



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

January 18, 2007

John S. Keenan
Senior Vice President - Generation
and Chief Nuclear Officer
Pacific Gas and Electric Company
P.O. Box 770000
Mail Code B32
San Francisco, CA 94177-0001

SUBJECT: DIABLO CANYON POWER PLANT - NRC RADIATION SAFETY TEAM
INSPECTION REPORT 05000275/2006013 AND 05000323/2006013

Dear Mr. Keenan:

On December 7, 2006, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Diablo Canyon Power Plant, Units 1 and 2, facility. The enclosed report documents the inspection findings, which were discussed at the conclusion of the inspection with Mr. S. David, Director of Operations, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The team reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, the team evaluated the inspection areas within the Radiation Protection Strategic Performance Area that are scheduled for review every two years. These areas are:

- Radiation Monitoring Instrumentation
- Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems
- Radioactive Material Processing and Transportation
- Radiological Environmental Monitoring Program and Radioactive Material Control Program

This inspection report documents one self-revealing, non-cited violation of very low safety significance (Green). However, because the finding was of very low safety significance and it was entered into your corrective action program, the NRC is treating this finding as a non-cited violation consistent with Section VI.A of the NRC Enforcement Policy. Additionally, one licensee-identified violation which was determined to be of very low safety significance is listed in this report. If you contest any non-cited violation 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, U.S. Nuclear Regulatory Commission Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011-4005; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington DC 20555-001; 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 (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/

Michael P. Shannon, Chief
Plant Support Branch
Division of Reactor Safety

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

Enclosure: NRC Inspection Report 05000275/2006013 and 05000323/2006013
w/attachment: Supplemental Information

cc: w/enclosure
Donna Jacobs
Vice President, Nuclear Services
Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

James R. Becker, Vice President
Diablo Canyon Operations and
Station Director, Pacific Gas and
Electric Company
Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

Sierra Club San Lucia Chapter
ATTN: Andrew Christie
P.O. Box 15755
San Luis Obispo, CA 93406

Pacific Gas and Electric Co.

-3-

Nancy Culver
San Luis Obispo Mothers for Peace
P.O. Box 164
Pismo Beach, CA 93448

Chairman
San Luis Obispo County Board of
Supervisors
County Government Building
1055 Monterey Street, Suite D430
San Luis Obispo, CA 93408

Truman Burns\Robert Kinosian
California Public Utilities Commission
505 Van Ness Ave., Rm. 4102
San Francisco, CA 94102-3298

Diablo Canyon Independent Safety Committee
Robert R. Wellington, Esq.
Legal Counsel
857 Cass Street, Suite D
Monterey, CA 93940

Director, Radiological Health Branch
State Department of Health Services
P.O. Box 997414 (MS 7610)
Sacramento, CA 95899-7414

Antonio Fernandez, Esq.
Pacific Gas and Electric Company
P.O. Box 7442
San Francisco, CA 94120

City Editor
The Tribune
3825 South Higuera Street
P.O. Box 112
San Luis Obispo, CA 93406-0112

James D. Boyd, Commissioner
California Energy Commission
1516 Ninth Street (MS 34)
Sacramento, CA 95814

Pacific Gas and Electric Co.

-4-

Jennifer Tang
Field Representative
United States Senator Barbara Boxer
1700 Montgomery Street, Suite 240
San Francisco, CA 94111

Electronic distribution by RIV:
 Regional Administrator (**BSM1**)
 DRP Director (**ATH**)
 DRS Director (**DDC**)
 DRS Deputy Director (**RJC1**)
 Senior Resident Inspector (**TWJ**)
 Branch Chief, DRP/B (**VGG**)
 Senior Project Engineer, DRP/E (**FLB2**)
 Team Leader, DRP/TSS (**MAS3**)
 RITS Coordinator (**MAS3**)
 DRS STA (**DAP**)
 V. Dricks, PAO (**VLD**)
 D. Cullison, OEDO RIV Coordinator (**DGC**)
ROPreports
 DC Site Secretary (**AWC1**)

SUNSI Review Completed: LTR ADAMS: Yes No Initials: LTR
 Publicly Available Non-Publicly Available Sensitive Non-Sensitive

RIV:PSB\SHP	PSB\HP	PSB\HP	PSB\HP	C:PSB
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VGGaddy	MPShannon			
/RA/	/RA/			
01/18/07	01/18/07			

**U.S. NUCLEAR REGULATORY COMMISSION
REGION IV**

Dockets: 50-275, 50-323

Licenses: DPR-80, DPR-82

Report: 05000275/2006013, 05000323/2006013

Licensee: Pacific Gas and Electric Company (PG&E)

Facility: Diablo Canyon Power Plant, Units 1 and 2

Location: 7 ½ miles NW of Avila Beach
Avila Beach, California

Dates: December 4 - 7, 2006

Inspectors: Larry Ricketson, P.E., Senior Health Physicist, Plant Support Branch
Bernadette Baca, Health Physicist, Plant Support Branch
Gilbert Guerra, C.H.P., Health Physicist, Plant Support Branch
Binesh Tharakan, C.H.P, Health Physicist, Plant Support Branch

Accompanied By James Noggle, Senior Health Physicist, Region I
Chad K. Huffman, Nuclear Safety Professional Development Program
Participant

Approved By: Michael P. Shannon, Chief, Plant Support Branch
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000275/2006-013, 05000323/2006-013; 12/04/06 - 12/07/06; Diablo Canyon Power Plant Units 1 and 2; Radiological Environmental Monitoring Program and Radioactive Material Control Program

The report covered a four-day period of inspection on site by a team of four region-based health physics inspectors. A finding of very low safety significance (Green) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 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: Public Radiation Safety

- Green. The team reviewed a self-revealing, non-cited violation of 10 CFR 20.1501(a) that resulted in an unconditional release of radioactive material from the radiologically controlled area. Specifically, the contents of a vehicle cab were not removed and surveyed, resulting in the release of a contaminated safety harness from the radiologically controlled area. The safety harness remained in the protected area. The licensee determined the inadequate survey of the vehicle and its contents was caused by inadequate procedural guidance. As corrective action, the licensee plans to revise Procedure RCP D-614, "Release of Solid Materials from Radiologically Controlled Areas," Revision 9, to include instructions for the removal of such items from vehicles and the survey to detect contamination.

The failure to adequately survey a contaminated item to prevent its release from the radiologically controlled area is a performance deficiency. This finding is greater than minor because it was associated with a Public Radiation Safety cornerstone attribute (material release) and it affected the associated cornerstone objective in that the failure to control radioactive material decreases the licensee's assurance that the public will not receive unnecessary dose. Using the Public Radiation Safety Significance Determination Process, the team determined that the finding had very low safety significance because: (1) the finding was a radioactive material control finding, (2) it was not a transportation finding, (3) it did not result in public dose greater than 0.005 rem, and (4) radioactive material was not released from the protected area more than five times. Additionally, this finding has a cross-cutting aspect in the area of human performance associated with resources because the licensee did not have complete procedures, in that, the procedures did not provide sufficiently detailed guidance to ensure the surveying of vehicle contents prior to removal of the vehicle from the radiologically controlled area (Section 2PS3).

B. Licensee Identified Violations

Violations of very low safety significance, which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective actions are listed in Section 4OA7 of this report.

REPORT DETAILS

2. RADIATION SAFETY

Cornerstones: Occupational Radiation Safety [OS] and Public Radiation Safety [PS]

2OS3 Radiation Monitoring Instrumentation and Protective Equipment (71121.03)

a. Inspection Scope

This area was inspected to determine the accuracy and operability of radiation monitoring instruments that are used for the protection of occupational workers and the adequacy of the program to provide self-contained breathing apparatus (SCBA) to workers. The team used the requirements in 10 CFR Part 20 and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed:

- Calibration of area radiation monitors associated with transient high and very high radiation areas and post-accident monitors used for remote emergency assessment
- Calibration of portable radiation detection instrumentation, electronic alarming dosimetry, and continuous air monitors used for job coverage
- Calibration of whole body counting equipment and radiation detection instruments utilized for personnel and material release from the radiologically controlled area
- Self-assessments, audits, and Licensee Event Reports
- Corrective action program reports since the last inspection
- Licensee action in cases of repetitive deficiencies or significant individual deficiencies
- Calibration expiration and source response check currency on radiation detection instruments staged for use
- The licensee's capability for refilling and transporting SCBA air bottles to and from the control room and operations support center during emergency conditions, status of SCBA staged and ready for use in the plant and associated surveillance records, and personnel qualification and training
- Qualification documentation for onsite personnel designated to perform maintenance on the vendor-designated vital components, and the vital component maintenance records for SCBA units

The inspector completed 9 of the required 9 samples.

b. Findings

No findings of significance were identified.

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (71122.01)

a. Inspection Scope

This area was inspected to ensure that the gaseous and liquid effluent processing systems are maintained so that radiological releases are properly mitigated, monitored, and evaluated with respect to public exposure. The team used the requirements in 10 CFR Part 20, 10 CFR Part 50 Appendices A and I, the Offsite Dose Calculation Manual, and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed:

- Radiological effluent release reports since the last inspection, changes to the Offsite Dose Calculation Manual, radiation monitor setpoint calculation methodology, anomalous sampling results, effluent radiological occurrence performance indicator incidents, program for identifying contaminated spills and leakage and the licensee's process for control and assessment, self-assessments, audits, and licensee event reports
- Gaseous and liquid release system component configurations
- Routine processing, sample collection, sample analysis, and release of radioactive liquid and gaseous effluent
- Abnormal releases
- The licensee's understanding of the location and construction of underground pipes and tanks and storage pools that contain radioactive contaminated liquids; the technical bases for onsite monitoring, the licensee's capabilities of detecting spills or leaks and identifying groundwater radiological contamination both on site and beyond the owner-controlled area
- Changes made by the licensee to the Offsite Dose Calculation Manual, the liquid or gaseous radioactive waste system design, procedures, or operation since the last inspection
- Monthly, quarterly, and annual dose calculations
- Surveillance test results involving air cleaning systems and stack or vent flow rates
- Instrument calibrations of discharge effluent radiation monitors and flow measurement devices, effluent monitoring system modifications, effluent radiation monitor alarm setpoint values, and counting room instrumentation calibration and quality control
- Interlaboratory comparison program results

- Licensee event reports, special reports, audits, self-assessments and corrective action reports performed since the last inspection

The inspector completed 11 of the required 11 samples.

b. Findings

No findings of significance were identified.

2PS2 Radioactive Material Processing and Transportation (71122.02)

a. Inspection Scope

This area was inspected to verify that the licensee's radioactive material processing and transportation program complies with the requirements of 10 CFR Parts 20, 61, and 71 and Department of Transportation regulations contained in 49 CFR Parts 171-180. The team interviewed licensee personnel and reviewed:

- The radioactive waste system description, recent radiological effluent release reports, and the scope of the licensee's audit program
- Liquid and solid radioactive waste processing systems configurations, the status and control of any radioactive waste process equipment that is not operational or is abandoned in place, changes made to the radioactive waste processing systems since the last inspection, and current processes for transferring radioactive waste resin and sludge discharges
- Radio-chemical sample analysis results for radioactive waste streams and use of scaling factors and calculations to account for difficult-to-measure radionuclides
- Shipping records for non-excepted package shipments
- Licensee event reports, special reports, audits, state agency reports, self-assessments and corrective action reports performed since the last inspection

Either because the conditions did not exist or an event had not occurred, no opportunities were available to review the following items:

- Shipment packaging, surveying, labeling, marking, placarding, vehicle checking, driver instructing, and disposal manifesting

The inspector completed 6 of the required 6 samples.

b. Findings

No findings of significance were identified.

2PS3 Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program (71122.03)

a. Inspection Scope

This area was inspected to ensure that the REMP verifies the impact of radioactive effluent releases to the environment and sufficiently validates the integrity of the radioactive gaseous and liquid effluent release program; and that the licensee's surveys and controls are adequate to prevent the inadvertent release of licensed materials into the public domain. The team used the requirements in 10 CFR Part 20, Appendix I of 10 CFR Part 50, the Offsite Dose Calculation Manual, and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed

- Annual environmental monitoring reports and licensee event reports
- Selected air sampling and thermoluminescence dosimeter monitoring stations
- Collection and preparation of environmental samples
- Operability, calibration, and maintenance of meteorological instruments
- Each event documented in the Annual Environmental Monitoring Report which involved a missed sample, inoperable sampler, lost thermoluminescence dosimeter, or anomalous measurement
- Significant changes made by the licensee to the Offsite Dose Calculation Manual as the result of changes to the land census or sampler station modifications since the last inspection
- Calibration and maintenance records for air samplers, composite water samplers, and environmental sample radiation measurement instrumentation, quality control program, interlaboratory comparison program results, and vendor audits
- Locations where the licensee monitors potentially contaminated material leaving the radiological controlled area and the methods used for control, survey, and release from these areas
- Type of radiation monitoring instrumentation used to monitor items released, survey and release criteria of potentially contaminated material, radiation detection sensitivities, procedural guidance, and material release records

Licensee event reports, special reports, audits, self-assessments and corrective action reports performed since the last inspection

The inspector completed 10 of the required 10 samples.

b. Findings

Introduction: The team reviewed a self-revealing, non-cited violation of 10 CFR 20.1501(a) that resulted in an unconditional release of radioactive material from the radiologically controlled area. The finding had very low safety significance.

Description: On August 29, 2006, the licensee was alerted to a problem when portal radiation monitors alarmed as a worker attempted to exit from the protected area. The worker alarmed each of the three radiation monitors, then contacted radiation protection personnel for assistance. Radiation protection personnel found radioactive contamination (up to 20,000 disintegrations per minute) on the lanyard portion of a safety harness worn by the worker. The radioactive material did not leave the protected area.

The licensee investigated the occurrence and concluded that the safety harness had been left, unsurveyed, in a vehicle cab at some previous time as the vehicle was surveyed and released from the radiologically controlled area. The safety harness remained outside the radiologically controlled area and was subsequently used by the worker who attempted to exit the protected area. The licensee determined the inadequate survey of the vehicle and its contents was caused by inadequate procedural guidance. As corrective action, the licensee plans to revise Procedure RCP D-614, "Release of Solid Materials from Radiologically Controlled Areas," Revision 9, to include instructions for the removal of such items from vehicles and the survey to detect contamination. However, as of January 4, 2007, the procedure had not been revised.

Analysis: The failure to adequately survey a contaminated item to prevent its release from the radiologically controlled area is a performance deficiency. This finding is greater than minor because it was associated with a Public Radiation Safety cornerstone attribute (material release) and it affected the associated cornerstone objective in that the failure to control radioactive material decreases the licensee's assurance that the public will not receive unnecessary dose. Using the Public Radiation Safety Significance Determination Process, the team determined that the finding had very low safety significance because: (1) the finding was a radioactive material control finding, (2) it was not a transportation finding, (3) it did not result in public dose greater than 0.005 rem, and (4) radioactive material was not released from the protected area more than five times. Additionally, this finding has a cross-cutting aspect in the area of human performance associated with resources because complete procedures were not available to provide guidance for surveying of vehicle contents prior to removal from the radiologically controlled area.

Enforcement: Part 20.1501(a) of Title 10 of the Code of Federal Regulations requires that each licensee make or cause to be made surveys that may be necessary for the licensee to comply with the regulations in 10 CFR Part 20 and that are reasonable under the circumstances to evaluate the extent of radiation levels, concentrations or quantities of radioactive materials, and the potential radiological hazards that could be present. Pursuant to 10 CFR 20.1003, a "survey" means an evaluation of the radiological conditions and potential hazards incident to the production, use, transfer, release, disposal, or presence of radioactive material or other sources of radiation. The licensee did not make surveys to ensure compliance with the following regulations: Part 20.1301(a) of Title 10 of the Code of Federal Regulations requires each licensee to conduct operations so that the total effective dose equivalent to individual members of the

public from the licensed operation does not exceed 0.1 rem. Part 20.2001 of Title 10 of the Code of Federal Regulations requires that licensees dispose of radioactive material only by means specified in 10 CFR Subpart K. Because this failure to perform a radiological survey is of very low safety significance and has been entered into the licensee's corrective action program (A0676400 and A0679734), this violation is being treated as a NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000275/2006013-01; 05000323/2006013-01, "Failure to survey material unconditionally released." (Section 4OA7 describes two additional licensee-identified examples of this violation.)

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution

a. Inspection Scope

The team evaluated the effectiveness of the licensee's problem identification and resolution process with respect to the following inspection areas:

- Radiation Monitoring Instrumentation (Section 2OS3)
- Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (Section 2PS1)
- Radioactive Material Processing and Transportation (Section 2PS2)
- Radiological Environmental Monitoring Program and Radioactive Material Control Program (Section 2PS3)

b. Findings and Observations

No findings of significance were identified.

4OA6 Management Meetings

Exit Meeting Summary

On December 7, 2006, the team presented the inspection results to Mr. S. David, Director of Operations, and other members of the staff who acknowledged the findings. The team confirmed that proprietary information was not provided or examined during the inspection.

4OA7 Licensee Identified Violations

The following finding of very low significance was identified by the licensee and is a violation of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as a non-cited violation.

Part 20.1501(a) of Title 10 of the Code of Federal Regulations requires that each licensee make or cause to be made surveys that may be necessary for the licensee to comply with the regulations in 10 CFR Part 20 and that are reasonable under the circumstances to evaluate the extent of radiation levels, concentrations or quantities of radioactive materials, and the potential radiological hazards that could be present. Part 20.2001 of Title 10 of the Code of Federal Regulations requires that licensees dispose of radioactive material only by means specified in 10 CFR Subpart K. However, on March 30, 2006, a licensee worker observed a wrench with purple paint outside the radiologically controlled area in the turbine building tool room. The licensee found that the wrench had a fixed contamination level of 13,000 disintegrations per minute. The wrench did not leave the protected area. During routine surveys on April 28, 2006, the licensee identified six thermoluminescent dosimeter cases contaminated with radioactive material. The cases were released from the radiologically controlled area, but were never unconditionally released from the protected area. Contamination levels on the cases were as high as 7000 disintegrations per minute. These occurrences were documented in the licensee's corrective action program by Action Requests A0662902 and A0665501. This finding was of very low safety significance because (1) the finding was a radioactive material control finding, (2) it was not a transportation finding, (3) it did not result in public dose greater than 0.005 rem, and (4) radioactive material was not released from the protected area more than five times.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

D. Cortina, Foreman, Chemistry
J. Costantino, Operations Support Team Lead, Radiation Protection
C. Dougherty, Senior Engineer, Regulatory Services
R. Gagne, Radwaste Foreman, Radiation Protection
C. Gans, Engineer, Chemistry
R. Gray, Engineer, Radiation Protection
R. Hite, Manager, Radiation Protection
J. Knemeyer, Engineer, Chemistry
C. Miller, Principal Radwaste Engineer, Radiation Protection
K. O'Neil, Engineer, ICE Engineering
O. Sabi, Technician, Radiological Environmental Monitoring Program
J. Scherman, Foreman, Radiation Protection
M. Somerville, Dosimetry and Technical Support Team Leader
J. Ramirez, Foreman, Radiation Protection
M. Wilson, Engineer, ICE Engineering
M. Wright, REMP Engineer, Radiation Protection

NRC

T. Jackson, Senior Resident Inspector
T. McConnell, Resident Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Opened and Closed During this Inspection

NCV 05000275/2006013-01; 05000323/2006013-01	NCV	Failure to survey material unconditionally released (Section 2PS3)
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Previous Items Closed

None

LIST OF DOCUMENTS REVIEWED

Section 20S3: Radiation Monitoring Instrumentation and Protective Equipment (71121.03)

Audits and Self-Assessments

2005 Radiation Protection Program Audit
NUPIC Audit 19070: Thermo Electron Radiation Measurement & Protection

Calibration Records and Work Orders

Instrument Numbers:

1.01.19, 1.01.29, 1.01.36, 1.01.38, 1.06.03, 1.06.04, 1.08.10, 1.08.19, 1.08.36, 1.08.45, 1.08.49, 3.05.02, 3.07.23, 3.09.07, 3.09.66, 3.09.602, 3.09.603, 3.22.26, 3.22.30, 3.22.39, 3.22.41, 3.22.43, 3.22.63, 4.03.17, 4.05.02, 4.05.35, 4.14.04, 4.14.06, 4.14.09, 4.15.29, 4.15.33, 4.15.48, 4.36.01, 4.36.03, 5.02.01, 5.02.03, 5.10.02, 5.10.04, 5.10.05, 5.10.08, 5.10.09, 6.10.03, 6.11.02, 97-5119

RCP D-954 Attachment 10.01, Calibration Verification Siemens Electronic Dosimeters November 3, 2006

Work Orders:

R0255118-01, R0255800-01, R0261112-01, R0261114-01, R0262962-01, R0263194-01, R0263702-01, R0263704-01, R0264558-01, R0264560-01, R0265754-01, R0265988-01, R0269304-01, R0270391-01, R0271815-01, R0272457-01, R0278598-01, R0292463-01

Corrective Action Documents (Action Requests)

A0635522, A0638118, A0638429, A0639135, A0639136, A0643681, A0651094, A0651253, A0652864, A0662091, A0668705, A0674824, A0675629, A0679876, A0681144, A0681151, A0682851, A0683274

Procedures

MP I-RC15	Calibration of Eberline PCM-1B Personnel Contamination Monitor, Revision 6B
MP I-RC24	NE Technology SAM-9 Tool Contamination Monitor Calibration, Revision 1
MP I-RC26	Calibration of Eberline PM-7 Portal Radiation Monitor, Revision 1
MP I-RD01	Calibration of Eberline Model RO-2 and RO-2A Ion Chamber Survey Instruments, Revision 4
MP I-RD03	Calibration of Eberline 6112B Teletector GM Survey Instrument, Revision 8
MP I-RD04	Calibration of Eberline Model PNR-4 Portable Neutron Rem Counter, Revision 4
RCP D-353	Operation of the Canberra Fastscan Whole Body Counters, Revision 9
RCP D-600	Personnel Decontamination and Evaluation, Revision 23
RCP D-954	Use and Maintenance of the Siemens MK2 Electronic Dosimeter, Revision 6
RP1 DC5	Portable Radiation Protection Instrumentation Calibration Program, Revision 4

STP I-18M2A	Calibration of Control Room Ventilation System Intake Monitors RM-25 or RM-26, Revision 11
STP I-39R90.B	Calibration of Radwaste Storage Building Radiation Monitor RM-90, Revision 1
STP I-100B3	Radiation Source Presentation (Isotopic) Calibration of Containment Radiogas Monitor RM-12, Revision 4A
STP I-120B3	Radiation Source Presentation (Isotopic) Calibration of Containment Air Particulate Monitor RM-11, Revision 7

Miscellaneous

2004 and 2005 Annual Radiological Effluent Release Report
 Count Rate Instrument Performance Test Logs
 Evaluation of the Acceptability of the AmBe Source (#99) for Calibrating Neutron Survey Meters
 Whole Body Count Results for Selected Personnel

Section 2PS1: Radioactive Gaseous & Liquid Effluent Treatment & Monitoring Systems (71122.01)

Procedures

CAP A-6	Gaseous Radwaste Discharge Management, Rev. 29
CAP A-8	Off-Site Dose Calculations, Rev. 30
CAP D-23	Preparation of Liquid Radwaste Composite Samples, Rev. 5
CAP E-5	Liquid Radwaste, Boron Recycle, and Miscellaneous Point Sampling, Rev. 10
CY2	Radiological Monitoring and Controls Program, Rev. 5
CY2.ID1	Radioactive Effluent Controls Program, Rev. 8
RCP EM-5	DCPP Groundwater Sampling, Rev. 0A
RP1.ID11	Environmental Radiological Monitoring Procedure, Rev. 7
STP G-9	General HEPA Filter Bank Penetration Test, Rev. 8
STP G-10	General Charcoal Filter Bank Penetration Test, Rev. 8
STP G-11	Procedure for Obtaining Charcoal Filter Media for Laboratory Testing (Methyl Iodine), Rev. 16
STP M-3A	Auxiliary Building Ventilation System - DOP and Halide Penetration Test, Rev. 13
STP M-41	Fuel Handling Building Ventilation System - DOP and Halide Penetration Test, Rev. 18
STP M-53	Control Room Ventilation System - DOP and Halide Penetration Test, Rev. 14
STP I-39R24R.B	Plant Vent Discharge Iodine Redundant RM-24R Calibration, Revision 9
STP I-39R29.B	High Radiation Plant Vent Gross Gamma Monitor RM-29 Calibration, Revision 5
STP I-39R87.B	Plant Vent Discharge Nobel Gas High Range RM-87 Calibration, Revision 8
STP I-102B3	Radiation Source Presentation (Isotopic) Calibration of the Liquid Radwaste Discharge Monitor Rm-18, Revision 6A
STP I-102B5	Semiannual Discriminator Check Using a Multichannel Analyzer: Liquid Radwaste Discharge Monitor RM-18, Revision 1B
STP I-103B3	Radiation Source Presentation (Isotopic) Calibration of Gas Decay Tank Discharge Monitor RM-22, Revision 7

Corrective Action Documents (Action Requests)

A0631085, A0635603, A0636466, A0637715, A0640237, A0640263, A0643232, A0643561, A0645828, A0645845, A0672916, A0674838, A0678121, A0683944, A0684026

Audits and Assessments

2006 Radioactive Effluents Program & Offsite Dose Calculation Procedure Audit 3/14/2006

Calibration Work Orders

R0249919-01, R0259119-01, R0262339-01, R0262341-01, R0262341-01, R0264617-01, R0265769-01, R0267052-01, R0270219-01, R0270952-01, R0270954-01, R0271353-01

Miscellaneous

2004 Annual Radioactive Effluent Release Report
2005 Annual Radioactive Effluent Release Report
Results of the Radiochemistry Cross Check Program 3rd Quarter 2006

Section 2PS2: Radioactive Material Processing and Transportation (71122.02)

Procedures

RP2.DC2 Radwaste Solidification Process Control Program, Revision 14
RP2.DC3 Radwaste Dewatering Process Control Program, Revision 7
RCP RW-3 Radioactive Waste Nuclide Fractions and Correlation Factor Determination, Revision 17
RCP RW-4 Solid Radioactive Waste Shipment, Revision 27
RCP RW-5 Receiving, Loading, and Releasing of Transport Vehicle for Radioactive Waste Shipment, Revision 13
AD4.DC2 Plant Material Condition and Housekeeping, Revision 9
MP M-50.20 Loading Pre-Loaded Liners into the Chem-Nuclear CNS 14-215H Radwaste Shipping Cask, Revision 22
MP M-50.23 Loading Pre-Loaded Liners into the Chem-Nuclear CNS 8-120B Radwaste Shipping Cask, Revision 22A
DPP PC-14 Use of ISIP for Waste Classification and Shipping Type Determination of Consolidated Packages, Revision 9

Action Requests

A0636950, A0660113, A0664986, A0667372, A0667585, A0670720, A0683748

Audits and Assessments

2006 Solid Radioactive Waste Management and Radioactive Material Transportation Programs Audit, EDMS #060530012

Quick Hit Self Assessment, "Verify Controlled Documents Match Radwaste Vendor List,"
September 19, 2006

Shipment Packages

RMS 05-085, RMS 05-113, RMS 05-118, RMS 06-106, RWS 05-002, RWS 06-001, RWS 06-002,
RWS 06-003

Miscellaneous

Characterization: Hot Resin, Hot Filters and Constant Scaling Factors, Presented at the
ASME/EPRI Radwaste Workshop, Colorado Springs, CO, June 17-19, 2002.

2004 Annual Radioactive Effluent Release Report, April 29, 2005

2005 Annual Radioactive Effluent Release Report, April 28, 2006

**Section 2PS3: Radiological Environmental Monitoring Program (REMP) And Radioactive
Material Control Program (71122.03)**

Procedures

CAP A-8	Off-Site Dose Calculations, Revision 30
CY2	Radiological Monitoring and Controls Program, Revision 5
RCP D-610	Control of Radioactive Materials, Revision 13
RCP D-614	Release of Solid Materials from Radiologically Controlled Areas, Revision 9
RCP D-620	Control of Radioactive Sources, Revision 6
RCP EM-1	Radiological Environmental Biological Sampling, Revision 7
RCP EM-2	Radiological Environmental Air Sampling, Revision 10
RCP EM-5	DCPP Groundwater Sampling, Revision 0A
RP1.ID11	Environmental Radiological Monitoring Procedure, Revision 7

Corrective Action Documents (Action Requests)

A0637343, A0638631, A0640176, A0664910, A0665501, A0662902, A0671231, A0674390,
A0676225, A0676400, A0679734, 680600

Audits and Assessments

2005 Radiation Protection Program Audit

2006 Radiological Environmental Monitoring Program Audit

Calibrations

Primary Meteorology Wind Direction, Wind Speed, and Air Temperature/Delta-T (5-11-06)

Backup Meteorology Wind Direction, Wind Speed, and Air Temperature/Delta-T (7-25-06)

Miscellaneous

2004 Annual Radiological Environmental Operating Report
2005 Annual Radiological Environmental Operating Report

SUMMARY OF FINDINGS

IR 05000275/2006-013, 05000323/2006-013; 12/04/06 - 12/07/06; Diablo Canyon Power Plant Units 1 and 2; Radiological Environmental Monitoring Program and Radioactive Material Control Program

The report covered a four-day period of inspection on site by a team of four region-based health physics inspectors. A finding of very low safety significance (Green) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 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: Public Radiation Safety

L. Ricketson (4640)

**PIM SELF NCV PRS December 7, 2006 71122.03 Human Performance
Failure to survey material unconditionally released**

- Green. The team reviewed a self-revealing, non-cited violation of 10 CFR 20.1501(a) that resulted in an unconditional release of radioactive material from the radiologically controlled area. Specifically, the contents of a vehicle cab were not removed and surveyed, resulting in the release of a contaminated safety harness from the radiologically controlled area. The safety harness remained in the protected area. The licensee determined the inadequate survey of the vehicle and its contents was caused by inadequate procedural guidance. As corrective action, the licensee plans to revise Procedure RCP D-614, "Release of Solid Materials from Radiologically Controlled Areas," Revision 9, to include instructions for the removal of such items from vehicles and the survey to detect contamination.

The failure to adequately survey a contaminated item to prevent its release from the radiologically controlled area is a performance deficiency. This finding is greater than minor because it was associated with a Public Radiation Safety cornerstone attribute (material release) and it affected the associated cornerstone objective in that the failure to control radioactive material decreases the licensee's assurance that the public will not receive unnecessary dose. Using the Public Radiation Safety Significance Determination Process, the team determined that the finding had very low safety significance because: (1) the finding was a radioactive material control finding, (2) it was not a transportation finding, (3) it did not result in public dose greater than 0.005 rem, and (4) radioactive material was not released from the protected area more than five times. Additionally, this finding has a cross-cutting aspect in the area of human performance associated with resources because the licensee did not have complete procedures, in that, the procedures did not provide sufficiently detailed guidance to ensure the surveying of vehicle contents prior to removal of the vehicle from the radiologically controlled area (Section 2PS3).