

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-275/82-33

Docket No. 50-275 License No. DPR-73 Safeguards Group \_\_\_\_\_

Licensee: Pacific Gas and Electric Company

77 Beale Street

San Francisco, California 94106

Facility Name: Diablo Canyon Unit 1

Inspection at: San Luis Obispo County, California

Inspection conducted: October 18-22, 1982

Inspector: *Emilio M. Garcia* Nov. 3, 1982  
E. M. Garcia, Radiation Specialist Date Signed

Approved by: *GP Yuhos* 11/4/82  
F. A. Wenslawski, Chief, Reactor Radiation Date Signed  
Protection Section

Approved by: *H. E. Book* 11/4/82  
H. E. Book, Chief, Radiological Safety Branch Date Signed

Summary:

Inspection on October 18-22, 1982 (Report No. 50-275/82-33)

Areas Inspected: Routine unannounced inspection by a regionally based inspector of the general employee training, proposed modifications of the liquid and solid radwaste systems, calibration of air samplers, Regulatory Guide 4.15 conditions, maintenance of personnel dosimetry reports, and follow up on IE Information Notices. This inspection involved 29 hours onsite by one inspector.

Results: Of the six areas inspected no items of noncompliance or deviations were identified.

## DETAILS

### 1. Persons Contacted

R. Thornberry, Plant Manager  
R. Patterson, Plant Superintendent  
\*J. Boots, Supervisor, Chemistry and Radiation Protection (C&RP)  
W. O'Hara, Senior C&RP Engineer (E)  
M. Peterson, Senior C&RPE  
\*H. Fong, C&RPE  
\*S. Fahey, C&RPE  
L. Vulchev, Solid Radwaste Foreman  
R. Bliss, Power Production Engineer  
A. Dame, Training Specialist  
J. Pequignot, Training Specialist  
D. Fulbright, Security Officer  
R. Kosmala, Assistant to Power Plant Engineer  
R. Mayberry, Acting Instrument and Control Foreman  
J. Diamonon, Supervisor, Quality Control  
W. Kelly, Power Production Engineer

(\*Denotes those present at the exit interview).

### 2. General Employee Training

10 CFR 19.12 describes the instructions that must be provided to individuals frequenting the restricted area. At this site the degree of training an individual receives is a function of the plant area to which they need access and whether they are supervisory or nonsupervisory personnel. The inspector observed portions of the training provided to nonsupervisory personnel needing unescorted access to the protected area but not to radiation controlled areas. The courses observed were SOP 900 "General Description of Plant and Facilities," RPD-300 "Introduction to Radiation Protection Guide," and SEA-122 "Security Overview."

SOP-900 consists of a slide show that has been transferred to video tape, and a six page handout. This course lasts about an hour. Among the major topics presented are: A description of the site, the PG&E site organizations, a brief description of nuclear fission, major plant systems and their components, the barriers to the release of fission products, and introduction to the plant security. The course also explains the individual's responsibility to report to management any condition which might lead to a violation of NRC regulations, how they can do this, and their right to inform the NRC if they feel the licensee has not taken appropriate action. The location of the NRC site office was presented and the NRC resident inspectors were identified.

RPD 300 consists of a commercially prepared video tape, lectures, and a twenty page handout. This course lasted about one hour and forty minutes. Among the major topics presented were: An introduction to radiation physics including types of radiations and their sources both natural and occupational; biological effects and dose risk; radiation detection and measurement; exposure control for radiation workers; warnings, emergency alarms and assembly points; and the rights and responsibilities described in 10 CFR 19. The handout included a copy of the Appendix to Regulatory Guide 8.13 "Possible Health Risks to Children of Women who are Exposed to Radiation during Pregnancy," and a copy of Form NRC-3 "Notices to Employees."

SEA-112 consists of a licensee prepared video tape that is complemented by instructor comments. Among the major topics are: A description of the security forces, the identification badges, the procedures for searching individuals and vehicles entering the protected area, escort duties and responsibilities, and a demonstration of the computer access control system.

The inspector made the following additional observations. In each course the participants were provided with opportunities to ask questions. The instructors emphasized important points. No examinations were given. The inspector concluded that for the intended access the training program meets the requirements of 10 CFR 19.12.

No items of noncompliance or deviations were identified.

3. Modifications to the Liquid and Solid Radwaste System

Section 11 (eleven) of the Final Safety Analysis Report (FSAR) describes the radioactive waste management system (radwaste system). This existing system has been examined in previous inspections. The licensee is planning to make modifications to the radwaste system. PG&E Design Criteria Memorandum (DCM) Number M-43, Revision 0, July 13, 1982 describes the proposed changes. According to DCM No. M-43, the modifications are necessary due to changes in burial ground criteria, increased radioactive waste disposal cost, increases in plant staffing and the operating plant's experiences in processing radioactive waste. The major modifications being considered are:

- I. Modification and expansion of the radioactive waste storage facility to:
  - A. Develop storage vaults for more than 180 eighty cubic foot liners of solidified radioactive waste.
  - B. Add a second floor addition to the facility for the storage of approximately 720 4' X 4' X 6' steel boxes of compacted radioactive waste.

- C. Establish a laundry facility on the north end of the second floor.
- II. Relocation and expansion of the existing laundry facility for radioactive contaminated clothing to include:
  - A. New respirator cleaning equipment.
  - B. New dry cleaning machines and an additional dryer.
  - C. Tables and shelves for surveying, sorting, folding and storing the anti-contamination clothing and respirators.
- III. Removal of the existing cement solidification system. Solidification is to be provided by a contractor with mobile equipment at the 115 feet yard.
- IV. Establishment of a dry active waste (DAW) collection and compaction area including:
  - A. The area will be located in the Auxiliary Building at the 115 feet elevation, where the cement solidification system was located.
  - B. A 55-gallon drum compactor and a 4' X 4' X 6' steel box compactor will be used to compact the DAW.
- V. Establishing of activated carbon filters and Ion Exchangers demineralizers process train for the treatment of liquid radwaste.
- VI. Modification of the radioactive waste evaporator to allow it to also be used as a boric acid evaporator.

The licensee's representative stated their plans have not been finalized. The location of the new laundry has not been agreed upon, nor has the used waste evaporator as a boric acid evaporator. He also stated that the Plant Staff Review Committee (PSRC) would review the final plans and determined whether a 50.59 review was required.

In a related matter the licensee informed the inspector they were seeking the establishment of a new employee category, utility worker. The duties of this position would include decontamination of equipment and facilities, operation of the radwaste laundry, collection and compaction of radwaste and assistance with the solidification of radwaste.

No items of noncompliance or deviations were identified in this area.

4. Calibration of Air Samplers

A problem with the calibration of portable air samplers has been identified at another nuclear power plant. The problem relates to the calibration of the air sampler rotameter at a pressure other than the pressure it will be used. The inspector reviewed procedures related to the calibration of portable air samplers. Procedure MP 6.14-1, Revision 0, February 25, 1982 titled "Calibration of RADeCO HD 28/HD 28B Constant Flow Air Sampler" requires the calibration of the rotameter at a pressure that may differ from the pressure the instrument will be used. The licensee agreed to review this procedure and other air sampler calibration procedures to insure that calibrations are being properly performed.

No items of noncompliance or deviations were identified in this area.

5. Regulatory Guide 4.15 Conditions

One of the requirements of Technical Specification 5.8.1 is that the licensee establish, implement, and maintain written procedures of the Quality Assurance Program for effluent and environmental monitoring. The Technical Specification goes on to state that the above will be done "using the guidance in Regulatory Guide 4.15, December 1977." The Supervisor, Chemistry and Radiation Protection requested from the inspector clarification on how Region V determines compliance with this requirement. The licensee's representative wanted to know if the recommendations in Regulatory Guide 4.15 were to be interpreted as requirements. After consulting with regional management, the inspector informed the licensee that Region V expects the licensee to address all the critical elements of Regulatory Guide 4.15. However, it is not Region V understanding that the licensee must follow every recommendation presented in the Guide verbatim. The licensee's representative stated that they understood the requirement.

No items of noncompliance or deviations were identified in this part.

6. Personnel Dosimetry Reports

The inspector reviewed the licensee's program for submitting individuals' exposure reports as required by 10 CFR 20.409 "Notifications and Reports to Individuals". The review indicates that the present program may not be adequate to assure timely submittals when reports are required. The inspector discussed with the licensee's representative the need to submit these reports on time. The licensee's representative acknowledged the inspector's observation and stated that action will be taken to insure that these reports are submitted as required.

No items of noncompliance or deviations were identified in this area.

7. Follow up on IE Information Notices

The inspector reviewed the licensee's records to determine if the licensee had received and reviewed the following information notices:

- A. IN 81-26, part 3, Supplement 1, "Clarification of Placement of Personnel Monitoring Devices for External Radiation."
- B. IN 82-18 "Assessment of Intakes of Radioactive Material by Workers."
- C. IN 82-31 "Overexposure of Diver During Work in Fuel Storage Pool."
- D. IN 82-36 "Respirator Users Warning for Certain 5 Minute Emergency Escape Self Contained Breathing Apparatus."

All of these information notices had been received and reviewed for applicability by the Plant Staff Review Committee.

No items of noncompliance or deviations were identified in this area.

8. Emergency Preparedness Exercise

The inspector assisted the Region V Emergency Preparedness Analyst in observing the licensee's October 20, 1982 exercise and critique. The results of the exercise inspection are described in inspection report 50-275/82-34.

9. Exit Interview

At the conclusion of the inspection, the inspector met with the persons denoted in Paragraph 1. The inspector summarized the purpose and scope of the inspection and discussed the inspection findings. The licensee was informed that no items of noncompliance were identified.