UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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October 26, 2007

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SUBJECT: DIABLO CANYON POWER PLANT - NRC INTEGRATED INSPECTION REPORT 05000275/2007004 AND 05000323/2007004

Dear Mr. Keenan:

On September 30, 2007, the U.S. Nuclear Regulatory Commission completed an inspection at your Diablo Canyon Power Plant, Units 1 and 2, facility. The enclosed integrated report documents the inspection finding that was discussed on October 3, 2007, with John Conway and members of your staff.

This inspection examined activities conducted under your licenses as they relate to safety and compliance with the Commission's rules and regulations, and with the conditions of your licenses. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

This report documents one self-revealing finding of very low safety significance. However, because of its very low risk significance and because it is entered into your corrective action program, the NRC is treating this as a green finding.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Vincent G. Gaddy, Chief
Project Branch B
Division of Reactor Projects

Dockets: 50-275
50-323
Licenses: DPR-80
DPR-82

Enclosure:
NRC Inspection Report 05000275/2007004
and 05000323/2007004
w/attachment: Supplemental Information

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SUNSI Review Completed: __yes___ ADAMS: Yes No Initials: VGG___
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RIV:RI:DRP/B	SRI:DRP/B	C:DRS/PSB	C:DRS/OB
MABrown	MSPeck	MPShannon	ATGody
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10/23/07	10/23/07	10/22/07	10/22/07

C:DRS/EB1	C:DRS/EB2	C:DRP/B	
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10/18/07	10/22/07	10/26/07	

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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Dockets:	50-275, 50-323
Licenses:	DPR-80, DPR-82
Report:	05000275/2007004 05000323/2007004
Licensee:	Pacific Gas and Electric Company
Facility:	Diablo Canyon Power Plant, Units 1 and 2
Location:	7 ½ miles NW of Avila Beach Avila Beach, California
Dates:	July 1 through September 30, 2007
Inspectors:	T. Jackson, Senior Resident Inspector M. Peck, Senior Resident Inspector M. Brown, Resident Inspector D. Allen, Senior Resident Inspector, Comanche Peak G. Pick, Senior Reactor Inspector, Engineering Branch 2 J. Melfi, Resident Inspector, Palo Verde P. Elkmann, Emergency Preparedness Inspector G. George, Reactor Inspector, Engineering Branch 1 S. Graves, Reactor Inspector, Engineering Branch 1 S. Makor, Reactor Inspector, Engineering Branch 1
Approved By:	V. G. Gaddy, Chief, Projects Branch B Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000275/2007-004, 05000323/2007-004; 7/1/07 - 9/30/07; Diablo Canyon Power Plant Units 1; Maintenance Effectiveness.

This report covered a 13-week period of inspection by resident inspectors and announced inspections on emergency preparedness, safety evaluations and heat exchangers. One self-revealing finding (Green) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter 0609 "Significance Determination Process." Findings for which the Significance Determination Process does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Initiating Events

- Green. A self-revealing finding was identified after an inadequate main turbine maintenance procedure resulted in an unplanned load reduction and a reactor shutdown. On August 9, 2007, the Unit 1 generator output decreased by 60MW due to failed main turbine stop valve. Pacific Gas and Electric Company shut down the plant the following day to repair the failed valve. The valve failed because the maintenance personnel did not properly adjust the external travel stop during outage related maintenance. The travel stop was not properly adjusted because the maintenance procedure did not require the maintenance personnel to verify that the disc was properly back seated against the internal stop during adjustment. This issue was entered into Pacific Gas and Electric Company's Corrective Action Program as Non Conformance Report N0002219.

  The finding is greater than minor because if left uncorrected, the condition would become a more significant safety concern. Using Inspection Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheet, the inspectors determined the finding to have very low safety significance because the condition did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. This finding has a crosscutting aspect in the area of human performance, associated with the resources component because PG&E failed to provide an adequate main turbine maintenance procedure (H.2.c) (Section 1R12).

B. Licensee-Identified Violations

A violation of very low safety significance, which has been identified by Pacific Gas and Electric Company, has been reviewed by the inspectors. Corrective actions taken or planned by Pacific Gas and Electric Company have been entered into their corrective action program. This violation and corrective actions are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

At the beginning of the inspection period, Pacific Gas and Electric Company (PG&E) was operating Diablo Canyon Unit 1 at full power. An unplanned power reduction to 95 percent rated thermal power occurred on August 9, 2007, after a main turbine stop valve disc separated from the swing arm, partially restricting steam flow. On August 10, PG&E shutdown Unit 1 and repaired the stop valve. The licensee restarted the reactor on August 16 and achieved full power on August 19. PG&E operated Unit 1 at full power for the remainder of the inspection period.

Pacific Gas and Electric operated Unit 2 at full power for the duration of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors completed a review of PG&E's readiness for seasonal susceptibilities involving extreme storm surges and high temperatures. The inspectors: (1) reviewed plant procedures, the Final Safety Analysis Report (FSAR) Update, and Technical Specifications (TSs) to ensure that operator actions defined in adverse weather procedures maintained the readiness of essential systems; (2) walked down portions of the two systems listed below to ensure that adverse weather protection features were sufficient to support operability, including the ability to perform safe shutdown functions; (3) evaluated operator staffing levels to ensure PG&E could maintain the readiness of essential systems required by plant procedures; (4) reviewed the communications protocols between PG&E and the transmission operator; and (5) reviewed the corrective action program (CAP) to determine if PG&E identified and corrected problems related to adverse weather conditions.

- July 11, 2007: Units 1 and 2, 480V Vital switchgear rooms, inverter/charger room and cable spreading room
- September 4, 2007: Units 1 and 2, Ultimate heat sink and intake structure

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed two samples (site-specific and hot weather).

b. Findings

No findings of significance were identified.

1R02 Evaluation of Changes, Tests, or Experiments (71111.02)

a. Inspection Scope

Between September 10 through September 14, 2007, the inspectors reviewed the effectiveness of PG&E's implementation of changes to the facility structures, systems, and components; risk significant normal and emergency operating procedures; test programs; and the FSAR Update in accordance with 10 CFR 50.59, "Changes, Tests, and Experiments."

The inspectors reviewed 7 samples of 10 CFR Part 50.59 safety evaluations. The evaluations were reviewed to verify that licensee personnel had appropriately considered the conditions under which the licensee may make changes to the facility or procedures, or conduct tests or experiments without prior NRC's approval. In addition, the inspectors reviewed 21 samples of 10 CFR Part 50.59 screens, in which licensee personnel determined that evaluations were not required, to ensure that the exclusion of a full evaluation was consistent with the requirements of 10 CFR Part 50.59.

The inspectors reviewed a sample of recent licensee action requests related to the 10 CFR Part 50.59 process to determine whether the licensee had identified problems and entered them into the corrective action program at the appropriate threshold.

The inspection procedure specifies the inspectors review a minimum sample of 5 licensee safety evaluations and a combination of 10 applicability determinations or screening. The inspectors completed a review of 7 licensee safety evaluations and 21 screens/applicability determinations.

Documents reviewed by the inspectors are listed in the attachment.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignments (71111.04)

.1 Partial System Walkdowns

a. Inspection Scope

The inspectors: (1) walked down portions of the below listed risk important systems and reviewed plant procedures and documents to verify that critical portions of the selected systems were correctly aligned; and (2) compared deficiencies identified during the walk down to the FSAR Update and CAP to ensure problems were being identified and corrected.

- July 18, 2007: Unit 1, Seismic trip system
- July 23, 2007: Unit 2, Component cooling water (CCW) system
- August 14, 2007: Unit 1 Control room ventilation system

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed three samples.

b. Findings

No findings of significance were identified.

.2 Complete System Walkdowns

a. Inspection Scope

The inspectors: (1) reviewed plant procedures, drawings, the FSAR Update, TSs, and vendor manuals to determine the correct alignment of the Unit 2 auxiliary feedwater (AFW) system; (2) reviewed outstanding design issues, operator workarounds, and FSAR Update documents to determine if open issues affected the functionality of the AFW system; and (3) verified that PG&E was identifying and resolving equipment alignment problems.

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

Quarterly Inspection

a. Inspection Scope

The inspectors walked down the below listed plant areas to assess the material condition of active and passive fire protection features and their operational lineup and readiness. The inspectors: (1) verified that transient combustibles and hot work activities were controlled in accordance with plant procedures; (2) observed the condition of fire detection devices to verify that they remained functional; (3) observed fire suppression systems to verify that they remained functional and that access to manual actuators was unobstructed; (4) verified that fire extinguishers and hose stations were provided at their designated locations and that they were in a satisfactory condition; (5) verified that passive fire protection features (electrical raceway barriers, fire doors, fire dampers, steel fire proofing, penetration seals, and oil collection systems) were in a satisfactory material condition; (6) verified that adequate compensatory measures were established for degraded or inoperable fire protection features and that the compensatory measures were commensurate with the significance of the deficiency;

and (7) reviewed the FSAR Update to determine if PG&E identified and corrected fire protection problems.

- August 2, 2007: Fire Area TB-4, Unit 1, 4 kV F Bus switchgear room and associated cable spreading room
- August 2, 2007: Fire Area TB-5, Unit 1, 4 kV G Bus switchgear room and associated cable spreading room
- August 2, 2007: Fire Area TB-6, Unit 1, 4 kV H Bus switchgear room and associated cable spreading room
- August 3, 2007: Fire Area TB-10, Unit 2, 4 kV F Bus switchgear room and associated cable spreading room
- August 3, 2007: Fire Area TB-11, Unit 2, 4 kV G Bus switchgear room and associated cable spreading room
- August 3, 2007: Fire Area TB-12, Unit 2, 4 kV H Bus switchgear room and associated cable spreading room
- August 14, 2007: Fire Area CR-1, Units 1 and 2 Control room and associated ventilation rooms
- September 23, 2007: Fire Area AB-1, Zone 3N, Unit 2 Safety injection pump rooms

Documents reviewed by the inspectors included:

- Diablo Canyon Power Plant Units 1 and 2 FSAR Update, Appendix 9.5A, Fire Hazards Analysis, Revision 17
- Diablo Canyon Power Plant Fire Protection Pre-Plan, dated May 14, 2003

The inspectors completed eight samples.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

.1 Semi-Annual Internal Flooding

a. Inspection Scope

The inspectors: (1) reviewed the FSAR Update, the flooding analysis, and plant procedures to assess susceptibilities involving internal flooding; (2) reviewed the FSAR

Update and CAP to determine if PG&E identified and corrected flooding problems; (3) verified that operator actions for coping with flooding can reasonably achieve the desired outcomes; and (4) walked down the one below listed area to verify the adequacy of: (a) equipment seals located below the floodline, (b) floor and wall penetration seals, (c) watertight door seals, (d) common drain lines and sumps, (e) sump pumps, level alarms, and control circuits, and (f) temporary or removable flood barriers.

- August 7, 2007: Units 1 and 2, Turbine buildings, elevation 85'

Documents reviewed by the inspectors included:

- PG&E, Probabilistic Risk Assessment Calculation File No. F.4 , PRA Internal Floods Analysis, Revision 1

- Component History/Work Order Closure Remarks, LS-16A, dated August 6, 2007

The inspectors completed one internal flooding sample.

b. Findings

No findings of significance were identified.

.2 Annual External Flooding

a. Inspection Scope

The inspectors: (1) reviewed the FSAR Update, the flooding analysis, and plant procedures to assess susceptibilities involving external flooding; (2) reviewed the FSAR Update and CAP to determine if PG&E identified and corrected flooding problems; (3) inspected underground bunkers to verify the adequacy of: (a) sump pumps, (b) level alarm circuits, (c) cable splices subject to submergence, and (d) drainage for bunkers/manholes; (4) verified that operator actions for coping with flooding can reasonably achieve the desired outcomes; and (5) walked down the one below listed area to verify the adequacy of: (a) equipment seals located below the floodline, (b) floor and wall penetration seals, (c) watertight door seals, (d) common drain lines and sumps, (e) sump pumps, level alarms, and control circuits, and (f) temporary or removable flood barriers.

- August 13, 2007: Units 1 and 2 Intake structure and auxiliary saltwater pump vaults

Documents reviewed by the inspectors included PG&E, Probabilistic Risk Assessment Calculation File No. F.4 , PRA Internal Floods Analysis, Revision 1

The inspectors completed one external flooding sample.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)

a. Inspection Scope

On September 20, 2007, the inspectors observed a licensed operator evaluation to identify deficiencies and discrepancies in the training to assess operator performance, and to assess the evaluator's critique.

Documents reviewed by the inspectors included Lesson ECA3132-A, "SGTR With Faulted Steam Generator," Revision 12.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

.1 Routine Maintenance Effectiveness Inspection

a. Inspection Scope

The inspectors reviewed the below listed maintenance activity to: (1) verify the appropriate handling of structure, system, and component (SSC) performance or condition problems; (2) verify the appropriate handling of degraded SSC functional performance; (3) evaluate the role of work practices and common cause problems; and (4) evaluate the handling of SSC issues reviewed under the requirements of the Maintenance Rule, 10 CFR Part 50, Appendix B, and the TSs.

- August 9, 2007: Unit 1, Failure of Main Turbine Stop Valve FCV-146

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

b. Findings

Introduction. The inspectors identified a self-revealing finding after an adequate main turbine repair procedure resulted in an unplanned power reduction and forced outage of Unit 1.

Description. PG&E failed to develop an adequate main turbine maintenance procedure resulting in an unplanned load reduction and a reactor shutdown. On August 9, 2007, plant operators observed that the Unit 1 generator output had decreased by 60MW. On August 11, PG&E shut down the reactor to investigate the cause of the load reduction.

The licensee determined that the load reduction resulted from inlet steam blockage after the disc on Turbine Stop Valve FCV-146 uncoupling from the stem. The disc uncoupled because the stem nut assembly failed. The stem nut failed due to the flow induced vibration caused by the failure of the stop valve to properly back-seat during power operations. The stop valve did not properly back-seat because the maintenance personnel failed to properly adjust the external travel stop during the turbine maintenance performed during the June 2004 refueling outage. The inspectors concluded that the travel stop was not properly adjusted because Procedure MP M-4.20, "HP Turbine Stop Valve Maintenance," Revision 12, did not require maintenance personnel to first verify that the disc was properly back seated against the internal stop during adjustment. Procedure ADI.ID1, "Nuclear Generation Procedures," required that procedures be written to clearly state any special limits, tolerances and other requirements in the design and licensing bases, vendor manuals and other documents.

Analysis. The failure of PG&E to develop an adequate procedure for the main turbine stop valve maintenance was a performance deficiency. The inspectors concluded that the finding is greater than minor because less than adequate turbine maintenance procedure, if left uncorrected, would become a more significant safety concern. Using Inspection Manual Chapter 0609, Significance Determination Process," Phase 1 Worksheet, the inspectors determined the finding to have very low safety significance because the condition did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. This finding has a crosscutting aspect in the area of human performance, associated with the resources component because PG&E failed to provide an adequate main turbine maintenance procedure (H.2.c).

Enforcement. This issue was entered into the licensee's corrective program as Non-Conformance Report N0002219. No violation of NRC requirements occurred because the turbine maintenance procedure, Procedure MP M-4.20, was neither Technical Specifications (TS) or quality related (FIN 05000275/2007004-01, Inadequate main turbine repair procedure resulted in an unplanned power reduction and forced outage).

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)

.1 Risk Assessments and Management of Risk

a. Inspection Scope

The inspectors reviewed the removal of the 230 kV transmission line while Transformer 2-1 was out of service on July 24, 2007. The inspectors conducted the review to verify: (1) performance of risk assessments when required by 10 CFR 50.65(a)(4) and licensee procedures prior to changes in plant configuration for maintenance activities and plant operations; (2) the accuracy, adequacy, and completeness of the information considered in the risk assessment; (3) that PG&E recognizes, and/or enters as applicable, the appropriate risk category according to the risk assessment results and licensee procedures; and (4) PG&E identified and corrected problems related to maintenance risk assessments.

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

.2 Emergent Work

a. Inspection Scope

The inspectors: (1) verified that PG&E performed actions to minimize the probability of initiating events and maintained the functional capability of mitigating systems and barrier integrity systems; (2) verified that emergent work related activities such as troubleshooting, work planning/scheduling, establishing plant conditions, aligning equipment, tagging, temporary modifications, and equipment restoration did not place the plant in an unacceptable configuration; and (3) reviewed the FSAR Update to determine if PG&E identified and corrected risk assessment and emergent work control problems.

- August 14, 2007: Unit 2, Control Room Ventilation Condenser CR-37 motor replacement with inoperable Condenser CR-38

Documents reviewed by the inspectors included Procedure AD7.DC6, "On-line Maintenance Risk Management," Revision 9.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors: (1) reviewed plant status documents such as operator shift logs, emergent work documentation, deferred modifications, and standing orders to determine if an operability evaluation was warranted for degraded components; (2) referred to the FSAR Update and design bases documents to review the technical adequacy of the operability evaluations; (3) evaluated compensatory measures associated with operability evaluations; (4) determined degraded component impact on any TS; (5) used the Significance Determination Process to evaluate the risk significance of degraded or inoperable equipment; and (6) verified that PG&E has identified and implemented appropriate corrective actions associated with degraded components.

- August 28, 2007: Degraded Startup Power
- September 12, 2007: Units 1 and 2, Degraded residual heat removal and containment spray motor operated valves
- September 19, 2007: Unit 1, Degraded Auxiliary Feedwater Pump 1-2

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed three samples.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17)

a. Inspection Scope

From September 10-14, 2007, the inspectors reviewed seven permanent plant modification packages and associated documentation, such as implementation reviews, safety evaluation applicability determinations, and screening, to verify that they were performed in accordance with regulatory requirements and plant procedures. The inspectors also reviewed the procedures governing plant modifications to evaluate the effectiveness of the program for implementing modifications to risk significant SSCs, such that these changes did not adversely affect the design and licensing basis of the facility.

Further, the inspectors interviewed the cognizant design and system engineers for the identified modifications as to their understanding of the modification packages and process.

The inspectors evaluated the effectiveness of the licensee's corrective action process to identify and correct problems concerning the performance of permanent plant modifications by reviewing a sample of related condition reports.

The inspection procedure specifies that the inspector should review a minimum of five sample permanent plant modifications.

The inspectors completed seven samples.

Documents reviewed by the inspectors are listed in the attachment.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors selected the three below listed postmaintenance test activities of risk significant systems or components. For each item, the inspectors: (1) reviewed the applicable licensing basis and/or design basis documents to determine the safety functions; (2) evaluate the safety functions that may have been affected by the maintenance activity; and (3) reviewed the test procedure to ensure it adequately tested the safety function that may have been affected. The inspectors either witnessed or reviewed the test data to verify that acceptance criteria were met, plant impacts were evaluated, test equipment was calibrated, procedures were followed, jumpers were properly controlled, the test data results were complete and accurate, the test equipment was removed, the system was properly realigned, and deficiencies during testing were documented. The inspectors also reviewed the FSAR Update to determine if PG&E identified and corrected problems related to post-maintenance testing.

- July 12, 2007: Unit 2, Preventive maintenance on Auxiliary Feedwater Pump Discharge Level Control Valves LCV-113 and LCV-115
- August 30, 2007: Unit 1, Replacement of Component Cooling Water Pump 1-2 motor
- September 21, 2007: Unit 2, Corrective maintenance of Reactor Vessel Cavity Sump Level Detector LT-62

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed three samples.

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities (71111.20)

a. Inspection Scope

The inspectors reviewed the plan for the Unit 1 shutdown and repair of the damaged Turbine Stop Valve 1-FCV-146 to verify that PG&E appropriately considered risk, industry experience and previous site specific problems. The inspection was focused on potential deficiencies with plant shutdown and startup, availability of required electrical sources, and maintenance and repair activities.

The inspectors completed one forced outage sample.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed the FSAR Update, procedure requirements, and TSs to ensure that the below listed surveillance activities demonstrated that the SSCs tested were capable of performing their intended safety functions. The inspectors either witnessed or reviewed the test data to verify that the following significant surveillance test attributes were adequate: (1) preconditioning; (2) evaluation of testing impact on the plant; (3) acceptance criteria; (4) test equipment; (5) procedures; (6) jumpers; (7) test data; (8) testing frequency and method demonstrated TS operability; (9) test equipment removal; (10) restoration of plant systems; (11) fulfillment of American Society of Mechanical Engineers Code requirements; (12) updating of performance indicator data; (13) engineering evaluations, root causes, and bases for returning tested SSCs not meeting the test acceptance criteria were correct; (14) reference setting data; and (15) annunciators and alarm setpoints. The inspectors also verified that PG&E identified and implemented any needed corrective actions associated with the surveillance testing.

- July 6, 2007: Unit 2, Inservice testing of Auxiliary Saltwater Pump 2-2
- September 5, 2007: Unit 1, Secondary side calorimetric
- September 23, 2007: Unit 1, Diesel generator 1-1, 2- hour surveillance
- September 22, 2007: Unit 2, Reactor coolant system leak rate test

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed two routine, one reactor coolant system leakage, and one pump inservice test samples.

b. Findings

No findings of significance were identified.

1EP2 Alert Notification System Testing (71114.02)

a. Inspection Scope

The inspectors discussed with PG&E staff the status of offsite siren and tone alert radio systems to determine the adequacy of the methods for testing the alert and notification system in accordance with 10 CFR Part 50 Appendix E. PG&E's alert and notification system testing program was compared with the criteria in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, Federal Emergency Management Agency (FEMA) Report REP-10, "Guide for the Evaluation of Alert and

Notification Systems for Nuclear Power Plants," and PG&E's current FEMA approved alert and notification system design report. The inspectors also reviewed the following procedures:

- EP MT-35, "Site Emergency Signal Audibility Test," Revision 3A
- EP MT-43, "Early Warning System Testing and Maintenance," Revision 8
- EWS Maintenance-Test-Operations Guidance, Revision 6

The inspectors completed one sample during the inspection.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization Augmentation (71114.03)

a. Inspection Scope

The inspectors discussed with PG&E staff the status of primary and backup systems for augmenting the on-shift emergency response staff to determine the adequacy of the methods for staffing emergency response facilities. The inspectors reviewed the following documents related to the emergency response organization augmentation system to evaluate PG&E's ability to staff the emergency response facilities in accordance with the licensee emergency plan and the requirements of 10 CFR Part 50 Appendix E:

- Evaluation Report for the 2006 Recall Drill
- 2007 ERO On-Call Schedule
- EP-G-3, "Interim Emergency Response Organization," Revision 31
- OM 0.DC2, "Emergency Response Organization On Call," Revision 4

The inspectors completed one sample during the inspection.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

a. Inspection Scope

The inspectors reviewed PG&E's CAP requirements in procedures OM7.ID1, "Problem Identification and Resolution, Action Requests," Revision 23, and OM7.ID4, "Root Cause Analysis and Apparent Cause Evaluations," Revision 9. The inspectors reviewed summaries of 448 action requests identified by or assigned to the emergency preparedness department between November 2005 and June 2007, and selected 29 for detailed review against the program requirements. The inspectors evaluated the response to the corrective action requests to determine that PG&E's ability to identify,

evaluate, and correct problems are in accordance with the licensee program requirements and 10 CFR Part 50.47(b)(14) and 10 CFR Part 50 Appendix E. The inspectors also reviewed other documents listed in the attachment to this report.

The inspectors completed one sample during the inspection.

b. Findings

No findings of significance were identified.

1EP6 Force-On-Force (FOF) Exercise Evaluation (71114.07)

a. Inspection Scope

For the exercise below, the inspectors: (1) observed the evolution to identify any weaknesses and deficiencies in classification, notification, and the protective action requirements development activities, and (2) reviewed the identified weaknesses and deficiencies against licensee-identified findings to determine whether PG&E is properly identifying deficiencies.

- August 8, 2007, Force-on-Force Drill, Day 2

The inspectors completed one sample during the inspection.

Documents reviewed by the inspectors are listed in the attachment.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification (71151)

Cornerstone: Emergency Preparedness

a. Inspection Scope

The inspectors reviewed licensee evaluations for the three emergency preparedness cornerstone performance indicators of Drill and Exercise Performance, Emergency Response Organization Participation, and Alert and Notification System Reliability, for the period from October 1, 2006, through June 30, 2007. The definitions and guidance of NEI 99-02, “Regulatory Assessment Indicator Guideline,” Revisions 2 through 4, and PG&E Procedure, AWP-EP-001, "Emergency Preparedness Performance Indicators," Revision 8, were used to verify the accuracy of the licensee’s evaluations for each performance indicator reported during the assessment period.

The inspectors reviewed a 100 percent sample of drill and exercise scenarios and licensed operator simulator training sessions, notification forms, and attendance and critique records associated with training sessions, drills, and exercises conducted during the verification period. The inspectors reviewed 13 selected emergency responder qualification, training, and drill participation records. The inspectors reviewed alert and notification system testing procedures, maintenance records, and a 100 percent sample of siren test records. The inspectors also reviewed other documents listed in the attachment to this report.

The inspectors completed one sample during the inspection.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Review of Identification and Resolution of Problems

a. Inspection Scope

The inspectors performed a daily screening of items entered into the corrective action program. This assessment was accomplished by reviewing action requests and event trend reports, and attending daily operational meetings. The inspectors: (1) verified that equipment, human performance, and program issues were being identified by PG&E at an appropriate threshold and that the issues were entered into the corrective action program; (2) verified that corrective actions were commensurate with the significance of the issue; and (3) identified conditions that might warrant additional follow-up through other baseline inspection procedures.

b. Findings

No findings of significance were identified.

.2 Selected Issue Follow-Up Inspection

a. Inspection Scope

In addition to the daily screening, the inspectors conduct an in-depth review of Action Request A070680, September 10, 2007, related to a fuel handling error. The inspectors considered the following during the review of PG&E's actions: (1) complete and accurate identification of the problem in a timely manner; (2) evaluation and disposition of operability/reportability issues; (3) consideration of extent of condition, generic implications, common cause, and previous occurrences; (4) classification and prioritization of the resolution of the problem; (5) identification of root and contributing causes of the problem; (6) identification of corrective actions; and (7) completion of corrective actions in a timely manner.

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one in-depth review sample.

b. Findings

The inspectors reviewed a licensee-identified Green noncited violation of TS 5.4.1.a, Procedures. A discussion of this non compliance is provided in Section 4OA7 of this report.

.3 Annual Sample Review

a. Inspection Scope

The inspectors selected three root cause analyses and 39 action requests for detailed review. The reports were reviewed to ensure that the full extent of the issues were identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized. The inspectors evaluated the action requests against the requirements of licensee Procedures OM7.ID1, "Problem Identification and Resolution, Action Requests," Revision 23, and OM7.ID4, "Root Cause Analysis and Apparent Cause Evaluations," Revision 9.

The inspectors completed one in-depth annual trend review sample.

b. Findings

No findings of significance were identified.

4OA5 Other

.1 (Closed) Unresolved Item 05000275; 05000323/2006005-01: Additional review of material to determine if the residual heat removal heat exchangers will meet their safety function.

The inspectors had questioned whether PG&E had implemented adequate design control measures to demonstrate that the residual heat removal heat exchangers could perform their design safety function. The inspectors questioned whether the heat exchangers required testing to validate the design calculations and found out that PG&E did not perform the flow verification for each cooler under the Surveillance Test Program. PG&E adjusted the flow through the containment fan cooler units and validated the flow rated for the remaining heat exchangers and coolers by analysis.

During the in-office review, the inspectors determined that PG&E: (1) had established an appropriate method to ensure that the required heat loads supplied by CCW would receive their design basis flow and (2) had provided information that the residual heat removal heat exchangers could perform their design basis heat removal function. The inspectors verified that both the reactor coolant system and the closed-loop CCW system had good chemistry controls and had not been contaminated. Consequently,

the inspectors concluded that no additional testing would be required, as described in the Generic Letter 89-13, Supplement 1, "Service Water System Problems Affecting Safety-Related Equipment."

During discussions with design engineering, PG&E agreed that the description in the FSAR Update did not clearly or accurately describe the system operation and response. PG&E initiated an AR A0704443 to document this deficiency and indicated that they would clarify the description.

Documents reviewed by the inspectors are listed in the attachment.

This unresolved item is closed.

40A6 Meetings, Including Exit

Exit Meeting Summary

On July 12, 2007, the inspectors presented the inspection results on emergency preparedness to Mr. J. Becker, Vice President and Station Director, Diablo Canyon Operations, and other members of his staff, who acknowledged the findings.

On July 25, 2007, the inspector conducted a telephonic meeting with Mr. C. Dougherty, Senior Engineer, Regulatory Services, to discuss the final characterization of one inspection issue on emergency preparedness.

On September 14, 2007, the inspectors presented the results on Inspection Procedure 71111.02, “Evaluations of Changes, Tests, or Experiments,” and Inspection Procedure 71111.17, “Permanent Plant Modifications,” to Ms. D. Jacobs, Vice President, Nuclear Services, and other members of licensee management. The licensee's management acknowledged the issues and observations presented.

On September 18, 2007, the inspectors discussed the results of their additional review of the material to determine if the residual heat removal heat exchangers would have met their safety function with Mr. S. Hamilton, Supervisor Regulatory Services. The inspectors returned all proprietary information to PG&E.

On October 3, 2007, the resident inspection results were presented to Mr. John Conway, Site Vice President and other members of PG&E management. PG&E acknowledged the findings presented.

In each case, the inspectors asked PG&E whether any materials examined during the inspection should be considered proprietary. Proprietary information was reviewed by the inspectors and left with PG&E at the end of the inspection.

4OA7 Licensee-Identified Violations

One very low safety significance (Green) violation of NRC requirements was identified by PG&E. This violation met the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a noncited violation.

- The inspectors reviewed one noncited violation of Technical Specification Procedure 5.4.1.a, after PG&E failed to adequately implement a fuel handling procedure. On September 10, 2007, operations personnel began moving the Unit 2 fuel handling bridge while a spent fuel assembly was still attached and partially inserted into the fuel rack. A second operator identified that the fuel assembly was still latched and alerted the bridge operator to stop the bridge prior to damaging the affected fuel assembly. Operating Procedure, "OP B-8H, Spent Fuel Pool Work Instructions," Section 6.2, required the operator to use the load cell to verify that the fuel assemble is disengaged prior to moving the bridge. Contrary to the above, the operator failed to use the load cell and to verify that the fuel assemble was disengaged prior to moving the bridge.

  Pacific Gas and Electric determined that plant operations had not established a qualification process or standard for fuel handlers. None of the operations personnel involved, including the fuel handling senior reactor operator, had previously performed fuel handling activities. Contributing to the event was poor communications between the operators and that the supervisor was physically involved in latching the fuel assembly rather than overseeing the work. The inspectors determined that the finding was of very low safety significance because there was no damage to the fuel assembly. This event was documented in PG&E's corrective action program as AR A0706980.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

PG&E personnel

J. Becker, Vice President - Diablo Canyon Operations and Station Director
J. Che, Transient and Accident Analysis Engineer
S. Hamilton, Supervisor, Regulatory Services
R. Hite, Manager, Radiation Protection
D. Jacobs, Vice President - Nuclear Services
S. Ketelsen, Manager, Regulatory Services
K. Langdon, Director, Operations Services
R. Lovell, Senior Nuclear Engineer
M. Meko, Director, Site Services
K. Peters, Director, Engineering Services
J. Purkis, Director, Maintenance Services
P. Roller, Director, Performance Improvement
D. Taggart, Manager, Quality Verification
R. Waltos, Manager, Emergency Preparedness

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000275/2007004-01	FIN	Inadequate main turbine repair procedure resulted in an unplanned power reduction and forced outage (Section 1R12)

Closed

05000275; 05000323/2006005-01	URI	Additional review of material to determine if the residual heat removal heat exchangers will meet their safety function (Section 4OA5)

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather (71111.01)

Action Requests

A0630103	A0637539	A0696383	A0702280	A0694274	A0706593
A0706432	A0706465	A0701118	A0705543		

Drawings

Number	Title	Revision
102023	480 Switchgear Room Ventilation System Supply & Exhaust, Sheet 13A	1

Procedures

Number	Title	Revision
AR PK15-05	Ambient Air Temperature	16
AR PK15-09	Electrical Rooms Temp Monitor	27
AR PK15-10	ESF Rooms Temp Monitor	16
OP H-10:1	Auxiliary Building Switchgear Ventilation – System	28
CP M019	Temporary Ventilation for the Control Room, Inverter/Charger Rooms and 480V Vital Switchgear Rooms	
OP J-2:VIII	Guidelines for Reliable Transmission Service for DCPP	13
B-1	Communications with Generation and Transmission Organizations	13
OP O-28	Intake Management	9

Other Documents

Title	Date/Revision
FSAR Section 9.4.8	

Section 1R02: Evaluations of Changes, Tests, or Experiments(71111.02)

Screens

Number	Title	Date
S-2006-047	Evaluation of Molded Case Circuit Breakers for 460 VAC Class 1E Motors	08-31-06

S-2006-060	Evaluation of Thermal Overload Relay Settings for 460VAC Class 1E motors	12-29-06
S-2006-043	Pressurizer heater cable insulation constituent quantities	11-29-06
S-2005-070	Emergency Diesel Generator Starting Air System	7-07-05
S-2006-004	PG&E Transmission Organization Special Protection Scheme	3-31-06
S-2006-009	CALC 235T-DC Class 1E Battery Capability During Discharge	10-24-06
S-2006-024	Class 1E Non-motor Protection Device Setting Calculation	8-3-26
S-2006-025	Supplemental LBIE Screen per Action Request A0677849	9-26-06
S-2006-031	CALC 235T-DC Class 1E Battery Capability During Discharge	10-24-06
S-2006-033	Emergency Diesel Generator Fuel Oil Storage	9-21-06
S-2006-034	Calculation of Unit 2 Containment Aluminum/Zinc after 2R12	9-21-06
S-2006-044	Evaluation of Molded Case Circuit Breakers for 460VAC Class 1E Motors	12-19-06
S-2006-045	Thermal Overload Settings for Class 1E Motors	11-17-06
S-2006-046	Evaluation of Thermal Overload Relay Settings for 460 VAC Class 1E Motors	8-31-06
S-2006-053	FCV-355 Spurious Closure	12-21-06
S-2006-057	Thermal Overload Settings for Class 1E Motors	11-17-06
S-2006-058	Backup Air/Nitrogen Supply Component Changes to AOV's	12-20-06
S-2006-061	Evaluation of Molded Case Circuit Breakers for 460VAC Class 1E Motors	12-19-06
S-2007-010	Evaluation of Thermal Overload Relay Settings for 460 VAC Class 1E Motors	12-27-06
S-2007-011	Thermal Overload Settings for Class 1E 460V MOV Motors	12-27-06
S-2007-023	FP-2-499: Replace Valve Using Freeze Seal	3-13-07

50.59 Evaluation

Number	Title	Date
2005-008	Replace Digital Feedwater Control System (DFWCS)	10-12-05
2006-010	Replace Digital Feedwater Control System (DFWCS)	7-13-06
2007-003	Replace the PDP with a new Centrifugal Charging Pump	3-2-2007
2006-014	Positive Displacement Pump	12-21-06

2005-009	Upflow Conversion and Upper Head Temperature Reduction	10-7-05
2006-001	Replacing E-Bar with DEX as a RCS indicator for Emergency Action Levels	12-19-05
2006-004	PG&E Transmission Organization Special Protection Scheme	3-31-06

Calculations

Number	Title	Date
195A-DC	Thermal Overloads for Class 1E Motors	4
235T-DC	Class 1E,Battery Capability Calculation During Discharge	0
M-786	EDG Fuel Oil Storage	15
M-1098	Pressurizer heater cable insulation constituent quantities for post-LOCA RHR sump screen debris generation analyses	0
J-002	Review of Backup Air/Nitrogen	11

Drawings

Number	Title	Date
106714, Sheet 2	Component Cooling Water System	56
106714, Sheet 7	Misc. CCW Header “C” Components	53
106714, Sheet 8	Misc. CCW Header “C” Components	55

Action Requests

A0707165	A0707166	A0707178	A0707328	A0632073	A0668408

Procedures

Number	Title	Revision
DCM S-25B	Backup Air/Nitrogen Supply System	11
TS3-ID2	License Basis Impact Evaluations	21A

Section 1R04: Equipment Alignment (71111.04)

Action Requests

A0623895	A0658946	A0659035	A0663591	A0665413	A0667567
A0670012	A0670015	A0671864	A0678838	A0684968	A0687113

A0621626	A0671529	A0680078	A0689732	A0689659	A0683442

Drawings

Number	Title	Revision
102018	Unit 1 Fire Protection Systems, Sheet 3	85
102033	Fire Water Storage Tank Instrumentation, Sheet 25A	87
106703	Unit 1 Feedwater, Sheet 3	71
107703	Unit 2 Feedwater, Sheet 3	50
108630	Drag Valve 2-900 lb ANSI-SOC. Weld Tags LCV-106, LCV-107, LCV-108, LCV-109	G

Procedures

Number	Title	Revision
OP H-5:II	Control Room Ventilation System - Alignment Verification	16
EOP E-0	Reactor Trip or Safety Injection	31
EOP E-2	Faulted Steam Generator Isolation	16
CP M-4	Earthquake	23
OP F-2:I	Component Cooling Water System - Make Available	18

Other Documents

Title	Date/Revision
AFW System Health Report	February 2007
DCM S-3B, Auxiliary Feedwater System	15A
System Training Guide I-3: Seismic Monitoring System	11

Section 1R12: Maintenance Effectiveness (71111.12)

Action Requests

A0261855	A0261857	A0704871	A0704958	A0704996	A0705260
A0705334					

Procedures

Number	Title	Revision
MP M-4.20	HP Turbine Stop Valve Maintenance	15
MP M-4.20	HP Turbine Stop Valve Maintenance	16

Section 1R13: Maintenance Risk Assessments and Emergent Work Control (71111.13)

Action Requests

A0641560

Procedures

Number	Title	Revision
OP J-2:VIII	Guidelines for Reliable Transmission Service for DCPP	12
OP J-2:III	Starup Bank - Shutdown and Clearing	20

Section 1R15: Operability Evaluations (71111.15)

Action Requests

A0703244	A0703815	A0707262	A0707263	A0707264	A0707265
A0707266	A0707267	A0707268	A0707269	A0707270	A0707271
A0707272	A0707273	A0707274	A0707275	A0707276	A0707278
A0707279	A0707280	A0705844	A0706684		

Procedures

Number	Title	Revision
OP J-2:VIII	Guidelines for Reliable Transmission Service for DCPP	13

Number	Title	Revision
OM7.ID12	Operability Determination	10

Drawings

Number	Title	Revision
437543	Unit 1 480V System Bus Section H	46
437542	Unit 1 480V System Bus Section 1G	48
437916	Unit 1 480V System Bus Section 1F	45

Other Documents

Title	Date/Revision
Quality Verification Short Form Assessment #072620010	9/19/2007
Herguth Laboratories, Inc. Report: 1-03-M-PP-AFWP2 Pump O.B. Brng.	9/20/2007

Section 1R17: Permanent Plant Modifications(71111.17)

Design Change Packages

Number	Title	Revision/ Date
M-49704	Replacement of the Positive Displacement Pump	1
N-50449	Reactor Vessel Internal Configuration Change	0
2-SJ-050731	Design Change Summary/Digital Feedwater Control System (DFWCS) Replacement	0
E-049490	Design Change Summary/Existing starter, overload relay, and overload auxiliary relay (FCV-95)	1
E-49872	Design Change Summary/Polar Crane Gantry Drive Upgrade	0
M-50807	Replace Diesel Engine Generator Lube Oil Heater & Controller	2/16/07
(Not available)	Diablo Canyon Special Protection Scheme Modification	3/14/06

Audits

Number	Title	Date
DA 2007-07	NUPIC - Morris Material Handling	3-19-07

071220010	Third-Party Supplier Quality Assurance Program Qualification (Morris Material Handling)	4-30-07
060130017	Third-Party Supplier Quality Assurance Program Qualification (Morris Material Handling)	1-13-06

Procedures

Number	Title	Revision
AD9.ID6	Evaluation, Selection, and Control of Suppliers of Items, and Services	4
CF3.ID9	Design Change Development	30
CF4.ID3	Modification Implementation	20
CF4.ID4	Field Change Process	12

Miscellaneous

Number	Title	Revision
DCL-06-079	10CFR 50.46 Emergency Core Cooling System Evaluation Model Changes	6-20-06
DCL-06-006	License Amendment Request 06-02, Revision to Technical Specification 5.6.5, “Core Operating Limits Report (COLR)”	1-13-06
DCL-06-088	10 CFR 50.46 Annual Report for 2005 of Emergency Core Cooling System Evaluation Model Changes	7-24-06
DCL-07-071	10 CFR 50.46 Annual Report of Emergency Core Cooling System Evaluation Model Changes for 2006	7-23-07

Section 1R19: Postmaintenance Testing (71111.19)

Action Requests

A0706246 A0706247 A0706248 A0706287

Procedures

Number	Title	Revision
STP V-3P6B	Exercising Valves LCV-115 and 113 Auxiliary Feedwater Pump Discharge	16
STP P-AFW-23	Routine Surveillance Test of Motor-Driven Auxiliary Feedwater Pump 2-3	16
STP P-CCW-A	Performance Test of Component Cooling Water Pumps	7

Other Documents

Title	Date/Revision
Hydromotor Testing Data Sheet FW-2-LCV-113	2/22/2005
Recurring Task Activity R0299961	7/11/2007
Recurring Task Activity R0300431	7/11/2007

Section 1R22: Surveillance Testing (71111.22)

Action Requests

A0688735 A0690766 A0692120 A0696601 A0706635

Procedures

Number	Title	Revision
STP P-ASW-22	Routine Surveillance Test of Auxiliary Saltwater Pump 2-2	20
STP R-2B1	PPC Operator Heat Balance	22
STP-I-1B	Routine daily Checks Required by License	83
STP-M-9A	Diesel Engine Routine Surveillance Test	74
STP-M-9G	Diesel Generator 24 Hour Load Test and Hot Restart Test	41
PEP M-98A	Setting Final Feedwater Flow Nozzles by “AMAG” Crossflow	17

Section 1EP5: Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

2006 DCPP Emergency Preparedness Program 50.54(t) Review

2007 Emergency Plan 50.54(t) Assessment, March 13, 2007

EP Event Summary Report for NUE-23 Declared 12/12/06

Procedures

Number	Title	Revision
AWP EP-004	10CFR50.54(q) Guidance	1
OM7.ID3	Root Cause Investigations, Root Cause Team	16A
OM10.ID1	Maintaining Emergency Preparedness	5 & 6
OM10.ID2	Emergency Plan Revision and Review	9
TS3.ID2	Licensing Basis Impact Evaluations	21A

Action Requests

A0651382	A0653733	A0656053	A0657702	A0658306	A0660254
A0660371	A0661069	A0661309	A0661432	A0661944	A0662502
A0663900	A0665069	A0666116	A0666813	A0670468	A0672086
A0672770	A0672772	A0673332	A0673461	A0674368	A0675270
A0675287	A0677537	A0679241	A0680984	A0680471	A0681088
A0683602	A0684019	A0685037	A0685039	A0688337	A0695123
A0702982	A0702984	A0702985			

Root Cause Analyses

NCR N0002200 NCR N0002215 NCR N0002199

Drill Schedules

2005, 2006, 2007

Drill Evaluation Reports

FEMA Evaluation Report, Medical Services Drill conducted May 19, 2005
Training and Qualification Tabletop Drill, conducted March 7, 2007
Integrated Consequences Drill, conducted July 13, 2005
Team C Drill, conducted September 14, 2005
Team C Remedial Drill, conducted September 23, 2005
Medical Drill, conducted June 23, 2006
Alpha/Bravo Team Full Scope Drill, conducted June 1, 2006
ERO Drill, conducted Aug 9, 2006
Team C Drill, conducted September 7, 2006

Emergency Planning Health Reports

4Q2006 1Q2007 2Q2007

Quick Hit Self Assessment for EP Drill and Exercise Performance Indicator, January 2006

Emergency Preparedness 10 CFR 50.54(t) Guidelines, Guidance 7, Interface with Offsite Agencies

Offsite Emergency Worker Training Summary for Diablo Canyon Nuclear Power Plant, January 1, 2006 to December 31, 2006

Emergency Planning Coordinator Qualification Guide, Revision 5

Emergency Planning Supervisor Qualification Guide, Revision 0

EP Coordinator Qualification Process (2007 DCPP Business Plan)

Section 1EP6: Force-On-Force (FOF) Exercise Evaluation (71114.07)

Procedures

Number	Title	Revision
CP M-15A	Site Specific Security Threat – Initial Response	4
CP M-15B	Subsequent Actions for a Site Specific Security Threat	2
CP M-15C	Homeland Security Advisory Non-Plant Specific Threat	0
SP 618	Implementation of Two-Person Rule – Vital Areas	4
EP G-1	Emergency Classification and Emergency Plan Activation	35
EP G-3	Emergency Notification of Off-Site Agencies	47

Other Documents

Title	Date/Revision
Completed DCPP Emergency Notification Form (EP G-3 Attachment 6.2)	9/14/2004

Section 4OA1: Performance Indicator (PI) Verification (71151)

Procedures

Number	Title	Revision
OM10.DC4	Emergency Classifications and Notifications	0
XI1.DC1	Collection and Submittal of NRC Performance Indicators	7
EP-G-2	Interim Emergency Response Organization	31
EP-G-3	Emergency Notification of Offsite Agencies	47

Procedure III.02A, "Watch Commander," Checklist 1, "Notification of an Emergency Condition," San Luis Obispo County NPPERP, August 2006

Miscellaneous Documents

Diablo Canyon Emergency Plan, Revision 4-06

Section 4OA2: Identification and Resolution of Problems (71152)

Action Request

A0652368 A0675020 A0678937 A0690981 A0697113 A0701368 A0706980

Procedures

Number	Title	Revision
TS6.ID2	Control and Accountability of Special Nuclear Material	16
OP B-8H	Spent Fuel Pool Work Instructions	21
OP B-8H	Spent Fuel Pool Work Instructions	22
OP B-8DS2	Core Loading	35
OP B-8DS2	Core Loading	36

Miscellaneous

Title	Date/Revision
Nonconformance Report N0002202 “Fuel Assembly Improperly Loading During 1C14 Core Reload”	05/29/2007
Nonconformance Report N0002193 “Adverse Trend/Errors that Affect Reactivity/Fuel	01/25/2007

Other Documents

2007 Operations Technical Specifications Audit, July 10 - August 8, 2007

Section 4OA5: Other Activities (71111.07B (OA))

Procedures

Number	Title	Revision
STP V-13A	CCW Flow Balancing	15

Calculations

Number	Title	Revision/Date
M-1017	Component Cooling Water System	3
PGE-96-590	Diablo Canyon Uprating Program RHR Cooldown Performance	July 18, 1996 (proprietary)

Other Documents

Title	Revision/Date
Regulatory Guide 1.68, "Initial Test Programs For Water-Cooled Nuclear Power Plants,"	1
Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment,"	July 18, 1989
Generic Letter 89-13, Supplement 1, "Service Water System Problems Affecting Safety-Related Equipment,"	April 4, 1990
Updated Final Safety Analysis Report Sections 5.5.6, 6.2.2 and 9.2.2	
Component Cooling Water System Flow Balance Design Basis White Paper	
ASME OM-SG-2000, Part 2, "Requirements for Performance Testing of Nuclear Power Plant Closed Cooling Water Systems"	

LIST OF ACRONYMS

ADAMS	agency document and management system
AFW	auxiliary feedwater
AR	action request
CCW	component cooling water
CFR	*Code of Federal Regulations*
FSAR	Final Safety Analysis Report
IMC	Inspection Manual Chapter
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records System
PG&E	Pacific Gas and Electric Company
TS	Technical Specifications