



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

April 12, 2021

Mr. James M. Welsch
Senior Vice President, Generation
and Chief Nuclear Officer
Pacific Gas and Electric Company
P.O. Box 56
Mail Code 104/6
Avila Beach, CA 93424

SUBJECT: DIABLO CANYON POWER PLANT, UNITS 1 AND 2 –NOTIFICATION OF NRC
DESIGN BASES ASSURANCE INSPECTION (PROGRAMS)
(05000275/2021011 AND 05000323/2021011) AND INITIAL REQUEST FOR
INFORMATION

Dear Mr. Welsch:

On July 26, 2021, the U.S. Nuclear Regulatory Commission (NRC) will begin an onsite inspection at the Diablo Canyon Power Plant Units 1 and 2. A three-person team will perform this inspection using NRC Inspection Procedure 71111, Attachment 21N.02, "Design Bases Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements."

This inspection will evaluate the reliability, functional capability, and design basis of risk-important power-operated valves as required by Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a and applicable 10 CFR Part 50, Appendix A and Appendix B, requirements, and as required by the Diablo Canyon Power Plant Units 1 and 2 Operating Licenses. Additionally, the team will perform an inspection of the documentation files to verify that the plant activities associated with safety-related motor-operated valves meet your commitments to Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance," and GL 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves." In conducting this inspection, the team will select power-operated valves used to prevent and mitigate the consequences of a design basis accident.

The inspection will include an information gathering site visit by the team leader and two weeks of onsite inspection by the team. The inspection will consist of three NRC inspectors. The current inspection schedule is as follows:

Onsite Information Gathering Visit: June 28-July 2, 2021
Preparation Weeks: July 19-23, 2021, and August 2-6, 2021
Onsite Weeks: July 26-30, 2021 and August 9-13, 2021

The purpose of the information gathering visit is to meet with members of your staff to become familiar with the power-operated valve activities at the Diablo Canyon Power Plant. The lead inspector will request a meeting with your personnel to discuss the site power-operated valve procedures. Additionally, the lead inspector will request a discussion with your staff to become familiar with the regulations and standards applicable to power-operated valves at the site. Additional information and documentation needed to support the inspection will be identified during the inspection, including interviews with engineering managers and engineers.

In order to minimize the inspection impact on the site and to ensure a productive inspection, we have enclosed a request for information needed for the inspection. This information should be made available to the lead inspector during the week of June 14-18, 2021. Since the inspection will be concentrated on safety-related and risk significant power-operated valves, a list of such power-operated valves should be available to review during and following the information gathering visit to assist in our selection of appropriate power-operated valves to review.

Additional requests by inspectors will be made during the onsite weeks for specific documents needed to complete the review of specific power-operated valves and associated activities. It is important that all these documents are up-to-date and complete in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection. To facilitate the inspection, we request that a contact individual be assigned to each inspector to ensure information requests, questions, and concerns are addressed in a timely manner.

The lead inspector for this inspection is Mr. Ronald A. Kopriva. We understand that our licensing engineer contact for this inspection is Ms. Amanda Sorensen. If there are any questions about the inspection or the requested materials, please contact the lead inspector by telephone at 817-200-1104 or by e-mail at Ron.Kopriva@nrc.gov.

This letter contains mandatory information collections that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). The Office of Management and Budget (OMB) approved these information collections (approval number 31500011). Send comments regarding this information collection to the Information Services Branch, Office of the Chief Information Officer, Mail Stop: T6 A10M, U.S. Nuclear Regulatory Commission, Washington, DC 205550001, or by email to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (31500011) Office of Management and Budget, Washington, DC 20503.

The NRC may not conduct nor sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding.

Sincerely,

Vincent G. Gaddy, Chief
Engineering Branch 1
Division of Reactor Safety

Docket Nos. 05000275 and 05000323
License Nos. DPR-80 and DPR-82

Enclosures:

1. Design Bases Assurance Inspection
(Programs) Power-Operated Valve
Request for Information
2. Valves of Interest List

cc w/ encl: Distribution via LISTSERV®

DIABLO CANYON POWER PLANT, UNITS 1 AND 2 –NOTIFICATION OF NRC DESIGN BASES ASSURANCE INSPECTION (PROGRAMS) (05000275/2021011 AND 05000323/2021011) AND INITIAL REQUEST FOR INFORMATION – DATED APRIL 12, 2021

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SUNSI Review: ADAMS: Non-Publicly Available Non-Sensitive Keyword:
 By: RAK Yes No Publicly Available Sensitive NRC-002

OFFICE	SRI:EB1	C:PBD	C:EB1			
NAME	RKopriva	JJosey	VGaddy			
SIGNATURE	<i>RKopriva</i>	<i>JJosey</i>	<i>VGaddy</i>			
DATE	4/12/2021	4/12/2021	04/12/2021			

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**Initial Request for Information
Design Bases Capability of Power-Operated Valves
Diablo Canyon Power Plant Units 1 and 2**

Inspection Reports: 05000275/2021011 AND 05000323/2021011

Information Gathering Dates: June 28-July 2, 2021

Inspection Dates: July 26-30, 2021, and August 9-13, 2021

Inspection Procedure: IP 71111, Attachment 21N.02, "Design Bases Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements"

Lead Inspector: Ronald A. Kopriva, Senior Reactor Inspector

I. Information Requested for Information Gathering Visit (June 28, 2021)

The following information should be provided to the lead inspector in hard copy or electronic format, to the attention of Ronald A. Kopriva, by June 14, 2021, to facilitate the reduction in the items to be selected for a final list of components. The inspection team will finalize the selected list during the prep week using the documents requested in this enclosure. The specific items selected from the lists shall be available and ready for review on the day indicated in this request. *Please provide requested documentation electronically in PDF" files, Excel, or other searchable formats, if possible. The information should contain descriptive names and be indexed and hyperlinked to facilitate ease of use. Information in lists should contain enough information to be easily understood by someone who has knowledge of pressurized water reactor technology. If requested documents are large and only hard copy formats are available, please inform the inspectors, and provide subject documentation during the first day of the onsite inspection.

1. Provide the valve characteristics for the valves listed in the attached list as described in Appendix C of Nuclear Regulatory Commission (NRC) Inspection Procedure 71111, Attachment 21N.02, "Design Bases Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements."
2. List of power-operated valves (POVs) important to safety for the Diablo Canyon Power Plant. The list should include (a) component identification number; (b) applicable plant system; (c) ASME *Boiler and Pressure Vessel Code* (BPV Code) Class; (d) safety-related or nonsafety-related classification; (e) valve type, size and manufacturer; and (f) actuator type, size, and manufacturer. If the NRC has granted a license amendment to categorize structures, systems, and component in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.69, please provide the risk-informed safety category of the component.
3. Listing of POVs sorted by risk importance, including external risk considerations.
4. Word searchable updated final safety analysis report (UFSAR), license conditions,

technical specifications, and most recent inservice testing (IST) program plan (and bases document), including any standards that have been committed to with respect to POV capability and testing. Also, identify which UFSAR sections address environmental, seismic, and functional qualification of POVs.

5. Provide copies of the latest POV program level procedures or manuals.
6. NRC Safety Evaluation Report(s) associated with the Diablo Canyon Power Plant IST program and relief and alternative requests submitted in accordance with 10 CFR 50.55a for POVs.
7. Provide the most recently completed audit, self-assessment, or benchmark of POV programs at Diablo Canyon Power Plant.
8. List of systems, system numbers/designators and corresponding names.
9. List of site contacts that will be associated with the inspection.

II. Discussions Requested

1. Interview with a Diablo Canyon Power Plant representative to discuss site POV capability analyses, including plant drawings and assumptions. This includes analysis for accident conditions.
2. Interview with a Diablo Canyon Power Plant representative to discuss POV maintenance elements as integrated into plant programs and procedures.
3. Interview with a Diablo Canyon Power Plant representative to discuss maintaining the design-basis capability of POVs if they have entered a period of extended operation, if applicable.

III. Information Requested for Inspection Preparation (July 19, 2021)

1. Calculations and/or evaluations associated with the selected POVs, as applicable. For example, these may include those related to motor-operated valve (MOV) torque switch setpoint, MOV terminal (degraded) voltage, maximum expected differential and pressure, torque switch bypass settings, rate of loading, environmental and process conditions during normal/accident operation, seismic and weak-link analysis, and pressure locking and thermal binding, etc. (Eight to Twelve specific valves will be identified and communicated to you prior to July 6, 2021.)
2. Vendor manuals and technical sheets associated with the selected POVs.
3. Provide results (i.e., completed work orders) from the last three performances of diagnostic (static and/or dynamic) testing and inservice testing (stroke time, leak rate, etc.) of the selected POVs.
4. Provide performance (or failure) trending data for the selected POVs.
5. List of modifications related to the selected POVs.

6. List of corrective action program documents, with a brief description, related to the selected POVs over the past five years.
7. List of preventive maintenance activities for the selected POVs (valve and actuator). Include the identification number, title and/or description, and frequency.
8. System training manuals and/or design basis documents associated with the selected POVs.
9. Piping and instrument diagrams for systems related to the selected POVs.
10. Tours of the rooms in which the selected POVs are installed. [If the inspection will be performed remotely, multiple pictures of selected valve and valve location can be provided. The pictures must have an orientation reference, a size reference, pictures of the surrounding environment, and pictures of the nameplates of both valve and valve operator.](#)

IV. Discussions Requested During the First Inspection Week (July 26, 2021)

1. Brief presentation of POV programs at Diablo Canyon Power Plant.
2. Interviews with representatives to discuss the design basis capability of POVs based upon the team's review of gathered information.

Inspector Contact Information:

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Fabian Thomas
Reactor Inspector
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Mailing Address:

U.S. NRC, Region IV
Attn: Ronald Kopriva
1600 East Lamar Blvd.
Arlington, TX 76011-45

Valves of Interest List

PLANT	DKT	SYS	ID	POV	SAFETY	VLV Type	Size
Diablo Canyon 1	275	Reactor Coolant System - PZR PORV ISOL	1-8000B	MOV		Gate	3
Diablo Canyon 1	275	Reactor Coolant System - REACTOR VESSEL HEAD VENT	1-8078B	SOV		Globe	1
Diablo Canyon 1	275	Chemical and Volume Control System - RCP SEAL WTR RETRN ISOL OC	1-8100	MOV		Gate	4
Diablo Canyon 1	275	Chemical and Volume Control System - CHG LINE ISOL	1-8108	MOV		Gate	3
Diablo Canyon 1	275	Safety Injection System - CHG INJ TO RCS	1-8801B	MOV		Gate	4
Diablo Canyon 1	275	Safety Injection System - SIPP-1 SUCT	1-8923A	MOV		Gate	6
Diablo Canyon 1	275	Containment Spray System - RHR HX-1 TO CS-A HDR	1-9003A	MOV		Gate	8
Diablo Canyon 1	275	Component Cooling Water System - RHR HX-2 CCW RETURN	1-FCV-364	AOV		Butterfly	12
Diablo Canyon 1	275	Feedwater System - SG-2 FW ISO	1-FCV-439	MOV		Gate	16
Diablo Canyon 1	275	Fire Protection System - CONT FIREWATER ISOL OC	1-FCV-633	AOV		Globe	3
Diablo Canyon 1	275	Component Cooling Water System - RCP THM BAR CCW RTN ISO IC	1-FCV-750	MOV		Globe	6
Diablo Canyon 1	275	Residual Heat Removal System - RHR HX-1 OUTLET	1-HCV-638	AOV		Ball	8
Diablo Canyon 1	275	Feedwater System - AUX FP-1 TO SG-3 REG	1-LCV-108	MOV		Globe	3
Diablo Canyon 1	275	Feedwater System - AUX FP-3 TO SG-3 REG	1-LCV-115	HOV		Globe	2
Diablo Canyon 1	275	Reactor Coolant System - PZR PORV	1-PCV-455C	AOV		Globe	2

PLANT	DKT	SYS	ID	POV	SAFETY	VLV Type	Size
Diablo Canyon 2	323	Chemical and Volume Control System - LTDN LINE ISOL OC	2-8152	AOV		Globe	2
Diablo Canyon 2	323	Residual Heat Removal System - RCS LOOP-4 TO RHR	2-8702	MOV		Gate	14
Diablo Canyon 2	323	Residual Heat Removal System - RHR TO HOT LEGS- 1, 2 IC	2-8703	MOV		Gate	12
Diablo Canyon 2	323	Residual Heat Removal System - RHR TRAIN XTIE OC	2-8716B	MOV		Gate	8
Diablo Canyon 2	323	Safety Injection System - RWST TO CHG PP SUCT	2-8805	MOV		Gate	8
Diablo Canyon 2	323	Containment Spray System - CS PP-2 ISOL	2-9001B	MOV		Gate	8
Diablo Canyon 2	323	Component Cooling Water System - RCP THM BAR CCW RTN ISO OC	2-FCV-357	MOV		Globe	6
Diablo Canyon 2	323	Component Cooling Water System - CCW HX-2 OUT ISOL	2-FCV-431	MOV		Butterfly	30
Diablo Canyon 2	323	Saltwater System - CCW HX-1 SW INLET	2-FCV-602	AOV		Butterfly	24
Diablo Canyon 2	323	Residual Heat Removal System - RHR PP-1 RECIRC	2-FCV-641A	MOV		Globe	2
Diablo Canyon 2	323	Turbine Steam System - AUX FP-1 STM SUP	2-FCV-95	MOV		Gate	4
Diablo Canyon 2	323	Feedwater System - AUX FP-2 TO SG-1 REG	2-LCV-110	HOV		Globe	2
Diablo Canyon 2	323	Turbine Steam System - SG-2 10% ATM DUMP	2-PCV-20	AOV		Globe	8
Diablo Canyon 2	323	Turbine Steam System - SG-3 10% ATM DUMP	2-PCV-21	AOV		Globe	8
Diablo Canyon 2	323	Reactor Coolant System - PZR PORV	2-PCV-456	AOV		Globe	2