CS Innovations as a supporting document for the DCP PPS by the letter dated September 28, 2011 (ADAMS Accession No. ML11277A153).

The following ISG-06 Phase 2 documents are addressed below for the Tricon-based PPS equipment and the FPGA-based ALS PPS equipment:

- Software Safety Analysis (SSA) (ISG-06 Enclosure B Item 2.1)
- Verification and Validation (V&V) Reports (ISG-06 Enclosure B Item 2.2)
- Test Design Specification (ISG-06 Enclosure B Item 2.4)
- Requirement Traceability Matrix (ISG-06 Enclosure B Item 2.7)
- Failure Modes and Effects Analysis (FMEA) (ISG-06 Enclosure B Item 2.8)
- System Build Documents (ISG-06 Enclosure B Item 2.9)
- Qualification Test Methodologies (ISG-06 Enclosure B Item 2.11)
- As-Manufactured Logic Diagrams (ISG-06 Enclosure B Item 2.13)
- System Response Time Confirmation (ISG-06 Enclosure B Item 2.14)

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Reliability Analysis (ISG-06 Enclosure B Item 2.15)
Setpoint Calculations (ISG-06 Enclosure B Item 2.16)
Software Tool Analysis Report (ISG-06 Enclosure B Item 2.17)
Commercial Grade Dedication Report(s) (ISG-06 Enclosure B Item 2.18)

SSA (ISG-06 Enclosure B Item 2.1)

Tricon-based PPS equipment

The Invensys Operations Management proprietary SSA document for the DCPD PPS Tricon-based equipment for the requirements phase of the project is "993754-1-915-P, Safety Analysis," and will be submitted by July 31, 2012.

The SSA document for the DCPD PPS Tricon-based equipment, "993754-1-915, Safety Analysis," will be revised for the test phase of the project and will be submitted by December 2012.

FPGA-based ALS PPS equipment

The SSA document for the FPGA-based ALS equipment, "6002-00006, ALS Security Plan," was submitted by CS Innovations as a supporting document for the ALS Topical Report by the letter dated July 29, 2010 (ADAMS Accession No. ML102160471).

V&V Reports (ISG-06 Enclosure B Item 2.2)

Tricon-based PPS equipment

The V&V report for the DCPD PPS Tricon-based equipment for the requirements phase of the project is "993754-1-860, Requirements Phase Summary Report," and will be submitted by July 31, 2012.

The V&V report for the DCPD PPS Tricon-based equipment will be revised for the design phase of the project and will be submitted by December 2012.

FPGA-based ALS PPS equipment

The V&V plan for the DCPD PPS for the FPGA-based ALS equipment is "6116-00003, Revision 0, Diablo Canyon PPS V&V Plan" and is contained in Attachment 7 to this Enclosure.

The V&V reports for the FPGA-based ALS equipment, "6002-30282, ALS-302 V&V Summary Report," and "6002-32182, ALS-321 V&V Summary Report," were

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submitted by CS Innovations as a supporting document for the ALS Topical Report by the letter dated February 10, 2012 (ADAMS Accession No. ML12048B425).

The V&V report for the DCPD PPS for the FPGA-based ALS equipment is "6116-00500, Revision A, Diablo Canyon PPS V&V Summary Report" and is contained in Attachment 7 to this Enclosure.

Test Design Specification (ISG-06 Enclosure B Item 2.4)

Tricon-based PPS equipment

The test design specification for the DCPD PPS Tricon-based equipment for the integrated system is "993754-1-812, Validation Test Specification" and for the software related to the DCPD PPS Tricon-based equipment is "993754-1-868, Software Verification Test Plan." These documents will be submitted by July 31, 2012.

FPGA-based ALS PPS equipment

CS Innovations document "6116-00005, DCPD PPS System Test Plan," includes the features to be tested, test approach, pass criteria, and deliverables of the ALS portion of the PPS replacement, and was submitted to the NRC by CS Innovations as a supporting document for the DCPD PPS by the letter dated September 28, 2011 (ADAMS Accession No. ML11277A153).

The test design specification for the DCPD PPS for the FPGA-based ALS equipment is "6116-70140, Revision 0, Diablo Canyon PPS System Test Design Specification" and is contained in Attachment 8 to this Enclosure.

Requirement Traceability Matrix (ISG-06 Enclosure B Item 2.7)

Tricon-based PPS equipment

The requirements traceability matrix document for the DCPD PPS Tricon-based equipment for the requirements and design phase of the project is "993754-1-804, Project Traceability Matrix," and will be submitted by July 31, 2012.

The requirements traceability matrix for the DCPD PPS Tricon-based equipment will be revised for the design phase of the project and will be submitted by December 2012.

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FPGA-based ALS PPS equipment

The requirements traceability matrix documents for the FPGA-based ALS equipment were submitted by CS Innovations as supporting documents for the ALS Topical Report by the letter dated February 10, 2012 (ADAMS Accession No. ML12048B425) that contained the "6002-30210, ALS-302 Core A Requirements Traceability Matrix," "6002-30211, ALS-302 Core B Requirements Traceability Matrix," and the "6002-32110, ALS-321 Core A Requirements Traceability Matrix;" by the letter dated March 25, 2011 (ADAMS Accession No. ML110900127) that contained the "6002-31110, ALS-311 Core A Requirements Traceability Matrix;" by the letter dated March 18, 2011 (ADAMS Accession No. ML110810494) that contained the "6002-32111, ALS-321 Core B Requirements Traceability Matrix," "6002-40210, ALS-402 Core A Requirements Traceability Matrix," "6002-40211, ALS-402 Core B Requirements Traceability Matrix," and the "6002-42110, ALS-421 Core A Requirements Traceability Matrix;" and by the letter dated February 25, 2011 (ADAMS Accession No. ML110600671) that contained the "6002-10210, ALS-102 Core A Requirements Traceability Matrix."

The requirements traceability matrix for the DCPD PPS for the FPGA-based ALS equipment is "6116-00059, Revision A, Diablo Canyon PPS Traceability Matrix" and is contained in Attachment 9 to this Enclosure.

FMEA (ISG-06 Enclosure B Item 2.8)

The system level FMEA document for the DCPD PPS is "Process Protection System Replacement Failure Modes and Effects Analysis," and will be submitted by July 31, 2012.

Tricon-based PPS equipment

The FMEA for the DCPD PPS Tricon-based equipment is "993754-1-811, Failure Modes and Effects Analysis," and will be submitted by July 31, 2012.

FPGA-based ALS PPS equipment

The FMEA documents for the FPGA-based ALS equipment were submitted by CS Innovations as a supporting document for the ALS Topical Report by the letter dated February 8, 2011 (ADAMS Accession No. ML110410380) that contained the "6002-10212, ALS-102 FPA, FMEA, and Reliability Analysis," "6002-30212, ALS-302 FPA, FMEA, and Reliability Analysis," "6002-31112, ALS-311 FPA, FMEA, and Reliability Analysis," "6002-32112, ALS-321 FPA, FMEA, and Reliability Analysis," "6002-40212, ALS-402 FPA, FMEA, and Reliability Analysis," "6002-42112, ALS-421 FPA, FMEA, and Reliability Analysis," and the "6002-60112, ALS-601 FPA, FMEA, and Reliability Analysis."

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The FMEA for the DCPD PPS for the FPGA-based ALS equipment is "6116-00029, Revision 1, Diablo Canyon PPS ALS Reliability Analysis and FMEA," and is contained in Attachment 11 to this Enclosure.

System Build Documents (ISG-06 Enclosure B Item 2.9)

Tricon-based PPS equipment

The system build documents for the DCPD PPS Tricon-based equipment are "993754-11-810, Software Design Description," "993754-12-810, Software Design Description," "993754-13-810, Software Design Description," and "993754-14-810, Software Design Description," and will be submitted by July 31, 2012.

FPGA-based ALS PPS equipment

The system build document for the FPGA-based ALS equipment is "6002-00060, Revision 0, ALS Board Manufacturing Procedures" and is contained in Attachment 10 to this Enclosure.

Qualification Test Methodologies (ISG-06 Enclosure B Item 2.11)

Tricon-based PPS equipment

The qualification test methodology information for the Tricon-based equipment is discussed in Sections 2.2.1 through 2.2.10 of the Invensys Operations Management topical report "7286-545-1, Revision 4, Triconex Topical Report," submitted by Invensys Operations Management by the letter dated January 5, 2011 (ADAMS Accession No. ML110140437).

FPGA-based ALS PPS equipment

The qualification test methodology document for the FPGA-based ALS equipment, "6002-00004, ALS Equipment Qualification Plan," was submitted by CS Innovations as a supporting document for the ALS Topical Report by the letter dated November 11, 2011 (ADAMS Accession No. ML11320A047).

The electromagnetic compatibility (EMC) qualification test procedure for the line sense module (LSM) for the DCPD PPS for the FPGA-based ALS equipment is "EQ-TP-251-PGE, Revision 0, EMC Qualification Test Procedure for the Line Sense Module (LSM) for Diablo Canyon." The environmental qualification test procedure for the LSM for the DCPD PPS for the FPGA-based ALS equipment is "EQ-TP-253-PGE, Revision 0, Environmental Qualification Test Procedure for the

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Line Sense Module (LSM) for Diablo Canyon." These documents are contained in Attachment 12 to this Enclosure.

The seismic qualification test procedure for the LSM for the DCPD PPS for the FPGA-based ALS equipment is "EQ-TP-252-PGE, Seismic Qualification Test Procedure for the Line Sense Module (LSM) for Diablo Canyon," and will be submitted by July 31, 2012.

As-Manufactured Logic Diagrams (ISG-06 Enclosure B Item 2.13)

Tricon-based PPS equipment

The as-manufactured logic diagrams for the DCPD PPS Tricon-based equipment are part of the system build documents and will be submitted by July 31, 2012.

FPGA-based ALS PPS equipment

The as-manufactured logic diagrams for the DCPD PPS for the FPGA-based ALS equipment is "PGE-ALS-001, Diablo Canyon Detailed Functional Diagrams" and will be submitted by July 31, 2012.

System Response Time Confirmation (ISG-06 Enclosure B Item 2.14)

Tricon-based PPS equipment

In support of the V10 Tricon safety evaluation, Invensys Operations Management submitted document "9600164-731, Maximum Response Time Calculations," by the letter dated November 17, 2009 (ADAMS Accession No. ML093280198). This document described the worst-case response time for the V10 Tricon Qualification System and included the standard equations for calculating worst-case response time of a given V10 Tricon configuration.

The time response calculation for the V10 Tricon PPS Replacement architecture, "993754-1-817, Revision 1, Maximum TSAP Scan Time," was submitted by PG&E in PG&E Letter DCL-12-039, dated April 30, 2012.

FPGA-based ALS PPS equipment

The system response time confirmation for the DCPD PPS for the FPGA-based ALS equipment is contained in "6116-00011, Diablo Canyon Process Protection System, ALS System Design Specification," submitted to the NRC by CS Innovations as a supporting document for the DCPD PPS by the letter dated September 28, 2011 (ADAMS Accession No. ML11277A153). Section 7.5 of document 6116-00011 identifies the ALS board access sequence and provides an analysis associated with

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digital response time performance. The DCPP PPS ALS system is configured in accordance with the qualification requirements of the ALS platform topical report.

Reliability Analysis (ISG-06 Enclosure B Item 2.15)

Tricon-based PPS equipment

The reliability analysis document for the DCPP PPS Tricon-based equipment is "993754-1-819, Reliability Analysis," and will be submitted by July 31, 2012.

FPGA-based ALS PPS equipment

The reliability analysis documents for the FPGA-based ALS equipment were submitted by CS Innovations as a supporting document for the ALS Topical Report by the letter dated February 8, 2011 (ADAMS Accession No. ML110410380) that contained the "6002-10212, ALS-102 FPA, FMEA, and Reliability Analysis," "6002-30212, ALS-302 FPA, FMEA, and Reliability Analysis," "6002-31112, ALS-311 FPA, FMEA, and Reliability Analysis," "6002-32112, ALS-321 FPA, FMEA, and Reliability Analysis," "6002-40212, ALS-402 FPA, FMEA, and Reliability Analysis," "6002-42112, ALS-421 FPA, FMEA, and Reliability Analysis," and the "6002-60112, ALS-601 FPA, FMEA, and Reliability Analysis."

The reliability analysis for the DCPP PPS for the FPGA-based ALS equipment is "6116-00029, Revision 1, Diablo Canyon PPS ALS Reliability Analysis and FMEA," and is contained in Attachment 11 to this Enclosure.

Setpoint Calculations (ISG-06 Enclosure B Item 2.16)

The evaluation of the setpoints and setpoint related uncertainties for the PPS replacement for the Tricon and ALS architecture is being performed by Westinghouse in two phases. The first phase of the evaluation of the setpoints includes a review of the setpoint uncertainty terms and evaluation of the PPS replacement reactor trip system (RTS) and engineered safety features actuation system (ESFAS) setpoints using expected bounding setpoint uncertainty input values. A Westinghouse proprietary version of the setpoint summary evaluation of the PPS replacement related setpoints is "PGE-12-52 P-Attachment, Westinghouse Input to Diablo Canyon Digital Process Protection System Replacement Uncertainty Calculations Summary LAR" and is contained in Attachment 15 to this Enclosure and a non-proprietary version, "PGE-12-52 NP-Attachment, Westinghouse Input to Diablo Canyon Digital Process Protection System Replacement Uncertainty Calculations Summary LAR" is contained in Attachment 16 to this Enclosure. The setpoint summary evaluation includes a discussion of the methods used for determining the nominal trip setpoints and as-found and as-left tolerances, the safety analysis limit, the calculation inputs, and the calculated values of the nominal

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trip setpoints and as-found and as-left tolerances for the racks, transmitters, and resistance temperature detectors as applicable. The as-found tolerance and as-left tolerance are operability criteria used to establish operability during periodic surveillance testing. The setpoint summary evaluation concludes that the current TS nominal trip setpoints for RTS and ESFAS functions processed by the PPS remain acceptable for the PPS replacement.

The second phase for the setpoints involves completion of formal Westinghouse setpoint uncertainty calculations that will be completed by December 31, 2012, and will be available for inspection by NRC staff in Washington DC with support provided by Westinghouse setpoint group personnel, as previously stated in PG&E Letter DCL-12-030, "Response to Items Contained in NRC Acceptance Review of License Amendment Request for Digital Process Protection System Replacement," dated April 2, 2012 (ADAMS Accession No. ML12094A072). The setpoint uncertainty calculations completed as part of the second phase will confirm the first phase calculations at a 95/95 level.

At DCP, setpoints are controlled using a graded approach by following PG&E Inter-Departmental Administrative Procedure (IDAP) CF6.ID1, "Setpoint Control Program," a procedure subject to 10 CFR 50.59. CF6.ID1 requires that electrical setpoints shall be fully documented by a calculation performed using a specified methodology.

For DCP, the Corrective Action Program (CAP) procedure is PG&E Program Directive OM7, "Corrective Action Program," and problems are documented per DCP IDAP OM7.ID1, "Problem Identification and Resolution." The CAP includes a process to perform a TS operability review, and document as necessary per DCP IDAP OM7.ID12, "Operability Determination," and to determine the necessary corrective actions to be taken, including corrective actions to prevent recurrence, per OM7.ID1. An issue is entered as a notification into a computer based tracking program.

The surveillance requirements (SRs) 3.3.1.7, 3.3.1.10, 3.3.2.5, and 3.3.2.9 for the channel operability tests and channel calibrations for the RTS and ESFAS PPS functions are performed using surveillance test procedures that are subject to 10 CFR 50.59. The current surveillance test procedures for SRs 3.3.1.7, 3.3.1.10, 3.3.2.5, and 3.3.2.9 for the RTS and ESFAS PPS functions contain acceptance criteria that require that if the as-found data for the setpoints are not within desired range, to notify management and to initiate a notification. These surveillance test procedures also require that the as-left data shall be within the desired range. The instrument channel cannot be returned to service and declared operable unless the setpoint can be reset to within the as-left setpoint and the evaluation of the channel shows it is functioning as required.

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In order to ensure control of the as-found and as-left tolerances associated with the TS setpoints for the RTS and ESFAS PPS functions, the 10 CFR 50.59 controlled surveillance test procedures applicable to SRs 3.3.1.7, 3.3.1.10, 3.3.2.5, and 3.3.2.9 will be updated as required as part of implementation of the amendment for each unit. The Actions for the various potential surveillance outcomes will be required as follows:

(1) The instrument channel setpoint exceeds the as-left tolerance but is within the as-found tolerance:

- Reset the instrument channel setpoint to within the as-left tolerance;
- If the instrument channel setpoint cannot be reset to a value that is within the as-left tolerance around the instrument channel setpoint at the completion of the surveillance, if not already inoperable, the instrument channel shall be declared inoperable.

(2) The instrument channel setpoint exceeds the as-found tolerance but is conservative with respect to the TS Allowable Value (AV):

- Reset the instrument channel setpoint to within the as-left tolerance;
- If the instrument channel setpoint cannot be reset to a value that is within the as-left tolerance around the instrument channel setpoint at the completion of the surveillance, if not already inoperable, the instrument channel shall be declared inoperable;
- Enter the channel's as-found condition in the CAP for prompt verification that the instrument is functioning as required, and for further evaluation. Evaluate the channel performance utilizing available information to verify that it is functioning as required before returning the channel to service. The evaluation may include an evaluation of magnitude of change per unit time, response of instrument for reset, previous history, etc., to provide confidence that the channel will perform its specified safety function;
- Document the condition for continued OPERABILITY.

Enclosure
PG&E Letter DCL-12-050

(3) The instrument channel setpoint is non-conservative with respect to the TS AV:

- If not already inoperable, declare the channel inoperable;
- Reset the instrument channel setpoint to within the as-left tolerance;
- Enter the channel's as-found condition in the Corrective Action Program for evaluation. Evaluate the channel performance utilizing available information to verify that it is functioning as required before returning the channel to service. The evaluation may include an evaluation of magnitude of change per unit time, response of instrument for reset, previous history, etc., to provide confidence that the channel will perform its specified safety function.

These procedure actions are the minimum actions which the procedures will require and additional actions may be taken. These procedure actions will apply until procedure actions consistent with a license amendment for TSTF-493, Revision 4, are implemented for all automatic protective devices related to variables having significant safety functions as delineated by 10 CFR 50.36(c)(1)(ii)(A).

In addition, the "Equipment Control Guidelines" (ECGs) will be updated as part of implementation of the amendment for each unit to identify the methodologies used to determine the as-found and as-left tolerances. The ECGs are documents controlled under 10 CFR 50.59 and are incorporated into the FSAR by reference.

Software Tool Analysis Report (ISG-06 Enclosure B Item 2.17)

Tricon-based PPS equipment

Invensys Operations Management does not credit any software tools in the development of the Tricon V10 platform, except for the TriStation 1131. The TriStation 1131 programming software is described in Section 2.1.3.2 of the Invensys Operations Management topical report "7286-545-1, Revision 4, Triconex Topical Report," submitted by Invensys Operations Management by the letter dated January 5, 2011 (ADAMS Accession No. ML110140437). The testing requires the use of data loggers or standard computer applications to collect data, however Invensys Operations Management manually verifies all results to ensure that any defects not detected by the tool will be detected.

Enclosure
PG&E Letter DCL-12-050

FPGA-based ALS PPS equipment

The software tools analysis report for the FPGA-based ALS equipment, "6002-00030, ALS Design Tools" was submitted by CS Innovations as a supporting document for the ALS Topical Report by the letter dated November 11, 2011 (ADAMS Accession No. ML11320A047).

Commercial Grade Dedication Report(s) (ISG-06 Enclosure B Item 2.18)

Tricon-based PPS equipment

The Invensys Operations Management topical report "7286-545-1, Revision 4, Triconex Topical Report," submitted by Invensys Operations Management by the letter dated January 5, 2011 (ADAMS Accession No. ML110140437), documents the basis for generic qualification of the Tricon Version V10 programmable logic controller (PLC) system for safety-related applications in nuclear facilities. The basis for qualification of the Tricon Version V10 PLC system is compliance with EPRI TR-107330, which has been approved by the NRC as an acceptable approach for qualifying commercial PLCs for safety-related applications. Appendix A to the Triconex Topical Report documents a detailed compliance matrix demonstrating how the Tricon system complies with each of the requirements specified in EPRI TR-107330. Where the Tricon PLC design does not fully comply with the corresponding requirement as given in the applicable section of EPRI TR-107330, the matrix contained in Appendix A to the Triconex Topical Report provides a disposition of the compliance exception.

FPGA-based ALS PPS equipment

There are currently no commercial grade dedication reports that are applicable to the FPGA-based ALS equipment.

Enclosure
PG&E Letter DCL-12-050

ATTACHMENTS

1. Regulatory Commitments
2. Final Safety Analysis Report Changes for Process Protection System Replacement
3. Technical Specification Bases Changes for Process Protection System Replacement
4. PG&E document "SCM 36-01, Revision 0, Diablo Canyon Power Plant Units 1 & 2 Process Protection System (PPS) Replacement Software Configuration Management Plan (SCMP)"
5. CS Innovations Authorization Letter, Affidavit AFF6616-00053-03
6. Westinghouse Authorization Letter, CAW-12-3485
7. CS Innovations Documents "6116-00003, Revision 0, Diablo Canyon PPS V&V Plan" and "6116-00500, Revision A, Diablo Canyon PPS V&V Summary Report"
8. CS Innovations Document "6116-70140, Revision 0, Diablo Canyon PPS System Test Design Specification"
9. CS Innovations Document "6116-00059, Revision A, Diablo Canyon PPS Traceability Matrix"
10. CS Innovations Document "6002-00060, Revision 0, "ALS Board Manufacturing Procedures"
11. CS Innovations Document "6116-00029, Revision 1, Diablo Canyon PPS ALS Reliability Analysis and FMEA"
12. CS Innovations Documents "EQ-TP-251-PGE, Revision 0, EMC Qualification Test Procedure for the Line Sense Module (LSM) for Diablo Canyon," and "EQ-TP-253-PGE, Revision 0, Environmental Qualification Test Procedure for the Line Sense Module (LSM) for Diablo Canyon"
13. CS Innovations Document "6116-00000, Revision 2, Diablo Canyon PPS Management Plan"
14. CS Innovations Document "6116-00005, Revision 1, Diablo Canyon PPS System Test Plan"
15. Westinghouse Document "PGE-12-52 P-Attachment, Westinghouse Input to Diablo Canyon Digital Process Protection System Replacement Uncertainty Calculations Summary LAR" (Westinghouse Proprietary)
16. Westinghouse Document "PGE-12-52 NP-Attachment, Westinghouse Input to Diablo Canyon Digital Process Protection System Replacement Uncertainty Calculations Summary LAR" (Non-Proprietary)

Enclosure
Attachment 1
PG&E Letter DCL-12-050

Regulatory Commitments

Commitment 1

This letter submits the ISG-06 Phase 2 documents identified in Reference 3 to be submitted, except the following that will be submitted by July 31, 2012:

Invensys Operations Management Tricon software safety analysis,
“993754-1-915-P, Safety Analysis”
Invensys Operations Management Tricon verification and validation reports,
“993754-1-860, Requirements Phase Summary Report”
Invensys Operations Management Tricon test design specification,
“993754-1-812, Validation Test Specification” and “993754-1-868, Software
Verification Test Plan”
Invensys Operations Management Tricon requirement traceability matrix,
“993754-1-804, Project Traceability Matrix”
Invensys Operations Management Tricon failure modes and effects analysis,
“993754-1-811, Failure Modes and Effects Analysis”
Invensys Operations Management Tricon system build document,
“993754-11-810, Software Design Description,” “993754-12-810, Software
Design Description,” “993754-13-810, Software Design Description,” and
“993754-14-810, Software Design Description”
Invensys Operations Management Tricon as-manufactured logic diagrams (part
of the system build documents)
Invensys Operations Management Tricon reliability analysis, “993754-1-819,
Reliability Analysis”
CS Innovations ALS seismic qualification test methodology, “EQ-TP-252-PGE,
Seismic Qualification Test Procedure for the Line Sense Module (LSM) for
Diablo Canyon”
CS Innovations ALS as-manufactured logic diagrams, “PGE-ALS-001, Diablo
Canyon Detailed Functional Diagrams”
PG&E system level failure modes and effects analysis, “Process Protection
System Replacement Failure Modes and Effects Analysis”

Commitment 2

The SSA document for the DCPD PPS Tricon-based equipment, “993754-1-915, Safety
Analysis,” will be revised for the test phase of the project and will be submitted by
December 2012.

Enclosure
Attachment 1
PG&E Letter DCL-12-050

Commitment 3

The V&V report for the DCPD PPS Tricon-based equipment will be revised for the design phase of the project and will be submitted by December 2012.

Commitment 4

The requirements traceability matrix for the DCPD PPS Tricon-based equipment will be revised for the test phase of the project and will be submitted by December 2012.

Commitment 5

In order to ensure control of the as-found and as-left tolerances associated with the TS setpoints for the RTS and ESFAS PPS functions, the 10 CFR 50.59 controlled surveillance test procedures applicable to SRs 3.3.1.7, 3.3.1.10, 3.3.2.5, and 3.3.2.9 will be updated as required as part of implementation of the amendment for each unit. The Actions for the various potential surveillance outcomes will be required as follows:

(1) The instrument channel setpoint exceeds the as-left tolerance but is within the as-found tolerance:

- Reset the instrument channel setpoint to within the as-left tolerance;
- If the instrument channel setpoint cannot be reset to a value that is within the as-left tolerance around the instrument channel setpoint at the completion of the surveillance, if not already inoperable, the instrument channel shall be declared inoperable.

(2) The instrument channel setpoint exceeds the as-found tolerance but is conservative with respect to the AV:

- Reset the instrument channel setpoint to within the as-left tolerance;
- If the instrument channel setpoint cannot be reset to a value that is within the as-left tolerance around the instrument channel setpoint at the completion of the surveillance, if not already inoperable, the instrument channel shall be declared inoperable;
- Enter the channel's as-found condition in the CAP for prompt verification that the instrument is functioning as required, and for further evaluation. Evaluate the channel performance utilizing

Enclosure
Attachment 1
PG&E Letter DCL-12-050

available information to verify that it is functioning as required before returning the channel to service. The evaluation may include an evaluation of magnitude of change per unit time, response of instrument for reset, previous history, etc., to provide confidence that the channel will perform its specified safety function;

- Document the condition for continued OPERABILITY.

(3) The instrument channel setpoint is non-conservative with respect to the TS AV:

- If not already inoperable, declare the channel inoperable;
- Reset the instrument channel setpoint to within the as-left tolerance;
- Enter the channel's as-found condition in the CAP for evaluation. Evaluate the channel performance utilizing available information to verify that it is functioning as required before returning the channel to service. The evaluation may include an evaluation of magnitude of change per unit time, response of instrument for reset, previous history, etc., to provide confidence that the channel will perform its specified safety function.

Commitment 6

The "Equipment Control Guidelines" (ECGs) will be updated as part of implementation of the amendment for each unit to identify the methodologies used to determine the as-found and as-left tolerances. The ECGs are documents controlled under 10 CFR 50.59 and are incorporated into the FSAR by reference.

~~Attachments 7-15 to the Enclosure contain Proprietary Information - Withhold Under 10 CFR 2.390~~

Enclosure
Attachment 5
PG&E Letter DCL-12-050

CS Innovations Authorization Letter, Affidavit AFF6616-00053-3

~~Attachments 7-15 to the Enclosure contain Proprietary Information~~
~~When separated from Attachments 7-15 to the Enclosure, this cover sheet is decontrolled.~~



CS Innovations, LLC
7400 E. Tierra Buena Lane, Suite 101
Scottsdale, AZ 85260
Phone: 480-567-1100
Fax: 480-315- 9359

May 29, 2012
Affidavit #AFF6116-00053-3

Pacific Gas & Electric Company
Ken Schrader
Diablo Canyon Power Plant, Bld 104/5/21A
9 Miles NW of Avila Beach
Avila Beach, CA 93424

**APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE**

Subject:

6116-00059, Rev A	Diablo Canyon Units 1 & 2 Process Protection System ALS Requirements Traceability Matrix
6002-00060, Rev 0	ALS Board Manufacturing Procedures
EQ-TP-251-PGE , Rev 0	EMC Qualification Test Procedure for the Line Sense Module (LSM) for Diablo Canyon
EQ-TP-253-PGE , Rev 0	Environmental Qualification Test Procedure for the Line Sense Module (LSM) for Diablo Canyon
6116-00000, Rev 2	Diablo Canyon PPS Management Plan
6116-00500, Rev A	Diablo Canyon PPS VV Summary Report
6116-00003, Rev 0	Diablo Canyon PPS VV Plan
6116-00005, Rev 1	Diablo Canyon PPS System Test Plan
6116-70140, Rev 0	Diablo Canyon PPS System Test Design Specification
6116-00029, Rev 1	Diablo Canyon PPS Reliability and Failure Mode and Effects Analysis

Reference: Letter from Scott Roberts to PG&E, 6116-00053, dated May 29, 2012

The Application for Withholding Proprietary Information from Public Disclosure is submitted by CS Innovations, LLC, a wholly-owned subsidiary of Westinghouse Electric Company LLC (Westinghouse), pursuant to the provisions of paragraph (b)(1) of Section 2.390 of the Commission's regulations. It contains commercial strategic information proprietary to Westinghouse and customarily held in confidence.

The proprietary information for which withholding is being requested is contained in the documents identified in the Reference. In conformance with 10 CFR Section 2.390, Affidavit AFF6116-00053-3 accompanies this application for withholding, setting forth the basis on which the identified proprietary information may be withheld from public disclosure.



CS Innovations, LLC
7400 E. Tierra Buena Lane, Suite 101
Scottsdale, AZ 85260
Phone: 480-567-1100
Fax: 480-315- 9359

May 29, 2012
Affidavit #AFF6116-00053-3

The documents identified in the Reference were prepared as Proprietary, and CS Innovations requests that they be considered proprietary in their entirety. CS Innovations does not plan to submit non-proprietary versions of these documents due to their extensive proprietary content. Non-proprietary versions would be of no value to the public.

It is respectfully requested that the subject information which is proprietary to CS Innovations be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the proprietary aspects of the application for withholding or the accompanying affidavit should reference AFF6116-00053-3 and should be addressed to Scott Roberts, Director, CS Innovations, LLC, 7400 E Tierra Buena Lane, Suite 101, Scottsdale, AZ 85260-1795.

Very truly yours,

Scott Roberts, President
CS Innovations

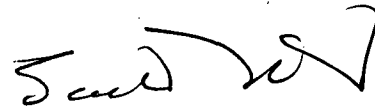
Enclosures

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STATE OF ARIZONA:

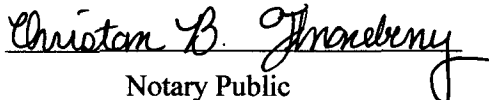
COUNTY OF MARICOPA:

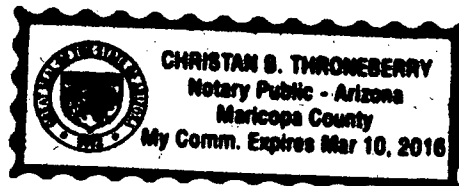
Before me, the undersigned authority, personally appeared Scott Roberts, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of CS Innovations, LLC, a wholly-owned subsidiary of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:



Scott Roberts, President
CS Innovations

Sworn to and subscribed before me
this 29th day of May 2012.


Notary Public



- (1) I am President, CS Innovations, LLC, and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of CS Innovations.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the CS Innovations Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by CS Innovations in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) 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 CS Innovations.
 - (ii) The information is of a type customarily held in confidence by CS Innovations and not customarily disclosed to the public. CS Innovations 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 constitutes CS Innovations policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

CS Innovations' competitors without license from CS Innovations constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use 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 a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of CS Innovations, its customers or suppliers.
- (e) It reveals aspects of past, present, or future CS Innovations or customer funded development plans and programs of potential commercial value to CS Innovations.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the CS Innovations system which include the following:

- (a) The use of such information by CS Innovations gives CS Innovations a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the CS Innovations competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the CS Innovations ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put CS Innovations at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving CS Innovations of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of CS Innovations in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The CS Innovations capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is contained in the following documents being submitted to the Commission.
- 1) 6116-00059, Rev A, Diablo Canyon Units 1 & 2 Process Protection System ALS Requirements Traceability Matrix (Proprietary)
 - 2) 6002-00060, Rev 0, ALS Board Manufacturing Procedures (Proprietary)
 - 3) EQ-TP-251-PGE, Rev 0, EMC Qualification Test Procedure for the Line Sense Module (LSM) for Diablo Canyon (Proprietary)
 - 4) EQ-TP-253-PGE, Rev 0, Environmental Qualification Test Procedure for the Line Sense Module (LSM) for Diablo Canyon (Proprietary)
 - 5) 6116-00000, Rev 2, Diablo Canyon PPS Management Plan (Proprietary)
 - 6) 6116-00500, Rev A, Diablo Canyon PPS VV Summary Report (Proprietary)

- 7) 6116-00003, Rev 0, Diablo Canyon PPS VV Plan (Proprietary)
- 8) 6116-00005, Rev 1, Diablo Canyon PPS System Test Plan (Proprietary)
- 9) 6116-70140, Rev 0, Diablo Canyon PPS System Test Design Specification (Proprietary)
- 10) 6116-00029, Rev 1, Diablo Canyon PPS Reliability and Failure Mode and Effects Analysis (Proprietary)

These documents are being transmitted by CS Innovations letter, 6116-00053, and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by CS Innovations is submitted in support of Pacific Gas & Electric Company's intention to submit a license amendment request for a digital upgrade of the Diablo Canyon Power Plant Reactor Trip System and Engineered Safety Features Actuation System, and may be used only for that purpose.

This information is part of that which will enable CS Innovations to:

- (a) Obtain NRC approval of its Advanced Logic System for use in Reactor Trip and Engineered Safety Features Actuation Systems.

Further this information has substantial commercial value as follows:

- (a) CS Innovations plans to sell the use of this information to its customers for purposes of obtaining NRC approval of its Advanced Logic System for use in Reactor Trip and Engineered Safety Features Actuation Systems.
- (b) CS Innovations can sell support and defense of the use of its Advanced Logic System in safety related applications.
- (c) The information requested to be withheld reveals the distinguishing aspects of a methodology which was developed by CS Innovations.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of CS Innovations because it would enhance the ability of

competitors to provide similar engineering services and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive CS Innovations effort and the expenditure of a considerable sum of money.

In order for competitors of CS Innovations to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith is the proprietary version of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval. The documents are to be considered proprietary in their entirety.

COPYRIGHT NOTICE

The documents transmitted herewith bear a CS Innovations copyright notice. CS Innovations is a wholly-owned subsidiary of Westinghouse. The NRC is permitted to make the number of copies of the information contained in these documents which is necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.390 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

~~Attachments 7-15 to the Enclosure contain Proprietary Information - Withhold Under 10 CFR 2.390~~

Enclosure
Attachment 6
PG&E Letter DCL-12-050

Westinghouse Authorization Letter, CAW-12-3485

~~Attachments 7-15 to the Enclosure contain Proprietary Information
When separated from Attachments 7-15 to the Enclosure, this cover sheet is decontrolled.~~



Westinghouse Electric Company
Nuclear Services
1000 Westinghouse Drive
Cranberry Township, Pennsylvania 16066
USA

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

Direct tel: (412) 374-4643
Direct fax: (724) 720-0754
e-mail: greshaja@westinghouse.com
Proj letter: PGE-12-52

CAW-12-3485

May 25, 2012

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: PGE-12-52 P-Attachment, "Westinghouse Input to Diablo Canyon Digital Process Protection System Replacement Uncertainty Calculations Summary LAR" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-12-3485 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Pacific Gas and Electric Company.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference CAW-12-3485, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. A. Gresham", written over a horizontal line.

J. A. Gresham, Manager
Regulatory Compliance

Enclosures

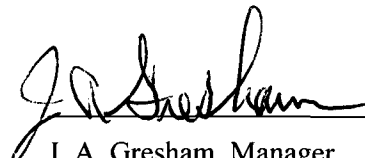
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COMMONWEALTH OF PENNSYLVANIA:

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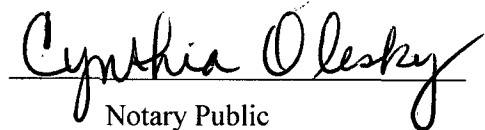
COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

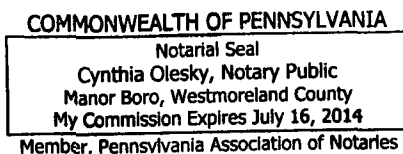


J. A. Gresham, Manager
Regulatory Compliance

Sworn to and subscribed before me
this 25th day of May 2012



Notary Public



- (1) I am Manager, Regulatory Compliance, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) 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 Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse 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 constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use 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 a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.
- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component

may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.

- (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
- (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in PGE-12-52 P-Attachment, "Westinghouse Input to Diablo Canyon Digital Process Protection System Replacement Uncertainty Calculations Summary LAR" (Proprietary), for submittal to the Commission, being transmitted by Pacific Gas and Electric letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with Diablo Canyon Units 1 and 2, and may be used only for that purpose.

This information is part of that which will enable Westinghouse to:

- (a) Provide input to the U.S. Nuclear Regulatory Commission for review of the Diablo Canyon Digital Process Protection System Replacement Uncertainty Calculations Summary Licensing Amendment Request.

- (b) Provide additional information related to instrument uncertainties.
- (c) Provide licensing support for customer submittal.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of the information to its customers for the purpose of meeting NRC requirements for licensing documentation.
- (b) Westinghouse can sell support and defense of the technology to its customers in the licensing process.
- (c) The information requested to be withheld reveals the distinguishing aspects of a methodology which was developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar calculations and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

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Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

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