

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION IV 612 EAST LAMAR BLVD, SUITE 400 ARLINGTON, TEXAS 76011-4125

December 30, 2008

John T. Conway Senior Vice President & Chief Nuclear Officer Pacific Gas and Electric Company P.O. Box 3 Mail Code 104/6/601 Avila Beach, CA 93424

SUBJECT: DIABLO CANYON POWER PLANT – NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000275/2008008; 05000323/2008008

Dear Mr. Conway:

On November 20, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed the on-site portion of a team inspection at your Diablo Canyon Power Plant. The enclosed inspection report documents the inspection findings, which were discussed on November 20, 2008, with Mr. K. Peters and other members of your staff during an exit meeting.

This inspection reviewed activities conducted under your license as they relate to the identification and resolution of problems, compliance with the Commission's rules and regulations, and the conditions of your operating license. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel. The team also interviewed a representative sample of personnel regarding the condition of your safety conscious work environment at the Diablo Canyon Power Plant.

The inspection team reviewed approximately 400 action requests and notifications, associated apparent cause evaluations and non-conformance reports, and other supporting documentation to assess the processes for the identification and resolution of problems at Diablo Canyon Power Plant. Based on these reviews, the team concluded that Diablo Canyon Power Plant had a generally effective corrective action program. In most cases, problems were identified at an appropriately low threshold and significant problems were adequately assessed and corrected. The team determined that the procedures and processes that implemented the various aspects of the corrective action program had been well established prior to October 1, 2008. However, these procedures and processes were not consistently followed. The team identified several samples of corrective actions that were limited in scope and not always carried through to completion. On October 1, 2008, a new corrective action program was implemented which similarly established appropriately low thresholds for identifying problems and sufficient processes for assessing and correcting these problems in a timely manner. However, at the

time of this inspection, these processes were too new for the team to provide a thorough evaluation of their effectiveness.

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On the basis of the approximately thirty interviews conducted during this inspection, observations of plant activities, and reviews of the corrective action and employee concerns programs, the team determined that site personnel were willing to raise safety issues to the attention of management by at least one of the available methods.

This report documents two NRC-identified findings of very low safety significance (Green). One of these findings was determined to involve a violation of NRC requirements. However, because of the very low safety significance and because it is entered into your corrective action program, the NRC is treating this finding as a non-cited violation (NCV), consistent with Section VI.A.1 of the NRC Enforcement Policy. If you contest either finding in this 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, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Diablo Canyon Power Plant.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if any, will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records 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/

Gregory Werner, Chief Plant Support Branch 2 Division of Reactor Safety

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

Enclosure:

NRC Inspection Report 05000275/2008008 and 05000323/2008008 w/Attachments: Supplemental Information, Information Requests

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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Dockets:	50-275, 50-323
Licenses:	DPR-80, DPR-82
Report:	05000275/2008008 05000323/2008008
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:	November 10-20, 2008
Inspectors:	E. Ruesch, Senior Reactor Inspector (Team Lead)M. Runyan, Senior Reactor AnalystM. Brown, Resident InspectorM. Baquera, Reactor InspectorG. Tutak, Reactor Inspector
Approved By:	G. Werner, Chief Plant Support Branch 2 Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000275/2008008; 05000323/2008008; 11/10/08 - 11/20/08; Diablo Canyon Power Plant: Identification and Resolution of Problems.

This team inspection was performed by a senior reactor inspector, a senior reactor analyst, a resident inspector, and two region-based reactor inspectors. Two findings of very low safety significance (Green) were identified during the inspection. One was classified as a non-cited violation (NCV), the other as a finding. 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's review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

Identification and Resolution of Problems

The inspection team reviewed approximately 400 action requests and notifications, associated apparent cause evaluations and non-conformance reports, and other supporting documentation to assess the processes for the identification and resolution of problems at Diablo Canyon Power Plant. The team also performed a five-year review of the auxiliary feed water system to determine whether problems were being effectively addressed. Based on these reviews, the team concluded that Diablo Canyon Power Plant had a generally consistent and effective corrective action program. In most cases, problems were identified at an appropriately low threshold and significant problems were adequately assessed and corrected. The team determined that, with the exception of the process for prioritization of issues, the procedures and processes that implemented the various aspects of the corrective action program were well established prior to October 1, 2008. However, these processes were not consistently followed. The team identified several samples of corrective actions that were limited in scope and not always carried through to completion. On October 1, 2008, the licensee established a new corrective action program which likewise established appropriately low thresholds for identifying problems and established sufficient processes for assessing, prioritizing, and correcting these problems in a timely manner. However, at the time of this inspection, these processes were too new for the team to provide a thorough evaluation of their effectiveness.

Overall, the team determined that the licensee had appropriately evaluated industry operating experience for relevance to the facility and had entered applicable items into the corrective action program.

Quality assurance audits were generally effective in identifying substantive issues and areas for improvement. However, several of the actions and recommendations generated from these audits were not acted on in a timely and thorough manner. Other self-assessment activities were narrowly focused and often did not identify any insightful issues concerning performance, limiting the value of the assessments.

On the basis of approximately thirty interviews conducted during and prior to this inspection, observations of plant activities, and reviews of the corrective action and employee concerns

programs, the team determined that site personnel were willing to raise safety issues to the attention of management. While several workers interviewed expressed a reluctance to report problems to management directly or to document issues in the corrective action program, all were willing to raise concerns to management attention by at least one of the several methods available.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

 <u>Green</u>. The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to properly implement housekeeping procedures to prevent seismically-induced system interactions. Specifically, the team identified two instances during a plant walk down where transient equipment was staged in the vicinity of safety-related equipment identified as seismically-induced system interaction targets. This transient equipment had not been analyzed to assess the risk to these safety-related components. Following identification by the team, licensee staff secured and analyzed the transient equipment. Licensee staff entered this finding into the corrective action program as Notifications 50084856 and 50084761.

The failure of plant personnel to follow the requirements to properly secure or analyze equipment in close proximity to sensitive equipment was a performance deficiency. The finding was more than minor because it was similar to Inspection Manual Chapter 0612, "Power Reactor Inspection Reports" Appendix E, Example 3.j., in that it was indicative of a significant programmatic deficiency in the licensee's Seismically-Induced System Interactions Program that could lead to worse errors if uncorrected. Specifically, a change in program ownership in 2006 resulted in a degradation of the sensitivity of plant personnel to the risk of seismically-induced system interactions due to transient materials, insufficient training of plant personnel on the program, and an absence of quality records over an approximately two-year period. Using Inspection Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to have very low safety significance because it did not result in an actual loss of a system safety function, did not result in a loss of a single train of safety equipment for greater than its technical specification allowed outage time, did not involve the loss or degradation of equipment specifically designed to mitigate a seismic, flooding, or severe weather initiating event, and did not involve the total loss of any safety function that contributes to an external event initiated core damage accident sequence. This finding has a cross-cutting aspect in the area of human performance associated with the work practices area component because the licensee failed to define and effectively communicate expectations regarding procedural compliance and personnel failed to follow procedures [H.4(b)] (Section 4OA2.a.3(a)).

Cornerstone: Public Radiation Safety

 <u>Green</u>. The team identified a finding for failure to take adequate corrective actions to correct adverse trends in control of radioactive and potentially contaminated material as required by the corrective action program. Specifically, between May 2005 and June 2008, the licensee on two occasions identified and failed to correct adverse trends in the control of radioactive and potentially contaminated material. Licensee staff entered this finding into the corrective action program as Notification 50085121.

The finding was more than minor because it affected the Public Radiation Safety cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain as a result of routine civilian nuclear reactor operation. Using Inspection Manual Chapter 0609 Appendix D, "Public Radiation Safety Significance Determination Process," the finding was determined to have very low safety significance because the dose impact to a member of the public was less than or equal to 0.005 rem total effective dose equivalent . The finding has a cross-cutting aspect in the area of problem identification and resolution, associated with the corrective action area component; because the licensee failed to thoroughly evaluate problems such that the resolution addressed the cause [P.1(c)] (Section 4OA2.a.3(b)).

B. Licensee-Identified Violations

None

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (71152B)

The team based the following conclusions, in part, on a review of issues that were identified during the assessment period, which ranged from June 15, 2006, (the last biennial problem identification and resolution inspection) to the end of the on-site portion of the inspection on November 20, 2008.

.a Assessment of Corrective Action Program (CAP) Effectiveness

.1 Inspection Scope

The team reviewed a sample of approximately 400 action requests and notifications. including associated root cause and apparent cause evaluations, from approximately 35,000 that had been initiated between June 2006 and November 2008 to determine if problems were being properly identified, characterized, and entered into the corrective action program for evaluation and resolution. The team reviewed work requests and attended the licensee's daily notification review team meeting to assess reporting thresholds, prioritization efforts, and significance determination processes, and to observe the corrective action program's interfaces with the operability assessment and work control processes. The team reviewed root cause and apparent cause evaluations to verify that the licensee considered the full extent of cause and extent of condition for problems and to determine how the licensee assessed generic implications and previous occurrences. The team assessed the timeliness and effectiveness of corrective actions, completed or planned, and looked for additional examples of similar problems. The team conducted interviews with plant personnel to identify other processes that may exist where problems may be identified and addressed outside of the corrective action program.

The team performed a five-year review of operability evaluations, equipment issues, and corrective actions associated with the auxiliary feed water system to determine whether problems were being effectively addressed. The team conducted a walk down of this system to assess the physical condition of equipment and to determine if problems were identified and entered into the corrective action process at an appropriate threshold.

During this inspection period, the licensee converted its corrective action program from its legacy Plant Information Management System (PIMS) to a new software tool called System's, Analysis and Programs (SAP). This conversion, which was completed on October 1, 2008, included the migration of all open action requests from PIMS to SAP; all closed action requests were archived in the PIMS system. The team performed a review of the processes used for this conversion and discussed associated procedural changes with licensee staff.

.2 <u>Assessments</u>

Effectiveness of Problem Identification

The team concluded that most problems were identified and documented in accordance with the licensee's corrective action program guidance and NRC requirements. Based on the approximately 35,000 action requests and notifications written during the period and on discussions with licensee personnel, the team concluded that although entry of issues into the corrective action program was not always accomplished in a timely manner, licensee staff generally identified problems at an appropriately low threshold. The team noted three exceptions to this conclusion, two specific and one general:

- On October 15, 2007, inspectors identified black soot on the Emergency Diesel Generator 1-1 exhaust manifold. Licensee personnel subsequently identified that one of four fasteners connecting the exhaust manifold to the turbo charger was missing. The soot buildup had been present since the last previous operation of the diesel generator on September 23, 2007. By procedure, plant operators were required to perform at least one inspection of the diesel generator each shift, to maintain awareness of equipment condition, and to report problems in a timely manner. This failure to identify a degraded condition was documented as noncited Violation (NCV) 2007005-01.
- During the walk down of the auxiliary feed water system, the team identified two instances of transient equipment that was neither secured nor analyzed as required by Procedure AD4.ID3, "SISIP Housekeeping Activities," Revision 6 (see 4OA2.a.3(a)). This procedure further requires that any identified deficiencies be promptly entered into the corrective action program. However, licensee personnel failed to enter one of the identified deficiencies into the corrective action program until prompted by the team.
- Through discussions and interviews with licensee personnel, the team determined that some personnel were reluctant to enter problems into the corrective action program (see 4OA2.d.2). Several personnel stated that the origination of issues in the corrective action program was the responsibility of their supervisors. Several others stated that due to their knowledge of improperly dispositioned issues, they had lost confidence in the corrective action program and were hesitant to use it to resolve issues. Further, while most of the interviewees stated that the corrective action program had a low threshold, almost none knew what the threshold was or where it could be found in plant procedures.

Effectiveness of Prioritization and Evaluation of Issues

The team determined that while the licensee was identifying most problems at an appropriately low threshold and that most conditions were assessed and ultimately corrected, the prioritization of issues within the corrective action program was deficient. Further, while the procedures and processes that implemented the various aspects of the corrective action program had been well established prior to October 1, 2008, these procedures and processes had not always been followed.

Although the licensee's legacy corrective action program provided a prioritization scheme, it was not used. Through interviews with licensee personnel, the team determined that licensee staff prioritized corrective actions based only on whether the issue had been identified as a "quality problem," not based on the assigned priority. The determination of whether an issue was a "quality problem" was made by the Action Request Review Team during their daily review of action requests. This quality problem determination did not address safety significance. Until late 2007, these determinations were made using guidance contained in an uncontrolled document referred to as the Action Request Review Team "Tribal Knowledge Document," which was noted on at least one occasion to directly conflict with quality-related procedures (Action Request A0637738). Further, issues were at times prioritized based on actual or potential regulatory consequences versus safety significance of the issue. Examples included:

- The quality problem statement for Action Request A0639139 determined the associated issue to be a quality problem, stating, "NRC non-cited violations (NCV) and licensee identified violations (LIV) events for 2002 through 2004 indicate a negative trend in violations due to increased numbers of events of the release of radioactive material from the radiologically controlled area."
- The quality problem statement for Action Request A0694780 stated, "The ARRT determined that this issue is a quality problem based on the possibility that further review by the NRC will result in a green non-cited violation. If the NRC review determines that the problem is minor and does not warrant a green non-cited violation, contact a member of the AR Review Team for a re-evaluation of the quality problem determination."
- The quality problem statement for Action Request A0703351 determined the associated issue to be a quality problem, stating, "There is a continuing negative trend in the NRC violations and plant events regarding the unauthorized release of radioactive material from the RCA."

On October 1, 2008, the licensee established a new corrective action program that procedurally established appropriately low thresholds for identifying problems and sufficient processes for assessing, prioritizing, and correcting these problems in a timely manner. This program put in place several tools and procedural changes that, if accompanied by changes in the licensee culture, have the potential to mitigate many of the prioritization and evaluation problems noted by the team. Further, procedures associated with the new corrective action program establish better and more objective

guidance on prioritization of issues. The team noted, however, during the observation of a Notification Review Team meeting, that these new procedures and expectations were at the time of the inspection still in the process of being implemented; they had not yet been fully embraced by licensee staff. Overall, these processes were too new for the team to provide a thorough evaluation of their effectiveness.

Effectiveness of Corrective Actions

While in most cases, problems were being identified at an appropriately low threshold, assessed, and corrected, the team identified numerous instances of untimely, inadequate, or ineffective corrective actions. The team noted that in March 2008, licensee management noted deficiencies in the implementation of the corrective action program by licensee staff, including the untimely resolution of issues. A root cause investigation (NCR N0002221) was initiated. During an August 2008 internal audit of the corrective action program, the licensee's quality verification department similarly concluded that there were deficiencies in corrective action program implementation.

The team determined that the licensee's corrective action process, including apparent cause evaluations, typically addressed issues as isolated instances and that issues were often not specifically evaluated for their cumulative impact or significance. The team noted that in many cases, corrective actions for identified issues were unnecessarily delayed and/or the recommended actions were changed to enable the licensee to meet timeliness goals. Examples included:

- In August 2006, Action Request A0675752 was initiated to address NRC Information Notice 2006-17, "Recent Operating Experience of Service Water Systems Due to External Conditions." When the licensee attempted to implement the recommended corrective actions, they were determined to be inadequate and put on hold. The action request was later closed with no actions taken. After being identified by the team, this issue was entered into the licensee's corrective action program as Notification 50084672.
- In May 2007, Action Request A0696350 was initiated to address NRC Information Notice 2007-17, "Fires at Nuclear Power Plants Involving Inadequate Fire Protection Administrative and Design Controls." Corrective actions included making changes to Procedure OM8.ID1, "Fire Loss Prevention." The implementation of these corrective actions, required by procedure to be accomplished within 180 days, was delayed several times to permit the development of formal training on the proposed procedural changes. When the procedural changes were implemented in April 2008, no formal training was conducted. The action request was closed in May 2008.
- In July 2007, as a result of a finding in an internal licensee audit of the radiation protection program, an apparent cause evaluation (Action Request A0703362) was initiated to address ineffective and untimely implementation of the corrective action program by radiation protection personnel. By procedure, this apparent

cause evaluation was required to be completed within 30 days. However, it was inappropriately delayed and was not completed until March 2008.

 In July 2007, as a result of a finding in an internal licensee audit of the radiation protection program, Action Request A0703351 was initiated to address an adverse trend in the release of radioactive material from the radiologically controlled area. The due date of the associated corrective actions was twice delayed and then closed in June 2008. The team determined that the corrective actions were inadequate and that the trend was inappropriately closed (see section 4OA2.a.3(b)).

The team reviewed a sample of condition reports that involved operability issues to assess the adequacy and timeliness of the operability assessment process. The team noted several operability review problems including inconsistent or incomplete engineering evaluations and unverified assumptions. Two NRC-identified NCVs were issued during the report period for operability-related issues:

- On two occasions between September 29 and November 9, 2006, operations and engineering personnel failed to address operability when using manual actions in place of automatic actions associated with the auxiliary building ventilation system (NCV 2006005-02).
- Between April 2006 and April 2007, in violation of its operability determination procedure, the licensee failed to complete a required prompt operability determination until approximately one year after the immediate operability determination was performed (NCV 2008003-02).

The team concluded that the licensee had an acceptable root cause determination process that was adequately implemented. Appropriate corrective actions were identified to address each cause and operating experience and off-site expertise were appropriately utilized during these evaluations. However, as previously discussed, these corrective actions were not always completed as recommended.

.3 Findings

(a) <u>Failure to Identify and Correct Violations of the Seismically-Induced Systems Interaction</u> <u>Program</u>

Introduction. The team identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to properly implement housekeeping procedures to prevent seismically-induced system interactions as required by the licensee's Seismically-Induced Systems Interaction Program (SISIP), which implements the requirements of Task II.C.3, "Systems Interactions," of NUREG-0660. Specifically, the team identified two instances during a plant walk down where transient equipment was staged in the vicinity of safety-related equipment identified as seismically-induced system interaction targets. This transient equipment had not been analyzed to assess the risk to these safety-related components. Following identification by the team, licensee staff secured and analyzed the transient equipment.

<u>Description</u>. On November 12, 2008, the inspectors identified two instances of transient equipment located in the vicinity of sensitive plant structures, systems, and components that had been identified in the SISIP as potential targets for seismically-induced system interactions. Specifically, a wheeled portable radiation monitor was discovered in the Unit 2 containment penetration room near auxiliary feed water piping and display stanchions were discovered in the Unit 1 containment penetration room near safety injection and containment spray system piping. In both cases, the transient equipment was not secured and had not been evaluated in accordance with Section 5.1.3 of Procedure AD4.ID3, "SISIP Housekeeping Activities." Until asked by the inspectors, plant personnel failed to enter the identification of the unsecured radiation monitor into the corrective action program in accordance with Section 5.6 of Procedure AD4.ID3.

Upon further investigation, the inspectors determined that records of SISIP walk downs had not been maintained since 2006, when ownership of the program was transferred from the quality verification department to the Housekeeping Department. Section 5.7 of Procedure AD4.ID3 requires that inspections of all plant areas be performed monthly to identify and correct situations where there is a potential for system interactions as a result of a seismic event. Pacific Gas and Electric was unable to provide documentation demonstrating that these required inspections had been performed.

The inspectors further concluded that no formal qualification and training was provided for personnel responsible for performing these inspections. Pacific Gas and Electric relied upon the instructions of Procedure AD4.ID3 to provide training. No training was provided to plant personnel on the importance of recognizing and identifying potential seismically-induced system interaction hazards.

Analysis. The failure of plant personnel to follow the requirements to properly secure or analyze equipment in close proximity to sensitive equipment was a performance deficiency. The finding was more than minor because it was similar to Inspection Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix E, Example 3.j., in that it was indicative of a significant programmatic deficiency in the licensee's Seismically-Induced System Interactions Program that could lead to worse errors if uncorrected. Specifically, a change in program ownership in 2006 resulted in a degradation of the sensitivity of plant personnel to the risk of seismically-induced system interactions due to transient materials, insufficient training of plant personnel on the program, and an absence of quality records over an approximately two-year period. Using Inspection Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to have very low safety significance because it did not result in an actual loss of a system safety function, did not result in a loss of a single train of safety equipment for greater than its technical specification allowed outage time, did not involve the loss or degradation of equipment specifically designed to mitigate a seismic, flooding, or severe weather initiating event, and did not involve the total loss of any safety function that contributes to an external event initiated core damage accident sequence. This finding has a cross-cutting aspect

in the area of human performance associated with the work practices area component because the licensee failed to define and effectively communicate expectations regarding procedural compliance and personnel failed to follow procedures [H.4(b)].

<u>Enforcement</u>. 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires 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. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished. Procedure AD4.ID3, "SISIP Housekeeping Activities," Section 5.1.3 requires that transient equipment located near safety-related equipment be secured, set back, or evaluated. Contrary to the above, on November 12, 2008, the inspectors identified transient equipment located near safety-related equipment that was not secured, set back, or evaluated. Because this finding was of very low safety significance and was entered into the licensee's corrective action program as Notifications 50084856 and 50084761, this violation is being treated as an NCV, consistent with Section VI.A of the Enforcement Policy: NCV 05000275; 05000323/2008008-01; Failure to Identify and Correct Violations of the Seismically-Induced Systems Interaction Program.

(b) Failure to take appropriate actions to correct an identified adverse trend

<u>Introduction</u>. The team identified a Green finding for failure to take adequate corrective actions to correct adverse trends in control of radioactive and potentially contaminated material as required by the licensee's corrective action program. Specifically, between May 2005 and June 2008, the licensee on two occasions identified and failed to correct adverse trends in the control of radioactive and potentially contaminated material.

<u>Description</u>. In May 2005, a routine audit of the radiation protection program by the licensee's quality verification department identified an adverse trend in the release of radioactive material from the radiologically controlled area. The audit identified sixteen events during the two-year audit period, two of which resulted in the issuance of Green non-cited violations.

During a subsequent routine audit in 2007, the licensee's quality verification department again identified a negative trend in radioactive material controls. During this second audit period there were seven radioactive material control events, one of which resulted in a Green non-cited violation. The 2007 audit identified that corrective actions associated with the non-cited violation issued during that audit period were too narrowly scoped and that other corrective actions were untimely. Twenty-nine findings were entered into the corrective action program as a result of this audit. These included (1) a finding of a continued adverse trend in the control of radioactive material and (2) a finding of ineffective implementation of the corrective action program by radiation protection personnel (Action Requests A0703351 and A0703362, respectively).

Action Request A0703351 was initiated on July 18, 2007, with four corrective actions recommended, including a review of previous apparent causes and corrective actions to

determine what was effective and sustainable. On August 1, 2007, the due date for these corrective actions was extended to February 17, 2008. On October 25, 2007, the due date was changed to December 31, 2007. On December 31, 2007, the due date was again extended to June 30, 2008. On June 30, 2008, the action request was closed with two of the four corrective actions taken. No review of previous apparent causes and corrective actions was documented. The basis for closure stated, "No events in the last six months. No finding for RP program audit completed June 08." However, the inspectors identified two events which occurred between January 2008 and June 2008. Specifically:

- On April 5, 2008, four purple-painted tools containing fixed contamination were found in a drum of clean tools outside the radiologically controlled area. This was documented in Action Request A0726562.
- On April 12, 2008, Action Request A0723504 documented a purple-painted tool found outside of the radiologically controlled area. While this tool was later surveyed and found to be free of contamination, the licensee's radiation protection department uses purple paint to mark contaminated tools and routinely handles all purple-painted tools as contaminated. Similar instances were documented as contributors to the previously identified adverse trends.

The inspectors determined that these events were indicative of a continued adverse trend. Further, in September 2008, the licensee again noted an adverse trend in radioactive material control, identifying seven events (Action Request A0741786). However, this trend did not identify that a similar trend was inappropriately closed out three months prior.

<u>Analysis</u>. The failure of Pacific Gas and Electric to follow the requirements of its corrective action program was a performance deficiency. The finding was more than minor because it affected the Public Radiation Safety cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain as a result of routine civilian nuclear reactor operation. The inspectors assessed the significance of this finding using Inspection Manual Chapter 0609 Appendix D, "Public Radiation Safety Significance Determination Process." The inspectors concluded that this finding was of very low safety significance because the dose impact to a member of the public was less than or equal to 0.005 rem total effective dose equivalent (TEDE). The finding has a cross-cutting aspect in the area of problem identification and resolution, associated with the corrective action area component; because the licensee failed to thoroughly evaluate problems such that the resolution addressed the cause [P.1(c)].

<u>Enforcement</u>. Licensee Procedure OM7, "Corrective Action Program," requires, in part, that the licensee evaluate problems commensurate with their significance, determine their cause, and conduct a proper evaluation and resolution of repeat occurrences. The procedure further requires that corrective actions are completed in a timely manner consistent with the problem significance. The licensee did not meet this meet this self-imposed standard, in that, between May 2005 and June 2008, plant personnel twice

identified and failed to properly evaluate and resolve adverse trends in the control of radioactive and potentially contaminated materials. The licensee entered this finding into the corrective action program as Notification 50085121. Because this performance deficiency does not involve a violation of regulatory requirements, enforcement action does not apply: Finding (FIN) 05000275;05000323/2008008-02, "Failure to Take Appropriate Actions to Correct an Identified Adverse Trend."

.b Assessment of the Use of Operating Experience

.1 Inspection Scope

The team examined the licensee's program for reviewing industry operating experience, including reviewing the governing procedure and evaluating self-assessments. The team reviewed a sample of operating experience notification documents that had been issued during the assessment period to determine whether the licensee had appropriately evaluated the notification for relevance to the facility. The team also examined whether the licensee had entered those items into the corrective action program and assigned actions to address the issues. The team reviewed a sample of root cause evaluations and significant condition reports to verify that the licensee had appropriately included industry operating experience.

.2 Assessment

Overall, the team determined that the licensee had appropriately evaluated industry operating experience for relevance to the facility, and had entered applicable items in the corrective action program. Once evaluated, assessments of the issues were generally appropriate. The team also determined that the licensee was evaluating industry operating experience when performing root cause and apparent cause evaluations.

.3 Findings

No findings of significance were identified.

.c Assessment of Self-Assessments and Audits

.1 Inspection Scope

The team reviewed a sample of licensee self-assessments and audits to assess whether the licensee was regularly identifying performance trends and effectively addressing them. The team also reviewed audit reports to determine the effectiveness of assessments in specific areas.

.2 Assessment

The team determined that audits conducted during the inspection period by the licensee's quality verification department were thorough and critical, identifying several opportunities for improvement of the assessed programs. However, many of the issues

identified in these audits were not acted upon in a timely manner. The licensee's corrective action program required that apparent cause evaluations be performed within thirty days on all audit findings. The team noted several examples where items were not completed in a timely manner (some of these examples are noted in Section 4OA2.a.2).

The team further identified that during the inspection period the quality verification department, responsible for performing a majority of the audits and self-assessments experienced a disproportionately high level of personnel turnover. Specifically, in the eighteen months prior to this inspection, the department lost ten experienced employees. These losses were the result of layoffs and the unexpected departure of several individuals. In addition, there were two changes in the department directorship over the same period. The team determined that these personnel losses and management changes resulted in insufficient resources to complete all tasks in a high-quality manner. The team did not identify any indication of unfulfilled regulatory commitments as a result of these changes, but the capability to conduct key activities and effective independent audit assessment was adversely impacted.

The team noted that in March 2008, a self-assessment by licensee management resulted in the initiation of a root cause investigation to address noted deficiencies in the corrective action program (Non-Conformance Report N0002221). As a result of items identified in this root cause investigation, the licensee has generated an Integrated Action Plan to improve corrective action performance.

.3 Findings

No findings of significance were identified.

- .d Assessment of Safety Conscious Work Environment
- .1 Inspection Scope

The team conducted focused interviews with 30 individuals from plant operations, electrical maintenance, and engineering, including supervisory and non-supervisory personnel, to assess whether conditions exist which would challenge the establishment of a safety conscious work environment at Diablo Canyon Power Plant. The team conducted additional interviews with quality assurance personnel and the manager responsible for the employee concerns program.

.2 Assessment

There are several vehicles established through which employees and contractors may raise concerns to management. In addition to the ability to raise a concern directly to a supervisor or to the NRC, formal programs included the corrective action program, the employee concerns program, and the differing professional opinion program. While all interviewees were willing to raise safety concerns through at least one of the available methods, the team concluded that some plant personnel were hesitant to raise concerns via one or more of these avenues. Examples included:

- Several interviewees provided examples where specific station managers did not appropriately respond to concerns raised during planning meetings. Some interviewees felt this behavior resulted in the hesitance of other plant personnel to bring issues up at these meetings.
- Several interviewees discussed examples of negative comments and/or body language at operations turnover meetings after safety issues were raised.
- More senior operators generally felt that a chilling affect occurred as a result of the disposition of a specific personnel issue in the 1990s. Some plant operations personnel stated that this chilled affect caused a continued barrier to the vigorous pursuit of safety issues within the operations organization.

Plant personnel generally felt that the corrective action program was effective. Several interviewees provided examples of issues improperly dispositioned by the corrective action program. These examples, which included prioritization and timeliness of corrective actions and ineffective corrective actions, resulted in some personnel losing confidence in the corrective action program and becoming hesitant to use the program to resolve issues. While most of the interviewees stated the corrective action program had a low threshold, almost none of the personnel intervieweed knew what this threshold was or where the threshold could be found in plant procedures.

About half of those interviewed exhibited a good understanding of the employee concerns program. While several plant operators and one engineer expressed strongly negative feelings about the effectiveness of the employee concerns program and its methods for maintaining confidentiality, only one interviewee was aware of an example of a perceived breach of confidentiality within the program. The employee concerns program categorized concerns as either nuclear safety/quality issues or as other issues. The team noted that all of the nuclear safety/quality issues for the past two and a half years were explicitly related to NRC-referred allegations; the program treated non-nuclear safety/quality issues informally.

Most interviewees stated that they had received training on safety conscious work environment. However, only three interviewees were able to correctly describe the attributes of a safety conscious work environment. Most interviewees associated "safety conscious work environment" with various industrial safety programs. Very few interviewees were familiar with the differing professional opinion process. The inspectors reviewed the single differing professional opinion file maintained in the employee concerns program files and concluded that the differing professional opinion was processed in accordance with station procedures. The team concluded that this differing professional opinion indirectly resulted in an adverse affect on the willingness within a particular engineering organization to raise concerns due to the related increase in workload.

The team concluded that site personnel were willing to raise safety issues to the attention of management. While several workers interviewed expressed a reluctance to report problems to management directly or to document issues in the corrective action program, all were willing to raise concerns to management attention by at least one of the several methods available.

.3 Findings

No findings of significance were identified.

4OA6 Management Meetings

Exit Meeting

On October 20, 2008, the preliminary results of the inspection were discussed with Mr. Peters and other members of the licensee staff. The licensee confirmed that no proprietary information was handled during this inspection.

Attachments:

- 1. Supplemental Information
- 2. Information Request (May 14, 2008)
- 3. Information Request (October 14, 2008)

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

- H. Garcia, Engineer, Design Engineering
- R. Glines, Auditor, Quality Verification
- R. Gray, Engineer, Radiation Protection
- W. Guldemond, Director, Site Services
- J. Hodges, Project Quality Supervisor, Quality Verification
- L. Hopson, Manager, Problem Prevention & Resolution
- T. Juarez, Engineer, Mechanical Systems Engineering
- S. Ketelsen, Manager, Regulatory Services
- G. Lautt, Plant Quality Assurance Supervisor, Quality Verification
- A. Maple, Process Improvement Coordinator, Engineering
- M. McCoy, Senior Engineer, Regulatory Services
- K. Millenaar, Intern, Regulatory Services
- C. Over, Corrective Action Program Supervisor, Problem Prevention & Resolution
- K. Peters, Station Director
- M. Somerville, Manager, Radiation Protection
- B. Waltos, Programs Supervisor, Technical Support Engineering
- S. Zawalick, Senior Engineer, Regulatory Services

<u>NRC</u>

- L. Carson, Senior Health Physicist, Plant Support Branch 2
- M. Peck, Senior Resident Inspector, Diablo Canyon
- D. Proulx, Senior Project Engineer, Reactor Projects Branch D
- G. Werner, Chief, Plant Support Branch 2, Division of Reactor Safety

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000275;05000323/2008008-01	NCV	Failure to Identify and Correct Violations of the Seismically Induced Systems Interaction Program
05000275;05000323/2008008-02	FIN	Failure to Take Appropriate Actions to Correct an Identified Adverse Trend

LIST OF DOCUMENTS REVIEWED

Action Requests:

A0067824	A0644594	A0676729	A0695972	A0715625	A0732001
A0125170	A0648578	A0677707	A0696297	A0715672	A0732266
A0196253	A0648581	A0677755	A0696350	A0715758	A0732643
A0331690	A0649158	A0678338	A0696953	A0715782	A0732836
A0406114	A0650104	A0678429	A0698528	A0716109	A0732976
A0408506	A0650216	A0678535	A0699162	A0716235	A0733673
A0519389	A0650404	A0678658	A0699496	A0717009	A0733674
A0545551	A0652122	A0678820	A0699655	A0717066	A0733675
A0550724	A0652663	A0679347	A0700176	A0717645	A0733679
A0552602	A0652882	A0679381	A0700190	A0717715	A0733681
A0555585	A0653879	A0679382	A0700231	A0718292	A0733682
A0557136	A0655264	A0679395	A0700559	A0718533	A0733683
A0558200	A0656196	A0679734	A0700663	A0718946	A0733685
A0558721	A0657132	A0679979	A0700745	A0719361	A0733686
A0560365	A0658595	A0680025	A0700864	A0719494	A0733687
A0565195	A0658846	A0680722	A0700892	A0719500	A0733689
A0565847	A0659068	A0681148	A0701328	A0719585	A0733690
A0569316	A0659091	A0681464	A0701791	A0719596	A0733693
A0571619	A0659407	A0682398	A0701835	A0719774	A0733694
A0574318	A0660589	A0682690	A0702236	A0719901	A0733695
A0574698	A0661022	A0683293	A0702276	A0720218	A0733697
A0576754	A0661997	A0683360	A0702304	A0720552	A0733698
A0577093	A0662373	A0683442	A0702816	A0721437	A0733699
A0577098	A0662699	A0683475	A0702845	A0721949	A0733700
A0577100	A0662902	A0683727	A0703224	A0722689	A0733701
A0577295	A0663496	A0684192	A0703244	A0723281	A0733702
A0577522	A0663823	A0684202	A0703351	A0723331	A0733703
A0579843	A0663923	A0684385	A0704318	A0723373	A0733704
A0581305	A0664992	A0684572	A0704824	A0723504	A0733729
A0584931	A0665039	A0684631	A0704871	A0723606	A0734529
A0587537	A0665101	A0685069	A0705303	A0724266	A0734535
A0590309	A0665153	A0685161	A0706450	A0724748	A0734536
A0593262	A0665166	A0685775	A0706704	A0724816	A0734830
A0595257	A0665501	A0686244	A0706980	A0725004	A0735113
A0595263	A0665588	A0686674	A0707628	A0725081	A0736063
A0595672	A0666110	A0686794	A0708019	A0725381	A0736228
A0597712	A0666414	A0687009	A0708447	A0725835	A0737235
A0598779	A0666980	A0688061	A0709237	A0725933	A0737237
A0603677	A0666983	A0688202	A0709399	A0726218	A0737959

A0613008	A0666984	A0688735	A0709407	A0726408	A0738064
A0613109	A0666985	A0688992	A0710059	A0726562	A0738079
A0613505	A0666990	A0689527	A0710082	A0726774	A0738260
A0614168	A0668929	A0690266	A0710187	A0727113	A0738268
A0615476	A0669226	A0690634	A0710328	A0727573	A0738519
A0617328	A0669468	A0691337	A0710335	A0727949	A0738964
A0620857	A0672242	A0691366	A0710868	A0728599	A0739136
A0623594	A0672417	A0691464	A0711318	A0728908	A0739307
A0625556	A0672419	A0691477	A0711645	A0729286	A0739505
A0626496	A0672422	A0691736	A0712328	A0729807	A0741297
A0630009	A0673108	A0692370	A0712329	A0730171	A0741409
A0630537	A0673125	A0692689	A0712539	A0730246	A0741456
A0635271	A0675254	A0692739	A0712803	A0730658	A0741786
A0635392	A0675603	A0692962	A0713307	A0730749	A0741803
A0637471	A0675752	A0693042	A0713616	A0730876	
A0639139	A0676321	A0693300	A0713859	A0731551	
A0640802	A0676400	A0695538	A0713960	A0731731	
A0641000	A0676595	A0695960	A0715336	A0731961	
Notifications:					
50032470	50037116	50039994	50040530	50044120	50084761
50032491	50038369	50040043	50040531	50044121	50084848
50032543	50039696	50040515	50040532	50044214	50084849
50032648	50039697	50040519	50041762	50044215	50084911
50032683	50039708	50040521	50043354	50044216	50084991
50032779	50039710	50040522	50043760	50044217	50085430
50032791	50039712	50040523	50043976	50044218	50085545
50032794	50039713	50040524	50044097	50044219	_
50032846	50039716	50040525	50044098	50070591	
50032874	50039768	50040526	50044105	50078086	
50032990	50039783	50040528	50044116	50084648	

Orders:

60005500

Non-Conformance Reports (Root Cause Evaluations):

N0002175	N0002209	N0002213	N0002218	N0002222	N0002227
N0002200	N0002210	N0002214	N0002219	N0002223	
N0002201	N0002211	N0002215	N0002220	N0002224	
N0002203	N0002212	N0002216	N0002221	N0002226	

Licensee Event Reports

LER 2008-001

Procedures:

"Human Error Investigation Tool," Revision 1

2R14 Maintenance Activities Assessment Checklist M.11, Housekeeping and Material Condition

2T15 Maintenance Activities Assessment Checklist M.11, Housekeeping and Material Condition

AD4.DC2, "Plant Material Condition and Housekeeping," Revision 9

AD4.ID1, "Housekeeping," Revision 10

AD4.ID2, "Plant leakage Evaluation," Revision 6A

AD4.ID2, "Plant leakage Evaluation," Revision 7

AD4.ID2, "Plant leakage Evaluation," Revision 8

AD4.ID3, "SISIP Housekeeping Activities," Revision 6

AD7.ID2, "Standard Plant Priority Assignment Scheme," Revision 10

AD7.ID4, "On-Line Maintenance Scheduling," Revision 12

AD7.ID8, "Project Management," Revision 1

AWP SP-003, "Oversight and Alignment of SGT CAP with the DCPP CAP," Revision 0

CF3.ID9, "Design Change Development," Revision 32

CF4.ID3, "Modification Implementation," Revision 21

ECG 18.7, "Fire Rated Assemblies," Revision 6

ER1.ID2, "Boric Acid Control Program," Revision 1

ER1.ID2, "Boric Acid Control Program," Revision 2

M-1106, "Auxiliary Feedwater Pump Room Flooding," Revision 0

M-49919, "Elimination of Floor Drain Credit from HELB/MELB Design Basis Flooding Analysis," Revision 0

MA1.ID14, "Plant Crane Operating Restrictions," Revision 17

OM15.ID1, "Human Performance Program," Revision 2

OM4.ID17, "Project Review Committee," Revision 1

OM4.ID17, "Project Review Committee," Revision 4

OM4.ID3, "Assessment of Industry Operating Experience," Revision 13

OM7.ID1, "Problem Identification and Resolution," Revision 27

OM7.ID1, "Problem Identification and Resolution," Revision 28

OM7.ID11, "10 CFR 21 Reportability Review Process," Revision 2

OM7.ID4, "Root Cause Analysis and Apparent Cause Evaluations," Revision 11

OM8.ID1, "Fire Loss Prevention," Revision 19

Operations Policy C-1, "Plant Power Level Official Indication," Revision 12

OPJ-6B:IV, "Manual Operation of DG 1-1," Revision 27

RCP D-614, "Release of Solid Materials from Radiologically Controlled Areas," Revision 14

STP I-7-M.1, "RCS Wide Range Pressure and RVLIS Transmitters Calibration," Revision 4

STP M-70C, "Inspection/Maintenance of Doors," Revision 15

STP M-9A, "Diesel Engine Generator Routine Surveillance Test," Revision 78

STP P-AFW-A11, "Comprehensive Testing of Turbine-Driven Auxiliary Feedwater Pump 1-1," Revision 2

STP P-AFW-A11, "Comprehensive Testing of Turbine-Driven Auxiliary Feedwater Pump 1-1," Revision 3

STP P-AFW-A21, "Comprehensive Pump Test for Turbine-Driven Auxiliary Feedwater Pump 2-1," Revision 1A

STP P-AFW-A21, "Comprehensive Pump Test for Turbine-Driven Auxiliary Feedwater Pump 2-1," Revision 2

STP R-22, "Thimble Tube Inspection," Revision 9

TP TA-0701, "Work Control Process During PIMS Unavailability," Revision 1A

TQ2.ID4, "Training Program Implementation," Revision 15

Drawings:

DC-663056-31-1, Motor-Driven Auxiliary Feedwater Pump Curves, April 13, 1971

106703, Sheet 3, Auxiliary Feedwater System, Revision 71

106704, Sheet 3, Auxiliary Feedwater Pump 1-1, Revision 88

102032, Sheet 27 Page 0, Rev. 101

102009, Sheet 3 Page 0, Rev. 62

57731, Equipment Location Section D-D Containment Turbine and Fuel Handling Buildings, Change 11

57729, Mechanical, Equipment Location Section B-B, Auxiliary and Containment Buildings, Revision 14

57725, Mechanical, Equipment Location, Plan and Elevation 91'-0" & 100'-0" Aux., Containment and Fuel Handling Bldgs, Revision 29

Audits and Assessments:

Audit #0881290001, "2008 Corrective Action Program Audit"

Audit #071290004, "2007 Radiation Protection Program Audit"

Plant Performance Improvement Report, October 2008

Quality Verification Short Form Assessment #080990011, April 10, 2008

SGT Corrective Action Program Audit, September 24, 2007

Quality Verification Short Form Assessment #072620010, September 19, 2007

Seismically Induced System Interaction Program Self-Assessment Report, November 2003

2005 Quality Performance Assessment Report

2007 Diablo Canyon Power Plant Quality Assurance Program and Procedures Audit

Quality Verification Department Bi-weekly Observation Report, January 2008

Quality Verification Department Bi-weekly Observation Report, March 2008

Quality Verification Department Bi-weekly Observation Report, April 2008

Assessment No. 032680010

Assessment No. 081290001

Nuclear Industry Evaluation Program (NIEP) of the Diablo Canyon Power Plant Quality Organization, July 28, 2008

Other:

"(a)(1) Goal Setting Summary Report," dated 11/17/2008 "ARRT 'Action Request Review Guidance," Revision 32 Auxiliary Feedwater Maintenance Rule Unavailability Line Chart, November 19, 2008 Auxiliary Feedwater System Health Report, November 19, 2008 DCM S-25A DCM S-9 DCM T-24 DCPP AR Backlog at Tech Down, September 24, 2008

Diablo Canyon Power Plant Health Issue 2008-S069-002, Start Up Voltage improvement for DCPP power block distribution,

Diablo Canyon Power Plant List of Employees Qualified as Cause Analysts, November 18, 2008

Diablo Canyon Units 1 & 2 EQ File IH06 ASCO Catalog NP Solenoid Valves, Revision 18

Information Notice No. 84-23, "Results of the NRC-Sponsored Research Test on ASCO Solenoid Valves", April 5, 1984

Information Notice No. 88-24, "Failure of Air Operated Valves Affecting Safety Related Systems", May 13, 1988

Maintenance Rule (a)(1) Goal Setting Summary Report, November 17, 2008

Plant Health Improvement Project List, November 18, 2008

Seismically Induced System Interaction Manual, Revision 9

System 3B, Auxiliary Feedwater System, Maintenance Rule Scoping Determination, Revision 3

System 9, Safety Injection, Maintenance Rule Scoping Determination, Revision 3

Vendor Manual, "ASCO Valves", DC 663190, Sheet 68, Rev. 3

Notifications generated as a result of this inspection:

50084648	Oil drips below the MDAFW pump
50084672	Flush of AFW suction piping not evaluated
50084729	Open/Closed indication on vlv MU-1-297 and -298
50084761	Stanchions in U1 GE Pen Room – SISI
50084856	Gooseneck air monitor in U2 GE Pen Room – SISI
50084948	Evaluate potential for future placement of equipment without appropriate SISI consideration
50084959	Documentation of SISI walkdowns
50084975	Notification not written for air sampler SISI issue
50084991	ASCO solenoid valve problem history/evaluation
50085119	Effectiveness of QV audit of SGRP
50085121	Effectiveness of CA's to prevent release of RAM
50085133	SISIP inspection training gaps
50085134	Quality record driving qual tracking
50085393	SISIP implementation weakness
50085527	Vendor manual info as OE?
50037116	AFW room floor drain MR scoping

Information Request May14, 2008 Diablo Canyon Problem Identification and Resolution Inspection (IP 71152; Inspection Report 05000275; 323/2008008)

The inspection will cover issues addressed during the period of June 15, 2006 through May 15, 2008, but will include a 5-year review of the Auxiliary Feedwater System. All requested information should be limited to this period unless otherwise specified. The information may be provided in either electronic or paper media or a combination of these. Information provided in electronic media may be in the form of e-mail attachment(s), CDs, thumb drives, or 3 ½ inch floppy disks. The agency's text editing software is MS Word; can also support Excel, Power Point, and Adobe Acrobat (.pdf) text files. In lieu of hard copies, the information may be placed on the Certrec website (IMS).

Please provide the following information to David Proulx (dlp@NRC.gov) by May 23, 2008:

- Note: On summary lists please include a description of problem, status, initiating date, and owner organization.
- 1. Summary list of all action requests of significant conditions adverse to quality opened or closed during the period. This includes a summary list of all QEs and NCRs.
- 2. Summary list of all action requests (non-RT) which were generated during the period.
- 3. A list of all corrective action documents that subsume or "roll-up" one or more smaller issues for the period
- 4. Summary list of all action requests which were down-graded or up-graded in significance, or were cancelled during the period.
- 5. List of all root cause analyses completed during the period.
- 6. List of root cause analyses planned, but not complete at end of the period.
- 7. List of all apparent cause analyses completed during the period.
- 8. List of plant safety issues raised or addressed by the employee concerns program during the period (Employee Concerns Program log).
- 9. List of action items generated or addressed by the plant safety review committees during the period
- 10. All quality assurance audits and surveillances of corrective action activities completed during the period.
- 11. A list of all quality assurance audits and surveillances scheduled for completion during the period, but which were not completed.

- 12. All corrective action activity reports, functional area self-assessments, and non-NRC third party assessments completed during the period.
- 13. Corrective action performance trending/tracking information generated during the period and broken down by functional organization
- 14. Current revisions of corrective action program procedures. This includes initiation, evaluation and corrective actions, processing root and apparent cause evaluations, operability assessments, extent of cause/condition reviews, quality assurance program procedures, operational experience, employee concerns/differing professional opinions, and procedures for implementing a safety conscious work environment.
- 15. A listing of all external events evaluated for applicability at Diablo Canyon during the assessment period.
- 16. Action requests or other actions generated for each of the items below issued during the assessment period:
 - Part 21 Reports
 - Applicable NRC Information Notices
 - All LERs issued by Pacific Gas and Electric during the period
 - NCVs and Violations issued to PG&E during the period (including licensee identified violations).
- 17. Safeguards event logs for the period
- 18. Radiation protection event logs
- 19. Current system health reports or similar information for the AFW System
- 20. Current predictive performance summary reports or similar information for the AFW system
- 21. Corrective action effectiveness review reports generated during the period
- 22. List of risk significant components and systems (ranked by importance measures).
- 23. List of ARs, NCRs and QEs on the AFW system from June 15, 2003 to May 15, 2008.
- 24. Current design basis documents and system drawings for the AFW system.
- 25. Plant Organizational Charts (both management and working level).

Information Request October 14, 2008 Diablo Canyon Problem Identification and Resolution Inspection (IP 71152; Inspection Report 05000275; 323/2008008)

The inspection will cover issues addressed during the period of June 15, 2006 through October 15, 2008, but will include a 5-year review of the Auxiliary Feedwater System. All requested information should be limited to this period unless otherwise specified. The information may be provided in either electronic or paper media or a combination of these. Information provided in electronic media may be in the form of e-mail attachment(s), CDs, thumb drives, or 3 ½ inch floppy disks. The agency's text editing software is MS Word; can also support Excel, Power Point, and Adobe Acrobat (.pdf) text files. In lieu of hard copies, the information may be placed on the Certrec website (IMS).

This information request was originally sent on May 14, 2008, covering the period from June 15, 2006, through May 15, 2008. In responding to this request, please include only new information not provided in your last response.

Please provide the following information to Eric Ruesch (eric.ruesch@nrc.gov) by October 20, 2008:

- Note: On summary lists please include a description of problem, status, initiating date, and owner organization.
- 17. Summary list of all action requests of significant conditions adverse to quality opened or closed during the period. This includes a summary list of all QEs and NCRs.
- 18. Summary list of all action requests (non-RT) which were generated during the period.
- 19. A list of all corrective action documents that subsume or "roll-up" one or more smaller issues for the period
- 20. Summary list of all action requests which were down-graded or up-graded in significance, or were cancelled during the period.
- 21. List of all root cause analyses completed during the period.
- 22. List of root cause analyses planned, but not complete at end of the period.
- 23. List of all apparent cause analyses completed during the period.
- 24. List of plant safety issues raised or addressed by the employee concerns program during the period (Employee Concerns Program log).
- 25. List of action items generated or addressed by the plant safety review committees during the period

- 26. All quality assurance audits and surveillances of corrective action activities completed during the period.
- 27. A list of all quality assurance audits and surveillances scheduled for completion during the period, but which were not completed.
- 28. All corrective action activity reports, functional area self-assessments, and non-NRC third party assessments completed during the period.
- 29. Corrective action performance trending/tracking information generated during the period and broken down by functional organization
- 30. Current revisions of corrective action program procedures. This includes initiation, evaluation and corrective actions, processing root and apparent cause evaluations, operability assessments, extent of cause/condition reviews, quality assurance program procedures, operational experience, employee concerns/differing professional opinions, and procedures for implementing a safety conscious work environment.
- 31. A listing of all external events evaluated for applicability at Diablo Canyon during the assessment period.
- 32. Action requests or other actions generated for each of the items below issued during the assessment period:
 - Part 21 Reports
 - Applicable NRC Information Notices
 - All LERs issued by Pacific Gas and Electric during the period
 - NCVs and Violations issued to PG&E during the period (including licensee identified violations).
- 17. Safeguards event logs for the period
- 18. Radiation protection event logs
- 19. Current system health reports or similar information for the AFW System
- 20. Current predictive performance summary reports or similar information for the AFW system
- 21. Corrective action effectiveness review reports generated during the period
- 22. List of risk significant components and systems (ranked by importance measures).
- 23. List of ARs, NCRs and QEs on the AFW system from June 15, 2003 to May 15, 2008.

- 24. Current design basis documents and system drawings for the AFW system.
- 25. Plant Organizational Charts (both management and working level).