Pacific Gas and Electric Company®

James M. Welsch
Vice President, Nuclear Generation

Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

805.545.3242
E-Mail: JMW1@pge.com

July 14, 2016

PG&E Letter DCL-16-068

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

10 CFR 50.55a

Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2
Submittal of the Fourth Ten-Year Interval Snubber Examination and Testing Program

Dear Commissioners and Staff:

Pursuant to 10 CFR 50.55a(g)(5)(i), Pacific Gas and Electric Company (PG&E) has updated its snubber program for the fourth ten-year inspection interval at Diablo Canyon Power Plant (DCPP) Units 1 and 2. The DCPP Snubber Examination, Testing, and Service Life Monitoring Program Plan for the Fourth Ten-Year Interval is provided in the Enclosure. PG&E is providing this plan for information only in accordance with the requirement of the American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code).

The Code Edition and Addenda applicable to DCPP snubbers for its fourth inservice inspection and testing interval is the ASME OM Code 2004 Edition with 2005 and 2006 Addenda. Paragraph 50.55a(b)(3)(v) requires Subsection ISTD, "Preservice and Inservice Examination and Testing of Dynamic Restraints (Snubbers) in Light-Water Reactor Power Plants," to be used for examination and testing of snubbers. The fourth ten-year interval for DCPP snubbers began on May 8, 2016, for Unit 1 and on July 1, 2016, for Unit 2.

There are no new or revised regulatory commitments (as defined by NEI 99-04) in this submittal.

If you have any questions regarding the information enclosed, or other snubber program activities, please contact Mr. Mark Sharp, Design Engineering Manager, at (805) 545-3031.

Sincerely,

James M. Welsch
Vice President, Nuclear Generation

rntt/4231/50843879-1
Enclosure
cc/enc: Kriss M. Kennedy, NRC Region IV Administrator
John P. Reynoso, NRC Acting Senior Resident Inspector
Balwant K. Singal, NRR Senior Project Manager

Enclosure
PG&E Letter DCL-16-068

SNUBBER EXAMINATION, TESTING, AND SERVICE LIFE MONITORING PROGRAM PLAN FOURTH INSERVICE INSPECTION & TESTING INTERVAL

Pacific Gas & Electric Company
Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

SNUBBER EXAMINATION, TESTING, AND SERVICE LIFE MONITORING PROGRAM PLAN FOURTH INSERVICE INSPECTION & TESTING INTERVAL

DIABLO CANYON POWER PLANT

Unit 1
Beginning May 8, 2016 – Ending December 31, 2025

Unit 2
Beginning July 1, 2016 – Ending May 31, 2026

Pacific Gas and Electric Company
P. O. Box 56
Avila Beach, California
93424

USNRC DOCKET NOS. 50-275/50-323

FACILITY OPERATING LICENSE NOS. DPR-80/82

COMMERCIAL OPERATION DATES: MAY 7, 1985 / MARCH 13, 1986

Revision 0

Pacific Gas & Electric Company
Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

Revision Log

Revision Description	Prepared By:	Date	Reviewed By:	Date	Approved By:	Date:
Fourth Interval Snubber Program, Original Issue	Glen Palmer	6/14/16	Mohan Kewalramani	6/15/16	BXS5 Behrooz Shakibnia	7/7/16

TABLE OF CONTENTS

SECTION

INTRODUCTION

1.1 Purpose

To provide requirements for the performance and administration of assessing the operational readiness of those dynamic restraints (Snubbers) whose specific functions are required to ensure the integrity of the reactor coolant pressure boundary or any safety-related system.

1.2 Scope

The program plan was prepared to meet the requirements of the following subsections of the American Society of Mechanical Engineers (ASME) OM Code 2004 Edition with 2005 and 2006 Addenda.

- Subsection ISTA, "*General Requirements*"
  ISTA contains the requirements directly applicable to inservice examination and testing including the Owner's Responsibility and Records Requirements.

- Subsection ISTD, "*Preservice and Inservice Examination and Testing of Dynamic Restraints (Snubbers) in Light-Water Reactor Nuclear Power Plants*"
  ISTD establishes requirements for preservice and inservice examination and testing, and the service life monitoring of Dynamic Restraints *(Snubbers)* in light-water reactor nuclear power plants. The snubbers covered are required to support the systems and components that are required in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, or in mitigating the consequences of an accident.

1.3 Discussion

In order to ensure the required operability of all safety related snubbers for the Diablo Canyon Power Plant during seismic or other events initiating dynamic loads, the inspection, testing, and the service life monitoring of these snubbers shall be implemented and performed in accordance with the requirements of Equipment Control Guideline ECG 99.1, "Snubbers".

The Snubber Program has previously been included in the Third Interval Inservice Inspection Program (ISI) as a requirement of the Section XI Inspection Code, IWF-5000. Due to the recent changes to the 2006 Edition of the Section XI Code, the Snubber Program will now be in accordance with the ASME O&M Code, Subsection ISTD, 2004 Edition with Addenda through 2006.

The examination boundaries shall include the snubber assembly from pin to pin inclusive. Coordination with the ISI program owner will be required to complete the surveillance requirements for piping and structural attachments. Integral and nonintegral attachments for snubbers shall be examined within the Station ISI program, in accordance with the requirements of the ASME Code Section XI: 2007 Edition through 2008 Addenda.

In addition to the SAP functional location (FLOC) data, the SnubbWorks snubber data base software program is used to identify and maintain the controlled list of snubbers included in the snubber program.

The Snubber Program described in ECG 99.1 adheres to the requirements of the ASME OM Code, Subsection ISTD, 2004 Edition with 2005 and 2006 Addenda, as required by 10CFR50.55a(b)(3)(v).

2.0 EXAMINATION, TESTING AND SERVICE LIFE MONITORING REQUIREMENTS

2.1 Visual Examinations, Functional Testing, and Service Life requirements shall be performed to the extent specified within ECG 99.1 and referenced implementing procedures.

2.2 Snubbers are grouped into Defined Test Plan Groups (DTPGs) in accordance with ISTD-5252. Each DTPG will be tested using the 10% sample plan per ISTD-5300. Snubbers attached to the Steam Generators will be in a separate DTPG.

2.3 Snubber DTPG's are defined as follows and in plant implementing procedure STP M-78B, Snubber Functional Testing.

Snubber Design Type	Unit 1		Unit 2	
	DTPG	Includes	DTPG	Includes
Anchor Darling	AS	AD40, AD70, AD150	AS	AD40, AD70, AD150
	AM	AD500	AM	AD500
	AL	AD1600, AD 5500, AD12500	AL	AD1600, AD 5500, AD12500
Basic PSA	PS	1/4, 1/2	PS	1/4, 1/2
	PM	1, 3, 10	PM	1, 3, 10
	PL	35, 100	PL	35, 100
Paul Munroe	M	20x3 LG Bore	M	20x3 LG Bore
Grinnell	G	All Sizes	G	All Sizes
Anvil	A	All Sizes	A	All Sizes

2.4 The service life of all snubbers shall be monitored and snubbers evaluated, replaced, or reconditioned in accordance with ECG 99.1 and ISTD-6200 to ensure that the service life is not exceeded between surveillance inspections. The replacement or reconditioning of snubbers shall be documented and records retained in accordance with Diablo Canyon Plant procedures.

3.0 EXAMINATION and TESTING METHODS

3.1 Visual examinations shall be performed by individuals qualified in accordance with Diablo Canyon Plant procedures. These examinations are conducted to ensure the mechanical and structural condition of the snubber support location and to observe conditions that could affect functional adequacy. Visual examinations and functional testing shall be performed to verify the requirements specified within ECG 99.1 are met in accordance with Subsection ISTD.

4.0 EXAMINATION and TESTING FREQUENCY

4.1 Visual Examinations and Functional Testing shall be performed at the frequency specified within ECG 99.1 and ISTD-4250 and ISTD-5240. Snubbers are categorized as inaccessible or accessible during reactor operation for visual examination. Each of these categories (inaccessible and accessible) may be examined independently according ISTD-4220.

4.2 Code Case OMN-13, which allows the extension of the STP M-78A, Snubber Visual Examination interval, has been implemented for snubber inspections during the Third Inspection Interval and will continue through the upcoming Fourth Interval. Code Case OMN-13 is approved for use in Regulatory Guide 1.192 (June 2003). Since the prescribed prerequisites of Code Case OMN-13 have been satisfied for both Units 1 and 2, the Visual Examination frequencies specified in Table ISTD 4252-1 have been extended in accordance with Code Case OMN-13.

4.3 Post installation visual examinations of snubbers shall be performed whenever new snubbers are installed, existing or swapped snubbers that were functionally tested are reinstalled, or after snubber repairs, replacements or modifications.

4.4 Functional testing requirements for new snubber installations or spare snubbers shall be equal to or more stringent than that specified within ECG 99.1.

5.0 EXAMINATION, TESTING AND SERVICE LIFE MONITORING EVAUATION

5.1 Snubbers that do not appear to conform to the Visual Examination requirements of ECG 99.1, shall be reported for evaluation and appropriate corrective action.

5.2 Snubbers that do not appear to conform to the visual examination acceptance requirements and are later confirmed as operable as a result of functional testing may be declared operable for the purpose of establishing the next visual inspection interval, providing that the unacceptable condition did not affect operational readiness for the snubber location.

5.3 Snubbers that do not meet the operability testing acceptance criteria in ECG 99.1 shall be evaluated to determine the cause of the failure and appropriate corrective action(s) shall be implemented.

5.4 The service life of a snubber is evaluated using manufacturer's recommendations and engineering information gained through consideration of the snubber service conditions and inservice functional test results. A service life monitoring program is included in ECG 99.1 and in the referenced implementing procedures.

6.0 REPAIR, REPLACEMENT, AND MODIFICATION REQUIREMENTS

6.1 Repairs, Replacements and Modifications performed on snubbers under this program shall conform, as applicable, to the requirements specified within the ASME Code, Section XI.

7.0 SCHEDULING

7.1 The Snubber Visual Examinations, Functional Testing schedules, and Service Life Replacements shall be established tracked and maintained in accordance with ECG 99.1 and Subsection ISTD by the Snubber Engineer.

7.2 The Snubber Engineer shall identify and track expanded sample plan or additional testing and/or examinations as required by ECG 99.1 and Subsection ISTD.

8.0 REPORTS and RECORDS

8.1 Reports and records for the Visual Examinations and Functional Testing shall be maintained for all snubbers included within the Snubber Program.

8.2 Applicable records and reports, as required for Repair and Replacements, shall be maintained.

8.3 Records of the service life of all snubbers listed in this program, including the date at which the service life commences or expires, and associated installation and maintenance records shall be maintained.