



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

**REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511**

October 29, 2020

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 – INTEGRATED
INSPECTION REPORT 05000275/2020003 AND 05000323/2020003**

Dear Mr. Welsch:

On September 30, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Diablo Canyon Power Plant, Units 1 and 2. On October 15, 2020, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

Two findings of very low safety significance (Green) are documented in this report. One of these findings involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the violation documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement; and the NRC Resident Inspector at Diablo Canyon Power Plant.

If you disagree with a cross-cutting aspect assignment or a finding not associated with a regulatory requirement in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; and the NRC Resident Inspector at Diablo Canyon Power Plant.

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 Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Jeffrey E. Josey, Chief
Reactor Projects Branch A
Division of Reactor Projects

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

Enclosure:
As stated

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 REPORT 05000275/2020003 AND 05000323/2020003 - October 29, 2020

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**U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report**

Docket Numbers: 05000275 and 05000323

License Numbers: DPR-80 and DPR-82

Report Numbers: 05000275/2020003 and 05000323/2020003

Enterprise Identifier: I-2020-003-0009

Licensee: Pacific Gas and Electric Company

Facility: Diablo Canyon Power Plant, Units 1 and 2

Location: Avila Beach, CA

Inspection Dates: July 1, 2020 to September 30, 2020

Inspectors: D. Antonangeli, Health Physicist
A. Athar, Resident Inspector
B. Baca, Health Physicist
N. Greene, Senior Health Physicist
S. Hedger, Emergency Preparedness Inspector
D. Krause, Senior Resident Inspector
C. Newport, Senior Resident Inspector
J. O'Donnell, Senior Health Physicist
J. Reynoso, Project Engineer
E. Simpson, Health Physicist

Approved By: Jeffrey E. Josey, Chief
Reactor Projects Branch A
Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee’s performance by conducting an integrated inspection at Diablo Canyon Power Plant (DCPP), Units 1 and 2, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC’s program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

List of Findings and Violations

Inadequate Screen of Operating Experience Report Results in Inoperable Auxiliary Feedwater System			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green FIN 05000323/2020003-01 Open/Closed	None	71111.15
<p>The inspectors reviewed a finding of very low safety significance (Green) because Pacific Gas and Electric (PG&E) personnel failed to follow the requirements of OM4.ID3, “Assessment of Industry Operating Experience,” Revisions 14 and 16. Specifically, PG&E personnel failed to appropriately screen relevant operating experience relating to corrosion of carbon steel piping under insulation received in 2009 and 2010 per OM4.ID3, preventing actions from being identified and implemented that could have eliminated vulnerabilities and prevented a similar event from occurring at the Diablo Canyon Power Plant. On July 23, 2020, while operating with the reactor plant at Mode 3, the Unit 2, auxiliary feedwater system was declared inoperable due to a through-wall leak caused by corrosion of carbon steel piping under insulation.</p>			

Inadequate Procedure Leads to Scaffold Installed Without Appropriate Engineering Evaluation			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000275,05000323/2020003-02 Open/Closed	[H.1] - Resources	71152
<p>The inspectors identified a Green, non-cited violation of Title 10 of the <i>Code of Federal Regulations</i> (10 CFR) Part 50, Appendix B, Criterion V, “Procedures,” because PG&E did not ensure that procedures were in place to adequately direct the conduct of evaluations of temporary scaffolding constructed in the vicinity of safety-related seismic targets. Specifically, NRC inspectors identified that a temporary scaffold was erected such that three of its horizontal support poles were approximately 0.5 inch above a safety-related, small-diameter instrument air-line without an appropriate engineering evaluation conducted by PG&E personnel.</p>			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000323/2020-001-00	LER 2020-001-00 for Diablo Canyon Power Plant, Unit 2, Shutdown required by Technical Specifications	71153	Closed
LER	05000323/2020-002-00	LER 2020-002-00 for Diablo Canyon Power Plant, Unit 2, Manual Reactor Trip Due to Increased Main Generator Hydrogen Usage	71153	Closed

PLANT STATUS

Units 1 and 2 began the inspection period at full power.

On July 17, 2020, Unit 2 was shutdown due to a hydrogen leak in the main turbine generator. Unit 2 returned to full power on August 3, 2020, and operated at full power for the remainder of the inspection period.

On September 22, 2020, Unit 1 went into coast-down and ended the inspection period at approximately 90 percent power.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards. Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident and regional inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time the resident inspectors performed periodic site visits each week, increasing the amount of time on site as local COVID-19 conditions permitted. As part of their onsite activities, resident inspectors conducted plant status activities as described in IMC 2515, Appendix D; observed risk significant activities; and completed on site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. The inspections documented below met the objectives and requirements for completion of the IP.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Seasonal Extreme Weather Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of seasonal heavy rains for Units 1 and 2, intake and cooling systems on September 2, 2020.

External Flooding Sample (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated that flood protection barriers, mitigation plans, procedures, and equipment are consistent with the licensee's design requirements and risk analysis assumptions for coping with external flooding.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (3 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) Unit 1, emergency diesel generator 1-2 on July 7, 2020
- (2) Unit 1, auxiliary feedwater pump 1-1 on July 14, 2020
- (3) Unit 2, emergency diesel generator 2-1 on September 23, 2020

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Unit 2, auxiliary building 73-foot elevation on July 9, 2020
- (2) Units 1 and 2, auxiliary building 54- and 64-foot elevations, Fire Zone 3-C, on July 15, 2020
- (3) Units 1 and 2, auxiliary building 115- and 140-foot elevations on July 21, 2020
- (4) Units 1 and 2, auxiliary building 115-foot elevation fire pump area on September 9, 2020
- (5) Units 1 and 2, H block 115-foot elevation on September 22, 2020

Fire Brigade Drill Performance Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the onsite fire brigade training and performance during an announced fire drill on September 3, 2020.

71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the Control Room during the following activities:
 - control room observation during turnover on August 27, 2020
 - Unit 1, restoration of reactor water storage tank level from below technical specification minimum volume on September 2, 2020
 - control room turnover observation on September 5, 2020

Licensed Operator Regualification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated a crew of licensed operators during simulator training on August 13, 2020.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (2 Samples)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

- (1) Control room ventilation system on July 8, 2020
- (2) Units 1 and 2, measuring and test equipment on September 21, 2020

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Unit 1, emergent risk from change in off-site power status during emergency diesel generator 1-1 major maintenance on July 2, 2020
- (2) Unit 1, emergency diesel generator 1-2 major maintenance on July 12, 2020
- (3) Unit 1, component cooling water 1-2 out of service on August 10, 2020
- (4) Unit 2, auxiliary feedwater pump 2-1 out of service on August 24, 2020
- (5) Unit 1, auxiliary feedwater extent of condition inspections on August 31, 2020

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (6 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Unit 1, vital battery 1-1 cell 47 debris on July 1, 2020
- (2) Units 1 and 2, open phase in 230 kV switchyard resulted in emergent risk event on July 1, 2020
- (3) Unit 1, emergency diesel generator 1-1 digital reference unit failure on July 9, 2020
- (4) Unit 2, auxiliary feedwater discharge pipe leak on July 24, 2020
- (5) Unit 1, reactor water storage tank below technical specification minimum volume on September 3, 2020
- (6) Unit 2, emergency diesel generator 2-3 mechanical governor out of tolerance on September 15, 2020

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the following post maintenance test activities to verify system operability and functionality:

- (1) Unit 1, emergency diesel generator 1-1 major maintenance activities and governor upgrade on July 2, 2020
- (2) Unit 1, emergency diesel generator 1-2 major maintenance activities on July 12, 2020

- (3) Unit 2, auxiliary feedwater piping weld repairs on July 27, 2020
- (4) technical support center breaker replacement on August 3, 2020
- (5) Unit 1, auxiliary building ventilation system fan E-1 maintenance on September 8, 2020

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (1 Sample)

- (1) Unit 2, emergency diesel generator 2-3 routine surveillance, per STP M-9A3, on September 16, 2020

Inservice Testing (IP Section 03.01) (1 Sample)

- (1) Unit 1, auxiliary feedwater pump 1-1 surveillance test of turbine-driven auxiliary feedwater pump 1-1, per STP P-AFW-11, on July 8, 2020

FLEX Testing (IP Section 03.02) (1 Sample)

- (1) Units 1 & 2, annual FLEX equipment surveillance testing on September 10, 2020

71114.02 - Alert and Notification System Testing

Inspection Review (IP Section 02.01-02.04) (1 Sample)

- (1) The inspectors evaluated the maintenance and testing of the alert and notification system from October 1, 2019 to September 8, 2020.

71114.03 - Emergency Response Organization Staffing and Augmentation System

Inspection Review (IP Section 02.01-02.02) (1 Sample)

- (1) The inspectors evaluated the readiness of the Emergency Preparedness Organization from October 1, 2019 to September 8, 2020. Inspectors also evaluated the licensee's ability to staff their emergency response facilities in accordance with emergency plan commitments.

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The inspectors evaluated the 10 CFR 50.54(q) emergency plan change process and practices between October 1, 2019 and September 8, 2020. This involved review of licensee screening and evaluation documentation. The reviews of the change process documentation do not constitute NRC approval.

71114.05 - Maintenance of Emergency Preparedness

Inspection Review (IP Section 02.01 - 02.11) (1 Sample)

- (1) The inspectors evaluated the maintenance of the emergency preparedness program between October 1, 2019 and September 8, 2020. The evaluation reviewed the conduct of drills and exercises, licensee audits and assessment, and the maintenance of equipment important to emergency preparedness.

71114.06 - Drill Evaluation

Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

- (1) The inspectors evaluated a tabletop emergency preparedness drill in the emergency operations facility on August 25, 2020.

RADIATION SAFETY

71124.05 - Radiation Monitoring Instrumentation

Walkdowns and Observations (IP Section 03.01) (10 Samples)

The inspectors evaluated the following radiation detection instrumentation during plant walkdowns:

- (1) Personnel contamination monitoring equipment at the plant common 85-foot access control exit: 3 ARGOS-5 units
- (2) Personnel monitoring equipment at the plant common 85-foot access control exit: 2 GEM-5 units
- (3) Small article monitoring equipment at the plant common 85-foot access control exit: 3 SAM-12 units
- (4) Plant process radiation monitor: turbine air ejector monitor, RM-15
- (5) plant process radiation monitor: Unit 2, component cooling water surge tank monitor, RM-17A
- (6) Pant process radiation monitor: Unit 1, main steam line monitor, RM-71
- (7) Radiation monitoring equipment: RP-01-14-021, Ludlum Model 177 count-rate meter
- (8) Radiation monitoring equipment: RP-03-45-064, Thermo RO-20AA ion chamber
- (9) Radiation monitoring equipment: RP-03-41-024, Mirion Telepole II
- (10) Radiation monitoring equipment: RP-03-27-008, Ludlum Model 12-4 (neutron) survey meter

Calibration and Testing Program (IP Section 03.02) (10 Samples)

The inspectors evaluated the calibration and testing of the following radiation detection instruments:

- (1) Ludlum Model 3, RP-01-15-011, May 26, 2020
- (2) F&J DL-40L-Li, RP-04-40-016, June 8, 2020
- (3) Canberra Apex-Invivo Fastscan1, May 26, 2020
- (4) Canberra Apex-Invivo Fastscan2, May 30, 2019
- (5) Canberra Apex-Invivo HPGe Bed, May 27, 2020

- (6) Unit 1, New Fuel Area Radiation Monitor, RM-59, February 11, 2020
- (7) Unit 1, Vent Noble Gas, RM-87, August 17, 2019
- (8) Unit 2, Containment High Range Radiation Monitor, RM-30, October 22, 2019
- (9) Thermo Small Article Monitor (SAM-12), RP-06.25.8, August 25, 2020
- (10) Unit 2, Steam Generator Blowdown Radiation Monitor, RM-23, July 30, 2019

Effluent Monitoring Calibration and Testing Program Sample (IP Sample 03.03) (3 Samples)

The inspectors evaluated the calibration and maintenance of the following radioactive effluent monitoring and measurement instrumentation:

- (1) WO 64181477, Unit 1, Vent Noble Gas Effluent Monitor, RM-14, August 17, 2019
- (2) WO 64181481, Unit 1, Vent Iodine Effluent Monitor, RM-24, August 17, 2019
- (3) WO 64197431, Plant Liquid Radwaste Monitor, RM-18, July 16, 2020

71124.08 - Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation

Radioactive Material Storage (IP Section 03.01) (3 Samples)

Inspectors evaluated the licensee's performance during walk-downs in the Radwaste Storage Building, Solid Radwaste Storage Facility, Old Steam Generator Storage Facility, and East Yard for controlling, labeling and securing of selected radioactive materials:

- (1) Sealand containers FXLU No. 1558209 and BXCUI No. 210009 in the East yard
- (2) Bagged outage equipment, dry active waste, and a B-25 container in Bays 2, 3, and 6, respectively, of the solid radwaste storage facility
- (3) Eight steam generators and two reactor pressure vessel heads in the old steam generator storage facility

Radioactive Waste System Walkdown (IP Section 03.02) (2 Samples)

Inspectors walked down accessible portions of the solid radioactive waste systems and evaluated system configuration and functionality for the following systems:

- (1) Spent resin transfer system in the auxiliary building 115-foot elevation
- (2) Mobile radwaste encapsulation system in solid radwaste storage facility Bay 2

Waste Characterization and Classification (IP Section 03.03) (3 Samples)

The inspectors evaluated the licensee's characterization and classification of the following radioactive waste streams:

- (1) Dry active waste
- (2) Unit 1 and Unit 2 filters
- (3) Spent resin

Shipment Preparation (IP Section 03.04)

The inspectors were unable to observe preparation of a shipment containing radioactive material according to requirements.

Shipping Records (IP Section 03.05) (4 Samples)

The inspectors evaluated the following non-excepted radioactive material shipments through a record review:

- (1) RWS-18-004, LSA II Encapsulated Spent Filters
- (2) RWS-19-002, LSA II Encapsulated Spent Filters
- (3) RWS-19-003, Type B Solidified Resins
- (4) RWS-20-001, Type B Solidified Resins

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

EP01: Drill/Exercise Performance (IP Section 02.12) (1 Sample)

- (1) 10/01/2019 - 06/30/2020

EP02: ERO Drill Participation (IP Section 02.13) (1 Sample)

- (1) 10/01/2019 - 06/30/2020

EP03: Alert & Notification System Reliability (IP Section 02.14) (1 Sample)

- (1) 10/01/2019 - 06/30/2020

MS08: Heat Removal Systems (IP Section 02.07) (2 Samples)

- (1) Unit 1 (07/01/2019 - 06/30/2020)
- (2) Unit 2 (07/01/2019 - 06/30/2020)

MS09: Residual Heat Removal Systems (IP Section 02.08) (2 Samples)

- (1) Unit 1 (07/01/2019 - 06/30/2020)
- (2) Unit 2 (07/01/2019 - 06/30/2020)

MS10: Cooling Water Support Systems (IP Section 02.09) (2 Samples)

- (1) Unit 1 (07/01/2019 - 06/30/2020)
- (2) Unit 2 (07/01/2019 - 06/30/2020)

71152 - Problem Identification and Resolution

Semiannual Trend Review (IP Section 02.02) (1 Sample)

- (1) The inspectors reviewed the licensee's corrective action program for potential adverse trends in evaluation and actions associated with inspections of degraded fire barriers, on August 4, 2020, that might be indicative of a more significant safety issue.

Annual Follow-up of Selected Issues (IP Section 02.03) (1 Sample)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

- (1) The inspectors evaluated the effectiveness of the scaffolding program at Diablo Canyon Power Plant. One violation of NRC requirements was identified and is documented in the inspection results.

71153 – Follow-up of Events and Notices of Enforcement Discretion

Event Follow-up (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated a Unit 2, manual reactor trip in response by a hydrogen leak in the main generator cooling system and the licensee's response on July 17, 2020.

Event Report (IP Section 03.02) (2 Samples)

The inspectors evaluated the following licensee event reports (LERs):

- (1) LER 05000323/2020-001-00, Unit 2, Shutdown Required by Technical Specifications (ADAMS Accession No. ML20100K071). The inspectors determined that it was not reasonable to foresee or correct the cause discussed in the LER; therefore, no performance deficiency was identified. The inspectors did not identify a violation of NRC requirements.
- (2) LER 05000323/2020-002-00, Unit 2, Manual Reactor Trip Due to Increased Main Generator Hydrogen Usage (ADAMS Accession No. ML20259A183). The inspectors determined that it was not reasonable to foresee or correct the cause discussed in the LER therefore no performance deficiency was identified. The inspectors did not identify a violation of NRC requirements.

OTHER ACTIVITIES – TEMPORARY INSTRUCTION, INFREQUENT, AND ABNORMAL

Evaluation of Diablo Canyon Power Plant Safety Condition in Light of Financial Conditions

Over the last six inspection periods, the inspectors have evaluated the impact of financial conditions on continued safe performance at DCP. In that the licensee's parent company, Pacific Gas & Electric Corporation, and its subsidiary, Pacific Gas & Electric Company (the licensee) were under bankruptcy protection/reorganization since January 29, 2019, NRC Region IV conducted special reviews of processes at DCP. The inspectors evaluated several aspects of the licensee's operations to determine whether the financial condition of the station impacted plant safety. The factors reviewed included the following: (1) impact on staffing, (2) corrective maintenance backlog, (3) changes to the planned maintenance schedule, (4) corrective action program implementation, and (5) reduction in outage scope, including risk-significant modifications. In particular, the inspectors verified that licensee personnel continued to identify problems at an appropriate threshold and enter these problems into the corrective action program for resolution. The inspectors also verified that the licensee continued to develop and implement corrective actions commensurate with the significance of the problems identified.

The special review of processes at DCPD included continuous reviews by the Resident Inspectors, as well as the specialist-led baseline inspections completed during the inspection period which are documented previously in this report.

On July 1, 2020, the licensee’s parent company, Pacific Gas & Electric Corporation, and its subsidiary, Pacific Gas & Electric Company (the licensee), completed reorganization and emerged from bankruptcy. The inspectors verified that changes associated with the new organization continued to support the safe operation of DCPD. This concludes the special review inspection conducted by NRC Region IV for Post-Bankruptcy Declaration for DCPD, Units 1 and 2.

INSPECTION RESULTS

Inadequate Screen of Operating Experience Report Results in Inoperable Auxiliary Feedwater System			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green FIN 05000323/2020003-01 Open/Closed	None	71111.15
<p>The inspectors reviewed a finding of very low safety significance (Green) because PG&E personnel failed to follow the requirements of OM4.ID3, “Assessment of Industry Operating Experience,” Revisions 14 and 16. Specifically, PG&E personnel failed to appropriately screen relevant operating experience relating to corrosion of carbon steel piping under insulation received in 2009 and 2010 per OM4.ID3, preventing actions from being identified and implemented that could have eliminated vulnerabilities and prevented a similar event from occurring at the Diablo Canyon Power Plant. On July 23, 2020, while operating with the reactor plant at Mode 3, the Unit 2 auxiliary feedwater system was declared inoperable due to a through-wall leak caused by corrosion of carbon steel piping under insulation.</p>			
<p><u>Description:</u> On July 23, 2020, with Diablo Canyon Power Plant (DCPD), Unit 2 operating with the reactor plant in Mode 3, an approximately 3.9 gallon per minute through-wall leak was observed coming out of a carbon steel piping elbow under insulation in the auxiliary feedwater system. The auxiliary feedwater system is used at DCPD to automatically supply feedwater to the steam generators to remove decay heat from the reactor coolant system upon the loss of normal feedwater supply. The identified leak reduced the feedwater supply to one of four steam generators and rendered the auxiliary feedwater system for Unit 2 inoperable. Per the DCPD technical specifications, DCPD operators promptly maneuvered the plant to Mode 4 to satisfy the technical specification requirements. Further investigation by PG&E personnel determined that the cause of the leak was due to corrosion under insulation of the carbon steel piping, which is partially located in an outside environment susceptible to the general conditions of the maritime location of DCPD.</p> <p>As part of the corrective actions taken in response to the event, PG&E personnel conducted a search of relevant operating experience received by the site. It was noted that on May 19, 2009, PG&E received INPO Operating Experience report No. 288818 describing corrosion of carbon steel piping under insulation of a cooling system located in an outside environment at Waterford Steam Electric Station, Unit 3. The report noted three locations of external corrosion (pitting) that exceed over 50 percent of the pipe wall thickness. On April 15, 2010, PG&E received INPO Operating Experience report No. 30955 describing</p>			

corrosion of carbon steel piping under insulation of a cooling system at the South Texas Project Electric Generating Station, also located outside. The report noted a through-wall leak in a section of system piping. Both reports noted the possibility that uncoated carbon steel piping operating at mild temperatures and subject to outside weather are susceptible to corrosion under insulation. The applicable PG&E operating experience procedure in place at the time, OM4.ID3, "Assessment of Industry Operating Experience," Revision 16, requires that operating experience reports received by the site be screened per applicability per Section 5.3, "Screening and Disseminating OPEX Documents." Section 5.3 requires that relevant operating experience is screened by subject matter experts and appropriate corrective actions assigned as appropriate to eliminate vulnerabilities and prevent a similar event from occurring at DCP. Contrary to the requirements of OM4.ID3, upon receipt of the two relevant operating experience reports, PG&E personnel dispositioned the reports without conducting any review of the auxiliary feedwater system or assigning any corrective actions related to the auxiliary feedwater system.

Corrective Actions: After the issue was identified, PG&E entered the issue into their corrective action program as Notification 51082639 and initiated corrective actions including repairing the damaged areas of auxiliary feedwater piping; conducting extent of condition walkdowns on Unit 2 and Unit 1; permanently removing piping insulation from the affected piping; and initiating a root cause evaluation to determine the root and contributing causes of the event; initiate corrective actions to prevent recurrence; and identify extent of condition and extent of cause applicability.

Corrective Action References: Notification 51082639

Performance Assessment:

Performance Deficiency: The inspectors determined that PG&E's failure to follow OM4.ID3, "Assessment of Industry Operating Experience," Revision 16, was a performance deficiency within PG&E's ability to foresee and correct.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to appropriately screen INPO operating experience caused a through-wall leak in the Unit 2 auxiliary feedwater system and rendered the system inoperable.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Because the auxiliary feedwater system maintained its PRA functionality due to being able to supply three of the four steam generators with feedwater despite being inoperable, the finding was determined to be of very low safety significance (Green).

Cross-Cutting Aspect: None. A cross-cutting aspect was not assigned to the finding since the finding did not represent current licensee performance. The performance deficiency occurred when operating experience was received and improperly dispositioned by PG&E between 2009 and 2010.

Enforcement:

Inspectors did not identify a violation of regulatory requirements associated with this finding.

Inadequate Procedure Leads to Scaffold Being Installed Without Appropriate Engineering Evaluation

Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000275,05000323/2020003-02 Open/Closed	[H.1] - Resources	71152

The inspectors identified a Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Procedures," because PG&E did not ensure that procedures were in place to adequately direct the conduct of evaluations of temporary scaffolding constructed in the vicinity of safety-related seismic targets. Specifically, NRC inspectors identified that a temporary scaffold was erected such that three of its horizontal support poles were approximately 0.5 inch above a safety-related, small-diameter instrument air-line without an appropriate engineering evaluation conducted by PG&E personnel.

Description: When used in the plant, the design and installation of temporary scaffold must be controlled to ensure that it is not installed too closely to safety-related equipment without an appropriate evaluation. During a seismic event, scaffolding installed too closely to safety-related seismic targets can come into contact with that equipment, cause damage to it, and affect its safety function. PG&E procedures control the installation and evaluation of temporary scaffold construction at Diablo Canyon Power Plant. The PG&E Seismically Induced Systems Interaction (SISI) manual, Revision 12, Section 2.3.7, states, in part, that "careful evaluation and conservative engineering judgment are necessary to assess the adequacy of the temporary scaffolding." PG&E procedure AD7.ID5, "Scaffold Material Structure," Revision 15, is the procedure used by PG&E to construct scaffolding and implement the requirements of the SISI manual. Procedure AD7.ID5, Section 5, requires only that a "walkdown" be performed by engineers for scaffolding constructed in SISI areas and that the purpose of such a walkdown "is to ensure no potential SISIs are created by the scaffold." Procedure AD7.ID5 does not require that a formal evaluation be completed or documented by engineering and does not ensure temporary scaffolding constructed in the vicinity of seismic targets is appropriately evaluated in accordance with the SISI manual requirements to ensure a reasonable assurance that temporary scaffolding will not impact safety-related targets during a seismic event.

During a routine walkdown of the emergency diesel generator (EDG) 1-1 room, the NRC resident inspectors noted that a temporary scaffold was erected such that three of its horizontal support poles were approximately 0.5 inch above an instrument air-line running laterally across the vertical wall of the EDG room. The instrument air-line supplies the motive force to fuel shutoff valve LCV-85. This valve is designed to close in the event of a fire in the EDG room and cut off the flow of diesel fuel oil from the main storage tank to the EDG 1-1 day tank to keep the fire from spreading and potentially impacting the adjacent, two, safety-related EDGs. During a seismic event, an improperly constructed temporary scaffold could impact the instrument air-line—a fragile target that is relatively easy to damage—and prevent LCV-85 from performing its safety function.

The NRC inspectors located the related scaffold tag and noted that the box for “SISI evaluation required” was checked “yes” along with a signature indicating that the scaffold had been inspected and evaluated by a site engineer. When asked, the engineering department could not provide a formal evaluation and subsequently generated a written evaluation describing why the temporary scaffold poles would not impact the instrument air-line during a design-basis earthquake. The NRC inspectors as well as an NRC seismic engineer reviewed the evaluation. The inspectors noted that the NRC-requested engineering evaluation relied heavily on engineering judgement and subjective observations of the construction of the scaffold to provide assurance that the scaffold structure would not impact the instrument air-line in a seismic event. Given the fragility of the seismic target and the proximity of the scaffold poles to the target in three separate places, the NRC concluded that the evaluation did not provide reasonable assurance that the posts would not impact the instrument air-line seismic target during a design basis seismic event. A second, more rigorous evaluation was conducted by the licensee and reviewed by the NRC. The evaluation addressed the issues raised by the NRC with the initial evaluation and provided reasonable assurance that the scaffold poles would not impact the instrument air-line during a seismic event.

The inspectors noted that a nearly identical scaffold in an adjacent EDG had been constructed such that the same horizontal support posts were located more than two inches below the equivalent instrument air-line and thus would not impact the target during a seismic event. The inspectors additionally noted that the scaffold had been in place for greater than 90 days and required application of the 10 CFR 50.59 process to provide for an additional and more rigorous analysis of the impacts of the temporary alterations on plant safety-related structures, systems, and components. The 10 CFR 50.59 screening document reviewed by the inspectors relied solely on the fact that all station procedural requirements per AD7.ID5, “Scaffold Material Structure,” had been followed in the construction of the scaffolding as justification for not requiring additional evaluation. This included the fact that an engineering walkdown was conducted and that the scaffold had been constructed in accordance with applicable maintenance procedures.

Corrective Actions: The licensee took corrective actions to correct the issue including moving the scaffolding so that it was more than two inches from the instrument air-line, requiring more stringent qualifications for engineers performing scaffolding evaluations, and generating a notification to generate changes to the procedure governing scaffolding evaluations.

Corrective Action References: Notification 51079088

Performance Assessment:

Performance Deficiency: The inspectors determined that not procedurally requiring an adequate engineering evaluation when temporary scaffold is erected in close proximity to safety-related seismic targets was a performance deficiency within PG&E’s ability to foresee and correct. NRC inspectors identified that a temporary scaffold was erected such that three of its horizontal support poles were approximately 0.5 inch above a safety-related, small diameter, instrument air-line without an appropriate evaluation by PG&E personnel.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the protection against external factors attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, PG&E erected temporary scaffolding in close

proximity to safety-related seismic targets and did not complete an acceptable engineering evaluation until NRC inspectors questioned the scaffold build. Only after several iterations of written evaluation at the request of NRC inspectors was PG&E able to provide reasonable assurance that the scaffold build would not impact the seismic target.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The finding was determined to be of very low safety significance (Green) since it did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic event.

Cross-Cutting Aspect: H.1 - Resources: Leaders ensure that personnel, equipment, procedures, and other resources are available and adequate to support nuclear safety. Specifically, PG&E procedure AD7.ID5, "Scaffold Material Structure," did not require engineering evaluations sufficient to provide a reasonable assurance that a temporary scaffold erected in the vicinity of seismic targets would not adversely impact the targets during a seismic event.

Enforcement:

Violation: Title 10 CFR Part 50, Appendix B, Criterion V, requires, in part, that activities affecting quality shall be prescribed by documented procedures and shall be accomplished in accordance with those procedures. Contrary to the above, PG&E did not ensure that procedures were in place to adequately direct the conduct of evaluations of temporary scaffolding constructed in the vicinity of safety-related seismic targets. Specifically, NRC inspectors identified that a temporary scaffold was erected such that three of its horizontal support poles were approximately 0.5 inch above a safety-related, small diameter, instrument air-line without an appropriate engineering evaluation directed by the applicable procedure, AD7.ID5, "Scaffold Material Structure," Revision 15.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On August 31, 2020, the inspectors presented the Public Radiation Safety inspection results to Mr. C. Harbor, Site Director, and other members of the licensee staff.
- On September 18, 2020, the inspectors presented the Emergency Preparedness Program inspection results to Mr. J. Welsch, Senior Vice President and Chief Nuclear Officer, and other members of the licensee staff.
- On October 15, 2020, the inspectors presented the integrated inspection results to Mr. J. Welsch, Senior Vice President and Chief Nuclear Officer, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Corrective Action Documents	Notifications	51003533, 51062502, 51013099, 51083419, 51075376, 50176803	
	Miscellaneous	SOER 2007-002	Intake Cooling Water Blockage	0
	Procedures	MA1.ID23	Periodic Review of Intake Preparedness for High Debris Loading Events	12
		OP O-28	Intake Management	36
		STP M-70.SWG	Inspection of ECG Swing Type Doors	11
Work Orders		60088003		
71111.04	Corrective Action Documents	Notifications	51089453, 51089455	
	Procedures	OP D-1:II	Auxiliary Feedwater System – Alignment Verification for Plant Startup	35B
		OP J-6B:I-A	Diesel Generator 2-1 – Alignment Checklist	0
		OP J-6B:II-A	Diesel Generator 1-2 – Alignment Checklist	0
71111.05	Corrective Action Documents	Notifications	51046421, 51064747, 50974958, 5104642, 51015502	
	Drawings	111805	Unit 2 H Block Elevation 128, & 154', Sheet 26	3
		111805	Unit 2 RCA Elevation 140, Sheet 24	3
		111805	Unit 1&2, RCA & H Block 140', Sheet 16	3
		111805	Radiological Control Area (RCA) & H Block Elevation 115'	3
		111805	Sheet 54	3
		111805	Radiological Control Area (RCA) & H Block Elev. 115' Sheet 14	3
		111805	Unit 2 Auxiliary Building Elevation 73', Sheet 8	4
	Miscellaneous	RA-1	Pre-Fire Plan: Radiological Control Area (RCA) Elev. 54' & 64' Unit 1 and 2	3
	Procedures	CP M-6	Site Fire Response	40
TQ1.DC12		Fire Brigade and Emergency Response Training	16	
71111.11Q	Calibration Records	Notification	51087025	
	Procedures	OP B-1A:VI	CVCS – Makeup Control System Operation	60

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.12	Corrective Action Documents	Notifications	51080947, 51081459, 51080647, 51080845, 51081269, 51082681, 51083147, 51083172, 51083256, 51083320, 51083434, 51084346, 51084358, 51084640, 51087174	
	Procedures	MA2.ID1	Use and Control of Measuring and Test Equipment (M&TE)	20
		MP M-23-FAN.4	Preventative Maintenance of Ventilation Fans With Dampers and Inlet Fans	10
71111.13	Corrective Action Documents	Notifications	50960118, 51080144, 51086323, 51086854	
	Procedures	AD7.ID14	Assessment of Integrated Risk	23
		AD7.ID4	On-Line Maintenance Scheduling	30
		OP O-36	Protected Equipment Postings	22
Work Orders		64208869		
71111.15	Corrective Action Documents	Notifications	51080157, 51080158, 51080159, 51080230, 51080144, 51080560, 51080427, 51082639, 51082882, 51082918, 51083525, 51083526, 51082880, 51082881, 51082882, 51087651, 51080523, 51080051, 51080007, 51080558, 51080670, 51081487, 51086998, 51087025, 51087029, 51087122, 51059948, 51088130	
	Drawings	106703	Auxiliary Feedwater, Sheet 3	71
		108003	Feedwater System, Sheet 4	68
		8002459	DEG Governor Control Schematic	G
	Procedures	AD7.DC6	On-line Risk Management	28
		AD7.ID14	Assessment of Integrated Risk	23
		OM7.ID12	Operability Determination	41
		OP B-1A:VII	CVCS – Makeup Control System Operation	60
		OP J-2:VIII	Guidelines for Reliable Transmission Service for DCPD	33
		OP J-6B:IX	Diesel Generator Extended On-line Maintenance	12
		STP C-20	Boric Acid Inventory	2A
		STP M-9A3	Diesel Engine Generator 2-3 Routine Surveillance Test	14
	STP M-9L	EDG Shutdown Lockout Relay Test	9	
Work Orders		60130360, 60130361, 60129601, 60129621, 60129360, 60130942		
71111.19	Corrective Action Documents	Notifications	51080591, 51080423, 51080528, 51080568, 51084329, 51082643, 51082639, 51082882, 51082918, 51082919,	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			51083139, 51082919, 51083525, 51083526, 51082880, 51082881, 51082882, 51080931	
	Drawings	106703	Auxiliary Feedwater, Sheet 3	71
		108003	Feedwater System, Sheet 4	68
	Procedures	EP EF-1	Activation and Operation of the Technical Support Center	58
		EP EF-11	Alternate Emergency Response Facilities/Incident Command Post (ICP)	3
		EP EF-9	Backup Emergency Response Facilities	13
		MA1.ID13	ASME Section XI Repair/Replacement Program and Implementation	17
		MP M-23-FAN.4	Preventative Maintenance of Ventilation Fans with Dampers and Inlet Vanes	11
		STP M-21-ENG.1	Diesel Generator Inspection (Every Refueling Outage)	27
		STP M-21-RTS.1	Return Diesel Engine to Service Following Outage Maintenance	20
		STP M-9A1	Diesel Engine Generator 1-1 Routine Surveillance Test	12
		STP M-9D1	Diesel Generator Full Load Rejection Test	27
		TS1.NE1	Flow-Accelerated Corrosion Monitoring Program	8
	Work Orders		64238008, 64106119, 64245719, 64036257, 60129915, 60130360, 60130361, 64192656	
71111.22	Corrective Action Documents	Notifications	50135773, 51028494, 51042004, 51088130, 51087659, 51087790	
	Procedures	STP M-9A3	Diesel Engine Generator 2-3 Routine Surveillance Test	14
		STP P-AFW-11	Routine Surveillance Test of Turbine-Driven Auxiliary Feedwater Pump 1-1	38
	Work Orders		60129430, 64227385, 64240851, 64213446	
71114.02	Corrective Action Documents	Notifications	51057076, 51061255, 51071367, 51071394	
	Miscellaneous		Pacific Gas & Electric Company, Diablo Canyon Power Plant (DCPP), Alert and Notification System (ANS) Design Report, Early Warning System (EWS)	4
	Procedures	EP MT-43	Early Warning System Testing and Maintenance	17
	Work Orders	Work Order Number	60125140	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71114.03	Miscellaneous	Attachment 1 ERO Personnel Response Matrix for Call-In	Desk Guide Series: Quarterly ERO On-Call Duty Verification Test, On-Call Team: Bravo	12/10/2019
		Attachment 1 ERO Personnel Response Matrix for Call-In	Desk Guide Series: Quarterly ERO On-Call Duty Verification Test, On-Call Team: Charlie	02/19/2020
		Attachment 1 ERO Personnel Response Matrix for Call-In	Desk Guide Series: Quarterly ERO On-Call Duty Verification Test, On-Call Team: Bravo	05/25/2020
		Attachment 1 ERO Personnel Response Matrix for Call-In	Desk Guide Series: Quarterly ERO On-Call Duty Verification Test, On-Call Team: Alpha	07/11/2020
	Procedures		Desk Guide: Quarterly ERO On-Call Duty Verification Test	7
		EP G-2	Interim Emergency Response Organization	55
	71114.04	Miscellaneous	Tracking Number 2019-28	50.54(q) Effectiveness Evaluation Form
Tracking Number 2019-38			50.54(q) Screening Evaluation Form	12/10/2019
Tracking Number 2020-15			50.54(q) Screening Evaluation Form	03/25/2020
Tracking Number 2020-17			50.54(q) Screening Evaluation Form	02/12/2020
Tracking Number 2020-19			50.54(q) Screening Evaluation Form	03/25/2020
Tracking Number 2020-25			50.54(q) Screening Evaluation Form	05/20/2020
Tracking Number 2020-26			50.54(q) Screening Evaluation Form	05/21/2020
Tracking Number 2020-30			50.54(q) Screening Evaluation	06/29/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Procedures	EP EF-1	Activation and Operation of the Technical Support Center	58
		EP G-1	Emergency Classification and Emergency Plan Activation	46
		EP G-2	Interim Emergency Response Organization	55
		OM10.ID2	Emergency Plan Revision and Review	13A
71114.05	Corrective Action Documents	Notifications	51051229, 51051401, 51052256, 51052431, 51052363, 51052985, 51054009, 51054101, 51054167, 51057071, 51058032, 51059685, 51059761, 51062981, 51068830, 51070294, 51070922, 51075187, 51077512, 51077513, 51081697, 51084329, 51084673, 51084928, 51085702, 51085909, 51086215, 51086278, 51086279, 51086295	
	Corrective Action Documents Resulting from Inspection	Notifications	51088284, 51088286, 51088326, 51088328, 51088332, 51088376, 51088428	
	Miscellaneous		Diablo Canyon Power Plant Emergency Action Level Wall Chart	5.02
			Drill Critique Report, Delta Team Full Scope Drill 3/5/2020	04/30/2020
			Drill Critique Report, Delta Team Full Scope Drill, 3/5/2020	04/30/2020
			Drill Critique Report, Health Physics Drill - Second Half 2019 - Backup	01/15/2020
			Drill Critique Report, DEP Focus Area Drill, 3/3/2020	04/13/2020
		193430001	Quality Performance Assessment Report (QPAR), Second Period 2019, May 15, 2019 through December 1, 2019	12/17/2019
		2020-IA-04	Pacific Gas & Electric Company, Diablo Canyon Power Plant, 2020 Emergency Preparedness Audit, February 3 to February 24, 2020	03/09/2020
		2020-QP-01	Quality Performance Assessment Report (QPAR), First Period 2020, December 2, 2019 to June 1, 2020	07/02/2020
		KLD TR-1128	Diablo Canyon Power Plant 2019 Population Update Analysis	11/19/2019
	Procedures	AWP EP-006	Emergency Preparedness Scenario Manual	4
		EP EF-3	Activation and Operation of the Emergency Operations Facility	49
		EP MT-21	Emergency Kits	17

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		EP MT-25	Emergency Procedure Phone Number Verification	7
		EP MT-26	Control Room	13
		EP MT-26	Operational Support Center (OSC)	15
		EP MT-27	Technical Support Center (TSC)	16
		EP MT-29	Emergency Operations Facility (EOF)	13
		EP MT-31	Joint Information Center (JIC)	10
		EP MT-36	Alternate Technical Support Center (TSC)/Operational Support Center (OSC)	2
		EP MT-50	Offsite Communication Drills	3
		EP RB-10	Protective Action Recommendations	21
		EP RB-8	Instructions for Field Monitoring Teams	30
		OM10.DC1	Emergency Preparedness Drills and Exercises	10, 11
		OM10.ID6	Equipment Important to Emergency Response (EITER)	7, 8
		OM4.ID14	Notification Review Team (NRT)	33
		OM7.ID1	Problem Identification and Resolution	55
71114.06	Work Orders	Work Order Number	60123399, 60124460, 60124606, 60124595, 60125480, 60128844, 60129841, 60130605, 68058631	
	Corrective Action Documents	Notifications	51086019, 50186215, 51086228	
	Miscellaneous Procedures		Dose Assessment and PAR DEP Drill	08/25/2020
71124.05	Calibration Records	OM10.DC1	Emergency Preparedness Drills and Exercises	11
			2019 Recalibration of the Canberra Apex-Invivo Fastscan2 Counting System in the 85' Count Room at the Diablo Canyon Power Plant	05/30/2019
			Annual Recalibration of the Apex-Invivo "DC HPGe Bed" Counting System for Diablo Canyon Power Plant	05/28/2020
			2020 Recalibration of the Apex-Invivo FastScan1 Counting System in the Dosimetry Count Room at the Diablo Canyon Power Plant	05/28/2020
			2020 Annual Verification of Calibration for the J.L. Shepherd Model 89 Irradiator 260 Ci Cs-137 RS-001	03/02/2020
	2019 Annual Verification of Calibration for the J.L. Shepherd Model 89 Irradiator 260 Ci Cs-137 RS-001	03/13/2019		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			2020 Annual Verification of Calibration for the J.L. Shepherd Model 89 Irradiator 400 Ci Cs-137 RS-002	03/03/2020
			2019 Annual Verification of Calibration for the J.L. Shepherd Model 89 Irradiator 400 Ci Cs-137 RS-002	03/13/2019
		64164531	RM-85 Solid Radwaste Insp Station Calib	06/11/2020
		64177224	I18F2 CAL S/G BLOWDOWN RAD MON 2RM-23	07/31/2019
		64177879	I103B CAL GAS DECAY TK DSCH MON 2-RM-22	07/11/2019
		64181477	I39R14B CAL PVNR NOBLE GAS MON 1-RM-14	08/24/2019
		64181478	I39R28B CAL PVNR PARTICULATE MON 1-RM-28	08/24/2019
		64181481	I39R24B CAL PVNR IODINE MON 1-RM-24	08/24/2019
		64182018	I108B CAL RHR EXH AIR PART MON RM-13	09/10/2019
		64182100	I39R30.B CAL CTMT HI RANGE MON RM-30	10/22/2019
		64183245	I119B CAL SPENT FUEL POOL AREA 2RM-58	08/09/2019
		64188787	I18M2 CAL CRVS RAD MON 2-RM-25	03/03/2020
		64190286	I18P2 CAL OILY WATER SEPARATOR MON [RM-3]	03/18/2020
		64193085	I39R44B.B CAL CONT VENT RM-44B	07/09/2020
		64193089	I119B CAL NEW FUEL AREA MON 1RM-59	02/11/2020
		64197431	I102B CAL LIQUID RADWASTE MON RM-18	07/16/2020
		MP I-RC33	Ludlum Model 3 w/ GM Pancake probe	05/26/2020
		MP I-RF20	EP Portable Air Sampler DF-40L-Li	06/08/2020
	Corrective Action Documents	Notifications	50985444, 50985445, 50985794, 50991756, 50999517, 51006298, 51006985, 51013098, 51014886, 51027280, 51030358, 51031662, 51032357, 51039812, 51039871, 51045943, 51050423, 51050910, 51054194, 51059997, 51068221, 51070294, 51071848, 51071944, 51078386, 51079152, 51079217, 51080565, 51084374	
	Drawings	107739	Sheet 3	7
Miscellaneous	DPR-80	Pacific Gas and Electric Company Diablo Canyon Nuclear Power Plant Technical Specifications for Diablo Canyon Power Plant Units 1 and 2	07/11/2007	
Procedures	CAP A-8	Off-Site Dose Calculations	41	
	CAP B-50:I	Liquid Scintillation Analyzer Model 2910 Operation	1	
	CAP B-53:III	Operation of the Canberra APEX Gamma Spectroscopy	3	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			System	
		CAP B-53:IV	Administration of the Canberra APEX Gamma Spectroscopy System	1
		CAP B-55	Proportional Counter (Tennelec Model S5E)	7A
		CAP Q-6	Radiochemical Cross-Check Program	4
		CY2	Radiological Monitoring and Controls Program	7B
		CY2.ID1	Radioactive Effluent Controls Program	16
		ECG 39.3	Radioactive Liquid Effluent Monitoring Instrumentation	5
		ECG 39.4	Radioactive Gaseous Effluent Monitoring Instrumentation	13
		MP I-39-R84.B	Solid Radwaste Inspection Station Radiation Monitors RM-84 & RM-85 Calibration	3
		MP I-RC28	Calibration of Ludlum 177 Count Rate Meter	0
		MP I-RC33	Ludlum Model 3 Calibration	1
		MP I-RD13	Thermo Model RO-20AA Ion Chamber Calibration	0
		MP I-RX04	Thermo RadEye GX	1
		MPI-RD44	Mirion TelePole II Calibration	0
		OM7	Corrective Action Program	7A
		OM7.ID1	Problem Identification and Resolution	55
		RCP D-981	Annual Verification of the J.L. Shepherd Model 89 Shielded Calibrator	4
		RP1.ID11	Environmental Radiological Monitoring Procedure	16
		STP I-39-R30.B	Containment High Range Radiation Monitor RM-30/RM-31 Calibration	18
	Self-Assessments	2020-IA-1	2020 Radiation Protection Programs Audit	01/29/2020
71124.08	Corrective Action Documents	Notifications	50988087, 50991772, 50993743, 50996293, 50996294, 50997135, 51004695, 51004762, 51019540, 51023691, 51028489, 51028939, 51042654, 51044544, 51064110, 51065091, 51065500, 51071437, 51073273, 51073636, 51078491, 51080134, 51080135, 51080136, 51080242, 51080616	
				2018 Annual Evaluation of Category 1 and Category 2 RAM Areas
	Miscellaneous		RCP RW-3 Attachment 2, Non-Gamma Emitting Nuclide Concentration Determination, Waste Stream: 2018 U1 Spent	06/04/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date	
			Fuel Pool Demineralizer Resin		
			RCP RW-3 Attachment 3, Non-Gamma Emitting Nuclide Correlation Factors, Waste Stream: 2018 U1 Spent Fuel Pool Demineralizer	06/04/2019	
			RCP RW-3 Attachment 2, Non-Gamma Nuclide Concentration Determination, Waste Stream: 2R20 Letdown (18-K-014) Filter	05/14/2018	
			RCP RW-3 Attachment 2, Non-Gamma Nuclide Concentration Determination, Waste Stream: 2019 U2 Spent Fuel Pool Demineralizer Resin	09/29/2019	
			RCP RW-3 Attachment 3, Non-Gamma Emitting Nuclide Correlation Factors, Waste Stream: 2019 U2 Spent Fuel Pool Demineralizer Resin	09/29/2019	
			RCP RW-3 Attachment 2, Non-Gamma Nuclide Concentration Determination, Waste Stream: 2R21 Shutdown (LD 2-1) Filter	12/10/2019	
			RCP RW-3 Attachment 3, Non-Gamma Emitting Nuclide Correlation Factors, Waste Stream: 2R21 Shutdown (LD 2-1) Filter	12/10/2019	
			Source Inventory: 2020	06/17/2020	
			Source Leak Test: 2020	07/21/2020	
			Source Leak Test: 2020	06/16/2020	
			Source Leak Test: 2019	01/13/2020	
			Source Leak Test: 2019	06/16/2019	
			RCP RW-3 Attachment 4, Summary Sheet - Radwaste Correlation Factors, Year: 2018	05/30/2019	
			RCP RW-3 Attachment 4, Summary Sheet - Radwaste Correlation Factors, Year: 2019	02/13/2020	
			RCP RW-3 Attachment 3, Non-Gamma Emitting Nuclide Correlation Factors, Waste Stream: 2R20 Letdown (18-K-014) Filter	05/14/2018	
			2020-SA-01	AVANTech Audit Report	02/07/2020
			Procedures	RCP D-620	Radioactive Source Control Program
		RCP D-631	Radioactive Material Shipments	13	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		RCP RW 5	Receiving, Loading and Releasing of Transport Vehicles for Radwaste Shipments	15
		RCP RW-1	Collection and Packaging of Low Level Radioactive Waste	16B
		RCP RW-3	Radioactive Waste Nuclide Fractions and Correlation Factor Determination	22
		RCP RW-7	Burial Site Disposal Criteria and Classification of Radwaste	15
		RP1.ID14	Radioactive Material Control	9
		RP1.ID18	Transportation Security Plan	1
		RP2.DC1	Radioactive Waste Classification Program	6
		RP2.DC2	Radwaste Solidification Process Control Program	16
	RP2.DC3	Radwaste Dewatering Process Control Program	9	
	Radiation Surveys	62647	Entered the OSGSF with the NRC to inspect the Building.	07/11/2018
		73015	20-K-011 U1 FHB 100 SFP Skimmer Filter changeout and storage in RW Bay 2	06/09/2020
		73292	Radwaste Building: Radwaste Monthly	07/09/2020
	Self-Assessments		2019 Annual Evaluation of Category 1 and Category 2 RAM Areas	11/20/2019
		51042654	Annual Quick Hit Self-Assessment: Part 37	10/14/2019
		51065500	Quick Hit Self-Assessment: NRC IP 71124.08, Radioactive Solid Waste Processing and Radioactive Material Handling, Storage and Transportation	07/09/2020
71151	Corrective Action Documents	Notifications	51053203, 51054897	
		Notifications	51067142, 51073618	
	Miscellaneous	DEP PEG-03	Drill and Exercise Performance Indicator (DEPI) Performance Evaluation Guide	1
		DEPI PEG-02	Drill and Exercise Performance Indicator (DEPI) Performance Evaluation Guide	1
		DEPI PEG-10	Drill and Exercise Performance Indicator (DEPI) Performance Evaluation Guide	1
	Procedures	AWP EP-001	Emergency Preparedness Performance Indicators	22
		DCPP MSPI Basis	Mitigating System Performance Index Basis Documents	07/24/2020
		DCPP MSPI Derivation	Unit 1 &2 MSPI (MS 08,09,10)	07/24/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Reports		
		Technical Specification Logs	Diablo Canyon	07/2019 to 06/2020
		XI1.ID5	Collection and Submittal of NRC Performance Indicators	1
71152	Corrective Action Documents	Notifications	51082598, 51082620, 51082622, 51082623, 51082625, 51065019, 51076667, 51076678, 51076114, 51076113, 51075717, 51077153, 51079088, 51079941, 51080754, 51081312, 51080872	
	Miscellaneous		Seismically Induced Systems Interaction Manual	12
	Procedures	AD4.ID3	SISIP Housekeeping Activities	16
		AD7.ID5	Scaffolding Material Structure	15
		MIP C-14.0	Erection of Temporary Scaffold	1
STP M-70D		Inspection of Fire Rated Barrier	25	
71153	Corrective Action Documents	Notifications	51082324, 51081723, 51081723	
	Miscellaneous	NUREG-1022	Event Reporting Guidelines 10 CFR 50.72 and 50.73	3
	Procedures	AR PK14-18	Generator Hydrogen System	16
		OM4.ID2	Plant Staff Review Committee (PSRC)	27
		OP AP-30	Main Generator Malfunction	24
OP1.DC1		Administrative Program to Control the Return to Power After a Reactor Trip	12A	