



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

April 16, 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 05000275/2020001 AND 05000323/2020001**

Dear Mr. Welsch:

On March 31, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Diablo Canyon Power Plant, Units 1 and 2. On April 9, 2020, the NRC inspectors discussed the results of this inspection with Ms. Paula Gerfen, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

One finding of very low safety significance (Green) is documented in this report. This finding 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 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,

A handwritten signature in black ink, appearing to read 'Jeffrey E. Josey', with a large, stylized loop at the end.

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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DIABLO CANYON POWER PLANT, UNITS 1 AND 2 – INTEGRATED INSPECTION REPORT
05000275/2020001 AND 05000323/2020001 – April 16, 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: 05000275/2020001 and 05000323/2020001

Enterprise Identifier: I-2020-001-0009

Licensee: Pacific Gas & Electric Company

Facility: Diablo Canyon Power Plant, Units 1 and 2

Location: Avila Beach, California

Inspection Dates: January 1, 2020 to March 31, 2020

Inspectors: M. Chambers, Physical Security Inspector
M. Doyle, Operations Engineer
N. Hernandez, Operations Engineer
R. Kopriva, Senior Reactor Inspector
L. Merker, Acting Senior Resident Inspector
C. Newport, Senior Resident Inspector
J. Reynoso, Resident Inspector
W. Smith, Health Physicist
F. Thomas, Reactor Inspector

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, 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

Failure to Follow Procedure Results in Inoperable Containment Spray Systems			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000275,05000323/2020001-01 Open/Closed	[H.5] - Work Management	71153
<p>The inspectors reviewed a self-revealed, Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for failure to follow the requirements of procedure OP L-6, "Cold Shutdown/Refueling." Specifically, while preparing for a reactor plant mode transition, the licensee inadvertently rendered both trains of containment spray inoperable in Mode 4, a mode of operation with both containment spray trains required to be operable.</p>			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000323/2019-001-00	LER 2019-001-00 for Diablo Canyon Power Plant, Unit 2, Containment Spray Inoperable in Mode 4.	71153	Closed

PLANT STATUS

Unit 1 operated at or near rated thermal power for the entire inspection period.

Unit 2 began the inspection period at full power. On February 13, 2020, Unit 2 was taken off line by controlled shutdown due to an equipment failure resulting in an unplanned technical specification entry. Unit 2 returned to full power on February 17, 2020, and remained at or near rated thermal power for the remainder of the inspection period.

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." From January 1 – March 19, 2020, the inspectors performed plant status activities described in IMC 2515, Appendix D, "Plant Status," and conducted routine reviews using IP 71152, "Problem Identification and Resolution." 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 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 and during that time conducted plant status activities as described in IMC 2515, Appendix D; and observed risk significant activities when warranted. 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 the cases where it was determined the objectives and requirements could not be performed remotely, management elected to postpone and reschedule the inspection to a later date.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Impending Severe Weather Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the adequacy of the overall preparations to protect risk-significant systems from impending severe weather due to high winds on January 7, 2020.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (5 Samples)

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

- (1) Unit 1, turbine-driven auxiliary feedwater pump 1-1 on January 16, 2020
- (2) Units 1 and 2, control room ventilation system on January 17, 2020
- (3) Units 1 and 2, reactor trip breakers and motor generator set on February 3, 2020
- (4) Unit 2, auxiliary feedwater and condensate system on February 4, 2020
- (5) Units 1 and 2, auxiliary saltwater trains A and B on February 5, 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) Units 1 and 2, turbine building 85-foot elevation on January 15, 2020
- (2) Units 1 and 2, 12 kV electrical switchgear rooms on February 3, 2020
- (3) Units 1 and 2, auxiliary building rod control rooms 115-foot elevation on February 3, 2020
- (4) Unit 2, auxiliary building battery rooms 115-foot elevation on February 12, 2020
- (5) Unit 1, auxiliary building battery rooms 115-foot elevation on March 12, 2020

71111.06 - Flood Protection Measures

Inspection Activities - Internal Flooding (IP Section 03.01) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) Units 1 and 2, auxiliary feedwater pump rooms on February 13, 2020

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

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

The inspectors observed and evaluated licensed operator performance in the Control Room during the following activities:

- (1) Unit 2, auxiliary feedwater pump 2-1 operation and main generator voltage regulator inconsistent function on February 11, 2020
Unit 2, return to power following unplanned technical specification required shutdown for control rod out of alignment on February 15, 2020
Units 1 and 2, high risk land management prescribed burn on February 29, 2020

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

- (1) The inspectors observed and evaluated licensed operator requalification classroom training on the auxiliary feedwater system on February 6, 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) Unit 2, main feedwater regulating valve FCV-510 on January 4, 2020
- (2) Units 1 and 2, control room and auxiliary building ventilation system on March 10, 2020

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (4 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 2, vital battery charger 2-1 cleaning and maintenance on January 13, 2020
- (2) Unit 1, emergency diesel generator 1-1 emergent lube oil heat exchanger oil repairs on January 23-24, 2020
- (3) Unit 1, auxiliary feedwater valve LCV-110 plant computer analog output card troubleshooting on February 19, 2020
- (4) Units 1 and 2, wildfire risk management activities on February 29, 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, emergency diesel generator 1-1 heat exchanger lube oil leak on January 7, 2019
- (2) Unit 2, steam generator 2-1 feedwater regulating valve FCV-510 flow oscillations on January 15, 2020
- (3) Unit 2, nitrogen leak inside containment on January 26, 2020
- (4) Unit 1, condensate storage tank loose resin on February 6, 2020
- (5) Unit 1, plant computer system analog output circuit card safety-related classification on February 13, 2020
- (6) Unit 2, emergency diesel generator 2-3 turbo air start pipe through wall leak on March 12, 2020

71111.17T - Evaluations of Changes, Tests, and Experiments

Sample Selection (IP Section 02.01) (31 Samples)

The inspectors reviewed the following evaluations, screenings, and/or applicability determinations for Title 10 of the *Code of Federal Regulations* (10 CFR) 50.59 from May 9-12, 2020:

- (1) Licensing Basis Impact Evaluation (LBIE) Screen S-2017-004, Auxiliary Salt Water ASW2-2 Vault Room Conduit Replacement
- (2) LBIE Screen S-2017-016, Partial Revision Calculation MP-6051
- (3) LBIE Screen S-2017-024, Replace Pressurizer Struts with Snubber - Unit 2
- (4) LBIE Screen S-2019-134, Task No. 134 Heating, Ventilation and Air Conditioning HVAC-83-14
- (5) LBIE Screen S-2018-103, Task No. 103 Unit 2, Emergency Diesel Generator Governor Control Upgrade
- (6) LBIE Screen S-2018-041, Task No. 41 DA Notification 50941685 Control Room Envelope (CRE) Floor Drain
- (7) LBIE Screen S-2017-107, Pipe Support Repair
- (8) LBIE Evaluation E-2018-002, Unit 1, Emergency Core Cooling System Valve Stem Mounted Limit Switch Interlocks
- (9) LBIE Evaluation E-2017-005, Unit 1, Hydrogen Recombiner Electrical Penetration Protection
- (10) LBIE Screen S-2017-011, Unit 2, Vital Battery and Battery Charger Unfused Non-Class 1E Ammeter Circuits modification
- (11) LBIE Screen S-2017-015, DCP 1*25408, Unit 1 Nuclear Instrumentation System (NIS) Sensitivity Kits
- (12) LBIE Screen S-2017-072, Temporary Modification Plant service Air Dryers (PAD) 03 04 Temporary Power
- (13) LBIE Screen S-2018-032, Task No. 32 Temporary Modification 60108251 Unit 2 480 Volt Bus G Indication
- (14) LBIE Screen S-2018-081, 91010-8219-AR_PK05-25u1r19e07-03-19, Pressurizer Relief Tank normal operating level is being lowered from 84 percent to a range of 60 percent-84 percent
- (15) LBIE Screen S-2019-014, Task No. 14 LBIE DA 50823711 Engineered Safety Feature Delays
- (16) LBIE Evaluation E-2017-019, UFSAR 3.2 for Class Breaks
- (17) LBIE Evaluation E-2018-009, 480 Volt Switchgear Room Tornado Impacts
- (18) LBIE Evaluation E-2018-010, DDP 1000025448, High Energy Line Break Analysis on 4 kV Switch Gear
- (19) LBIE Evaluation E-2019-003, FSAR Engineered Safeguard Feature Non-LOOP Delays
- (20) LBIE Evaluation 2017-004, DCN 2*1689, Unit 2 Hydrogen Recombiner Electrical Penetration Protection
- (21) LBIE Evaluation 2017-023, Gas Decay Tank Rupture
- (22) LBIE Evaluation 2017-026, Liquid Holdup Tank Rupture
- (23) LBIE Evaluation 2018-001, Unit 2 Emergency Core Cooling System Valve Stem Mounted Limit Switch Interlocks, DCN-2000001823
- (24) LBIE Screen OP _O -22u3r07e03-27- 17, Motor operated valves (MOVs) that may need local manual operation with motor contactors during emergency situations.

- (25) LBIE Screen, OP B-3AIVu 1 r02e04-29-1 7, Venting pressure between the Safety Injection (SI) Pump discharge check valves and the Reactor Coolant System (RCS) loop injection check valves.
- (26) LBIE Screen S-2017-030, Fisher regulators M98H is being evaluated to replace 98H regulators for PCV-410/411 in the Diesel Fuel Oil System.
- (27) LBIE Screen STP P-AFW-A 1 1 u 1 r1 2-OTSC-06-25 - 1 7-S8B2, turbine-driven auxiliary feedwater (AFW) pump test procedure that performs the comprehensive flow surveillance be revised to allow a widened pump testing speed band.
- (28) LBIE Screen S-2017-108, Modification installs a structural weld overlay (SWOL) on the existing weld containing the flaw at weld WIB-245.
- (29) LBIE Screen S-2017-008, Unit 1 ICW Head Tank Nitrogen Cover Gas as permanent plant equipment and provides a more permanent tank lid hold-down device.
- (30) LBIE Screen S-2017-129, The proposed activity will remove the interlocks associated with the stem-mounted Namco external limit switches.
- (31) LBIE Screen 90120-1090-OP D-1 Vu 1 r25e05-23-18, Deleted closing of the FW-1 21 Auxiliary Feedwater Pump suction valve when aligned to the Condensate Storage Tank.

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Unit 2, pressurizer relief tank operating procedure modifications on January 6, 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 2, Eagle 21 rack 4 board replacement on January 9, 2020
- (2) Unit 1, control room air conditioner compressor CP-36 and condenser overhaul on January 21, 2020
- (3) Unit 1, emergency diesel generator 1-1 heat exchanger repair on January 23, 2020
- (4) Unit 1, condensate storage tank cleaning and inspection on February 4, 2020
- (5) Units 1 and 2, control room ventilation backdraft damper BD-67 repairs on March 9, 2020

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (3 Samples)

- (1) Unit 2, vital battery charger 2-31 test per procedure STP M-12B on January 9, 2020
- (2) Unit 2, main generator reactive power capability test per procedure TP TO-19005 on January 14, 2020

- (3) Unit 1, emergency diesel generator 1-1 monthly surveillance test per procedure STP M-9A1 on January 21, 2020

Inservice Testing (IP Section 03.01) (1 Sample)

- (1) Unit 2, component cooling water fill check valve MU-2-971 in-service test per procedure STP V-18S on March 5, 2020

71114.06 - Drill Evaluation

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

- (1) The inspectors evaluated an emergency preparedness drill on March 3, 2020

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

IE01: Unplanned Scrams per 7000 Critical Hours Sample (IP Section 02.01) (2 Samples)

- (1) Unit 1 (01/01/2019–12/31/2019)
- (2) Unit 2 (01/01/2019–12/31/2019)

IE03: Unplanned Power Changes per 7000 Critical Hours Sample (IP Section 02.02) (2 Samples)

- (1) Unit 1 (01/01/2019–12/31/2019)
- (2) Unit 2 (01/01/2019–12/31/2019)

IE04: Unplanned Scrams with Complications (USwC) Sample (IP Section 02.03) (2 Samples)

- (1) Unit 1 (01/01/2019–12/31/2019)
- (2) Unit 2 (01/01/2019–12/31/2019)

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 trends that might be indicative of a more significant safety issue. The inspectors' review was focused on fire damper issues during the period from January 1, 2019, to March 11, 2020.

Annual Follow-up of Selected Issues (IP Section 02.03) (2 Samples)

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

- (1) Corrective actions associated with steam header pressure control and main steam safety valve RV-58 lifting while rolling main turbine generator on December 17, 2019

- (2) Corrective actions associated with Units 1 and 2, auxiliary building ventilation system damper and supply fan failures on February 26, 2020

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

Event Report (IP Section 03.02) (1 Sample)

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

- (1) LER 05000323/2019-001-00, Unit 2, Containment Spray Inoperable in Mode 4 (ADAMS Accession No. ML20029E862). The circumstances surrounding this LER and an associated non-cited violation are documented in the Inspection Results section of this report.

Personnel Performance (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated the licensee's performance during a Unit 2, controlled shutdown required by technical specifications due to control rod misalignment on February 13, 2020.

OTHER ACTIVITIES – TEMPORARY INSTRUCTION, INFREQUENT, AND ABNORMAL

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

Because Pacific Gas & Electric Corporation, and its subsidiary, Pacific Gas & Electric Company (the licensee) was under bankruptcy protection/reorganization during the inspection period, NRC Region IV conducted special reviews of processes at Diablo Canyon Power Plant. Using the flexibilities in the baseline inspection program, the inspectors evaluated several aspects of the licensee's operations to determine whether the financial condition of the licensee impacted plant safety. The factors reviewed during this period included: (1) impact on staffing, (2) corrective maintenance backlog, (3) changes to the planned maintenance schedule, (4) corrective action program implementation, and (5) any reduction in outage scope, including risk-significant modifications. Considering the licensee's financial difficulties, 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 Diablo Canyon Power Plant included continuous reviews by the resident inspectors, as well as the specialist-led baseline inspections completed during the inspection period which are documented in this report. During this period, the inspectors did not identify any indications that the licensee's financial circumstances were adversely affecting plant performance and safety.

INSPECTION RESULTS

Failure to Follow Procedure Results in Inoperable Containment Spray Systems			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000323/2020001-01 Open	[H.5] - Work Management	71153
<p>The inspectors reviewed a self-revealed, Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for failure to follow the requirements of procedure OP L-6, "Cold Shutdown/Refueling." Specifically, while preparing for a reactor plant mode transition, the licensee inadvertently rendered both trains of containment spray inoperable in Mode 4, a mode of operation with both containment spray trains required to be operable.</p>			
<p><u>Description:</u> On November 30, 2019, at the start of Unit 2, Refueling Outage 21, the licensee began to transition the unit from Mode 4 to Mode 5 in accordance with OP L-6, "Cold Shutdown/Refueling." While preparing for this transition, personnel from operations issued instructions to disable the containment spray pumps while the plant was still in Mode 4, a task that is required by OP L-6 only after the plant reaches Mode 5. This rendered both trains of containment spray inoperable as Technical Specification (TS) 3.6.6, "Containment Spray and Cooling Systems," requires two containment spray trains to be operable while in Modes 1, 2, 3, and 4. Approximately 8 hours later, operations personnel identified that the two containment spray trains were inoperable while still in Mode 4. Operations personnel subsequently entered the applicable TS limiting condition for operation (LCO) 3.0.3 which states, in part, that when an LCO is not met, action shall be initiated within 1 hour to place the unit in Mode 5 within 37 hours. Operations personnel restored power to the containment spray pumps, returned both trains of containment spray to operable status within the 37-hour requirement to place the unit in Mode 5, and exited the applicable TS LCOs.</p> <p>Corrective Actions: Operations personnel returned both trains of containment spray to operable status and entered the issue into the corrective action program.</p> <p>Corrective Action References: Notification 51057622</p>			
<p><u>Performance Assessment:</u></p> <p>Performance Deficiency: The inspectors determined that the licensee's failure to follow OP L-6, "Cold Shutdown/Refueling," by rendering both trains of containment spray inoperable while in a Mode of operation with containment spray required to be operable, was a performance deficiency.</p> <p>Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Human Performance attribute of the Barrier Integrity cornerstone and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, the licensee rendered both trains of containment spray inoperable while in Mode 4, a mode of operation in which both containment spray trains are required to be operable.</p>			

Significance: The inspectors assessed the significance of the finding using Appendix G, "Shutdown Safety SDP." The inspectors determined the finding to be of very low safety significance (Green) because the finding did not degrade the ability to close or isolate the containment; the physical integrity of reactor containment; or involve an actual reduction in function of hydrogen control for a BWR Mark III containment, a PWR ice condenser containment, or an AP1000 containment.

Cross-Cutting Aspect: H.5 - Work Management: The organization implements a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority. The work process includes the identification and management of risk commensurate to the work and the need for coordination with different groups or job activities.

Enforcement:

Violation: Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Section 6.1.3 of OP L-6, "Cold Shutdown/Refueling," Revision 29, an activity affecting quality requires, in part, that containment spray pumps and control power are disabled after the unit reaches Mode 5 and before reaching Mode 6. Contrary to the above, on November 30, 2019, in anticipation of Mode 5 entry, the licensee inadvertently rendered both trains of containment spray inoperable while still in Mode 4, a mode of operation in which both containment spray pumps are required to be operable.

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 March 12, 2020, the inspectors presented the Evaluations of Changes, Tests and Experiments inspection results to Mr. M. Hayes, Director, Learning Services, and other members of the licensee staff.
- On April 9, 2020, the inspectors presented the integrated inspection results to Ms. P. Gerfen, Site Vice President, 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	51061491, 51061412	
	Procedures	CP M-16	Severe Weather	17
71111.04	Corrective Action Documents	Notifications	51051094, 51034153, 51041762, 51062395	
	Drawings	106703	Sheet 3	71
		106704	Sheet 4	88
		106723	Control Room Ventilation HVAC – Unit 1	133
		107723	Control Room Ventilation HVAC – Unit 2	105
	Procedures	OP D-1:II	Auxiliary Feedwater System - Alignment Verification for Plant Startup	35B
OP H-5:II		Control Room Ventilation System - Alignment Verification	23	
71111.05	Corrective Action Documents	Notifications	51047792, 50937061, 51065375, 51065372, 50914543, 51069005, 51069558	
	Drawings	111805	RCA and H-Block Elev 115	3
		111805	Radiological Control Area (RCA) & H Block Elev. 115'	3
		111805 Sheet 60	Fire Preplan Unit 2 Radiological Control Area 115'	17
		111805 Sheets 49 and 60	Turbine Building Elev. 115 ft	3
		111805 TB-3	Fire Pre-Plan Drawing Turbine Building 85-foot elev. Sheet 49	3
		111805 TB-5	Fire Pre-Plan Drawing Turbine Building 85-foot elev. Sheet 50	1
		515221	Operational Requirement for Important to Safety Doors	29
		663389	Hollow Door Vendor Drawing	17
	RA-9	Fire Preplan Unit 1 Radiological Control Area 115'	9	
	Miscellaneous	SAP Calc. No. 9000041689-002-00	NFPA 805 Design Basis Documents Units 1 and 2	43
		TCP #12520	Transient Combustible Permit, 480 V temp power	12/22/2019
	Work Orders		68058246, 64138828	
71111.06	Corrective Action	Notifications	50632943, 50636857, 50826609, 50591129	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents			
	Miscellaneous	DCM No. T-12	Diablo Canyon Power Plant, Units 1 & 2, Design Criteria Memorandum T-12 Pipe Break (HELB/MELB), Flooding, and Missiles	24
71111.11Q	Corrective Action Documents	Notifications	51066561, 51068223, 51065923, 51066632, 51066599, 50531403, 51058992, 51059240, 51057622, 51068868, 51066670, 51066564, 51066758, 51066640, 51069557, 51068235, 51068180, 51066545	
	Procedures	AD7.DC8	Work Planning	53
		AR PK05-08	RCS Valves Stem Leakage	12
		CF2.DC1	Configuration Management Plan for the Operator Training Simulator	12
		OP1.DC10	Conduct of Operations	59
		OP1.DC31	Dissemination of Operations Information	8
		STP P-AFW-21	Routine Surveillance Test of Turbine-Driven Auxiliary Feedwater Pump 20-1	30
		STP R-1A	Routine Control Rod Exercise	25
	Work Orders		60120360, 60126079, 68055020	
71111.12	Corrective Action Documents	Notification	51060172, 50980489, 51048745, 51048849, 51047760, 50997012, 51063460	
	Drawings	108036s4D	Multivariable Instrument Systems	74
	Miscellaneous	DCM No. S-3C	Main Feedwater & Steam Dump Control Systems	0
		PC-23B-01 Worksheet	Main Auxiliary Building HVAC Maintenance Rule Performance Criteria	5
		STP-V3P1	Valve Stroke Times for FCV-510	
	Procedures	OM7.ID12	Operability Determination	40
STP M-6A		Routine Surveillance Testing of Control Room Ventilation System	58	
71111.13	Corrective Action Documents	Notifications	51034877, 51063460, 51050796, 50984446, 51066561, 51066728, 51048684, 51032369	
	Procedures	AD7.DC6	On-Line Maintenance Risk Management	28
		AD7.ID15	On Line Maintenance Outage Window Execution	5
		AD7.ID4	Assessment of integrated Risk	23
AWP WM-001		Integrated Risk Supplement Classification Guidance	12	

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		B-40	Operations Response to Wildfire	1
		CS1.ID15	Cyber Security Configuration Management	0
		OP J-6B:IX	Diesel Generator Extended On-Line Maintenance	17
		OP O-36	Protected Equipment Posting	22
	Work Orders		64129724, 60126079	
71111.15	Corrective Action Documents	Notifications	51065420, 51066561, 51053146, 51053498, 51063165, 51063163, 51048609, 50985428, 51060172, 51061381, 51024543, 50985953, 50931403, 50828966, 51060220, 51063968, 51063831, 51069677	
	Drawings	107709	Mechanical Piping Gaseous System	63
		108021-4B	Turbo Charger Air Assist System 2-3	42
	Procedures	STP M-21-ENG.1	Diesel Engine Generator Inspection (Every Refueling Outage)	27
		STP M-9A1	Diesel Engine Generator 1-1 Routine Surveillance Test	12
Work Orders		60126079, 60123682, 60124189, 60111921, 64137989		
71111.17T	Calculations	14078110-MR-001	PG&E Design Class I Component Class Break Report	12/16/2016
		SAP Calculation No. : 9000033734, Legacy No. 364-DC	Unit 2 Electrical Penetration Protection Calculation.	6B
		SAP Calculation No. 9000012062, Legacy No. RA-93-9	Gas Decay Tank/Gaseous Radwaste System	0
		WECTEC 14078110-C-M-00003	Site Boundary Doses for a Gas Decay Tank (GDT) Rupture.	0
	Corrective Action Documents		50870357, 50873211, 50881494, 50939612, 50946995, 50969368, 50969621, 51005934, 51005938, 51034727, 51053313, 51063468	
	Corrective Action Documents		51069457, 51069490, 51069602, 51069620	

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	Resulting from Inspection			
	Drawings	102003	Diablo Canyon Power Plant - PG&E Co. - Feedwater System	84
		102008	Diablo Canyon Power Plant – PG&E Co., Chemical & Volume Control System, Sheet 5B	116
		102008	Diablo Canyon Power Plant – PG&E Co., Chemical & Volume Control System, Sheet 9	102
		102013	Diablo Canyon Power Plant – PG&E Co., Spend Fuel Pit Cooling System, Sheet 2	45
		102016	Diablo Canyon Power Plant – PG&E Co., Make-Up Water System, Sheet 18	86
		102016	Diablo Canyon Power Plant – PG&E Co., Make-Up Water System, Sheet 16	97
		102017	Diablo Canyon Power Plant – PG&E Co. Saltwater System, Sheet 3B	96
		102021	Diablo Canyon Power Plant – PG&E Co., Diesel Engine-Generator Associated Systems, Sheet 7B	70
		102021	Diablo Canyon Power Plant – PG&E Co., Diesel Engine-Generator Associated Systems, Sheet 7	73
		102021	Diablo Canyon Power Plant – PG&E Co., Diesel Engine-Generator Associated Systems, Sheet 7A	73
		106708	PG&E Co. Sheet 15A - Chemical & Volume Control System OVID	133
		106708	PG&E Co. Sheet 9 - Chemical & Volume Control System OVID	150
		106713	PG&E Co. Sheet 2 - Spend Fuel Pit Cooling System OVID	46
		106716	PG&E Co. Sheet 18 - Make-Up Water System OVID	174
		106716	PG&E Co. Sheet 16 - Make-Up Water System OVID	186
		106717	PG&E Co. Sheet 8 - Saltwater System OVID	209
		106717	PG&E Co. Sheet 7 - Saltwater System OVID	198
		106721	PG&E Co. Sheet 16 - Diesel Engine-Generator Associated Systems OVID	61
		106721	PG&E Co. Sheet 6 - Diesel Engine-Generator Associated	60

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Systems OVID	
		441368	Electrical Schematic Diagram 125 Volt D. C. System	24
	Engineering Changes	DCN 2000001689	Replace the 3 existing Shawmut A23X125 fuses in the Hydrogen Recombiner Power Supply Panel with Shawmut A50P125-4 and Install 3 more redundant A50P125-4 fuses in series.	0
		DDN 2000001912	Design Change Notice – 4kV Switchgear Room Ventilation System Modification (Unit 1)	11/28/2018
		DDN 2000001913	Design Change Notice - This design change will revise the licensing basis to explicitly credit manual operator actions to ensure the cooling requirement for the electrical equipment served by the 480VAC Switchgear Room and 125VDC Inverter Room Ventilation System is met following a design basis tornado that disables the ventilation system.	11/28/2018
		DDN 2000001927	Design Change Notice - This design change will revise the licensing basis to explicitly credit manual operator actions to ensure the cooling requirement for the electrical equipment served by the 480VAC Switchgear Room and 125VDC Inverter Room Ventilation System is met following a design basis tornado that disables the ventilation system.	2/15/2019
		DDP 1000025299	Replace the existing fuse and install a redundant fuse in series in the Hydrogen Recombiner Power Supply Panel.	0
		DDP 1000025506	Minor Design Change Package Summary - This design change will revise the licensing basis to explicitly credit manual operator actions to ensure the cooling requirement for the electrical equipment served by the 480VAC Switchgear Room and 125VDC Inverter Room Ventilation System is met following a design basis tornado that disables the ventilation system.	2/15/2019
		EDT No. 4*1581	Engineering Drawing Transmittal: NMOD Convert TMOD 68012135 for U1 ICW Cover Gas to Permanent Equipment.	0
	Engineering	DDP 1000025448	Design Change Package Summary and Evaluation - This	1/4/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Evaluations		Design Change Package implements a physical change to the vital 4.16-kV Switchgear room (SWGR) and Cable Spreading Room (CSR) ventilation system by placing the dampers in the normally closed position and disabling (abandon in place) the associated HVAC exhaust fire damper position switches.	
	Miscellaneous	Y-3.2(10)	UFSAR Change Request - The proposed activity is a change to the DCPD current licensing basis (CLB) for the configuration of system boundaries as defined in UFSAR Section 3.2.2.1. I(i).	1/31/2017
	Procedures	CF3.ID22	Minor Modification Process	6
		CF3.ID6	Drawing Change Transmittal Processing	28
		CF3.ID9	Design Change Development	8
		CF4.ID4	Field Change Process	26A
		CF4.ID7	Temporary Alteration	30
		CP M-16	Severe Weather	17
		OM7.ID1	Problem Identification and Resolution	54
		OM7.ID4	Cause Evaluations	39
		OP B-3A:IV	Safety Injection System - Off Normal Operation.	2
		OP H-10:IV	Auxiliary Building General Ventilation - Off Normal Operation – (Unit 1)	10
	OP H-10:IV	Auxiliary Building General Ventilation - Off Normal Operation – (Unit 2)	9	
	TS3.ID2	Licensing Basis Impact Evaluations	44A	
	Work Orders		60101343, 60108251	
71111.18	Corrective Action Documents	Notifications	51060208, 50390780, 50673779, 50390622, 50673779, 51060449	
	Miscellaneous	Temporary Modification 60076719	Unit 2 PRT Hydrogen Concentration Limit Increase	0
	Procedures	AD7.ID14	Assessment of Integrated Risk	23
		OP A-4B:III	Pressurizer Relief Tank – Remove From Service	21
		OP A-4B:IV	Pressurizer Relief Tank – Normal Operations	15

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		OP F-5:I	Chemical Control Limits and Action Guidelines for the Primary Systems	48
71111.19	Corrective Action Documents	Notifications	51058860, 51056200, 51062395, 51063795, 51053498, 50985428, 51063333, 50934425	
	Miscellaneous		Unit 1 Diesel Generator 1-1 Lube Oil Leak Adverse Condition Monitoring Plan	12/26/2019
	Procedures	MP M-21-HX.2	Diesel Generator Lube Oil Heat Exchanger	6
		MPM M-23-BD.67	Preventive Maintenance of BD-67	1
		OP H-5:I	Control Room Ventilation Prepare for Service	21
		OP H-5:III	Control Room Ventilation System	22
		STP I-36-R04	Eagle 21 Rack 4 Removal From Service and Return to Service	9
		STP M-21-ENG.1	Diesel Engine Generator Inspection (Every Refueling Outage)	27
		STP M6-A	Routine Surveillance Testing of Control Room Ventilation System	58
Work Orders		6010901, 60123967, 60124001, 60123682, 60111921, 64196335, 64174219		
71111.22	Corrective Action Documents	Notifications	51053146, 51053498	
	Miscellaneous	DCL-14-018	License Amendment Request 14-01, "Revision to Technical Specifications 3.8.1, 'AC Sources – Operating"	3/27/2014
	Procedures	STP M-12B	Battery Charger Performance Test	19
		STP M-9A1	Diesel Engine Generator 1-1 Routine Surveillance Test	12
		STP V-18S	Nonintrusive Test of MU-02-971	7
		TP TO-19005	Unit 2 Main Generator Reactive Power Capability Test	0
Work Orders		64230300, 60123682, 64153267, 64178148, 64178183		
71114.06	Procedures	EOP E-2	Faulted Steam Generator	23A
		EOP E-3	Steam Generator Tube Rupture	40A
		EP G-3	Emergency Notification of Off-Site Agencies	62
		EP RB-10	Protective Actions Recommendations	21
71151	Procedures	AWP L-001	NRC Performance Indicators Initiating Events, SSFFs, and MOR	9

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		XI1.ID2	Regulatory Reporting Requirements	43
		XI1.ID5	Collection and Submittal of NRC Performance Indicators	
71152	Corrective Action Documents	Notifications	50980570, 51022441, 51023724, 51023903, 51024097, 51024146, 51024613, 51023931, 51023932, 51024092, 51024090, 51025122, 51025123, 51025124, 51025128, 51025129, 51025160, 51025161, 51025163, 51025164, 51025166, 51025167, 51025168, 51025169, 51025180, 51025181, 51025182, 51025183, 51025184, 51025185, 51025186, 51025187, 51025188, 51025644, 51029223, 51029224, 51023930, 51029225, 51029389, 51032751, 51032866, 51032752, 51032865, 51032794, 51032795, 51032797, 51032851, 51032869, 51036160, 51037549, 51037687, 51037631, 51037736, 51038664, 51039380, 51041668, 51045183, 51045184, 51048745, 51048746, 51056345, 51056346, 51056347, 51056450, 51061194, 51062658, 51066257, 51066606, 51067284, 51067980, 51069986, 51068062, 51027584, 51032876, 51071321, 51067890, 51063444, 51067017, 51022978, 51057273, 51007668, 51070121, 51059901, 50652438, 50652617, 50643534, 50652093, 50657850, 50654950, 51049295, 51049291, 51050256	
	Drawings	107723	Auxiliary Building HVAC	94
	Procedures	MP M-23-BD.67	Preventive Maintenance of BD-67	1
		NRC IN 97-09	Inadequate main steam safety valve (MSSV) Setpoints and Performance Issues	3/12/1997
		NUREG/CR-7037	Industry Performance of Relief Valves of U.S. Commercial Nuclear Power Plant Through 2007	3/2011
		OP C-3:II	Main Unit Turbine – Startup	53
		STP M-39B	Routine Test of Cable Spreading Room CO2 Fire System Operation	38
		STP M-39B	Routine Test of Cable Spreading Room CO2 Fire System Operation	39
		STP M-70B	Inspection and Testing of Fire Dampers	22
		STP V-3R1	Exercising 10% Atmospheric Dump Valves PCV-19, 20, 21,	57A

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			22 and Isolation Valves	
	Work Orders		60117800, 60118027, 60119941, 64190982, 60126407	
71153	Corrective Action Documents	Notifications	51057622, 51057314, 51061381, 51067153, 51066758, 51058035, 51060562, 51065170, 51066241, 51060172, 51066640	
	Miscellaneous Procedures	LER 2019-001-00	Containment Spray Inoperable in Mode 4	1/29/2020
		OP AP-12B	Control Rod Misalignment	19
		OP AP-25	Rapid Load Rejection or Shutdown	13
		OP L-4	Normal Operation at Power	82
		OP L-6	Cold Shutdown/Refueling	29
		OP1.DC1	Administrative Program to control The Return to Power after a Reactor Trip	12A
		STP R-19	Shutdown Margin Determination	32
		STP R-1A	Exercising Full Length Control Rod	25