U. S. NUCLEAR REGULATORY COMMISSION OFFICE OF INSPECTION AND ENFORCEMENT

REGION V

Report No. 50-275/82-29

Docket No. 50-275 License No. DPR-76 Safeguards Group

Licensee: Pacific Gas and Electric Company

P. O. Box 7442

San Francisco, California 94106

Facility Name: Diablo Canyon Unit 1

Inspection at: Diablo Canyon Site, San Luis Obispo County, California

Inspection conducted: August 29, 1982 through October 2, 1982

Inspectors Resident Reactor Inspector Carlson. John D. Sr. aned Mendonca, Resident Reactor Inspector Signed in Date Approved by ief, Reactor Projects Section No. 3 Kirsch.

Summary:

Inspection on August 29 through October 2, 1982 (Report No. 50-275/82-29)

Areas Inspected: Routine inspections of plant operations, surveillance testing, physical security, maintenance and TMI Task Action Plan Items. The inspection involved 155 inspector-hours by two NRC Resident Inspectors.

Results: No items of noncompliance or deviations were identified.

1. Persons Contacted

- *R. C. Thornberry, Plant Manager
- *R. Patterson, Plant Superintendent
- *J. M. Gisclon, Power Plant Engineer
- D. A. Backens, Supervisor of Maintenance
- *J. A. Sexton, Supervisor of Operations
- J. V. Boots, Supervisor of Chemistry and Radiation Protection
- *W. B. Kaefer, Technical Assistant to the Plant Manager
- *R. G. Todaro, Security Supervisor
- *R. T. Twiddy, Supervisor of Quality Assurance
- *R. C. Howe, Regulatory Compliance Engineer

The inspectors also interviewed a number of other licensee employees including shift supervisors, reactor and auxiliary operators, maintenance personnel, plant technicians and engineers, quality assurance personnel and members of General Construction.

*Denotes those attending the exit interview.

2. Operational Safety Verification

During the inspection period, the inspectors observed and examined activities to verify the operational safety of the licensee's facility. The observations and examinations of those activities were conducted on a daily, weekly, or monthly basis.

On a daily basis, the inspectors observed control room activities to verify compliance with limiting conditions for operations as prescribed in the facility Technical Specifications. Logs, instrumentation, recorder traces, and other operational records were examined to obtain information on plant conditions, trends, and compliance with regulations. Shift turnovers were observed on a sample bases to verify that all pertinent information on plant status was relayed.

During each week, the inspectors toured the accessible areas of the facility to observe the following:

- a. General plant and equipment conditions.
- b. Maintenance requests and repairs.
- c. Fire hazards and fire fighting equipment.
- d. Ignition sources and flammable material control.
- e. Conduct of selected activities for compliance with the licensee's administrative controls and approved procedures.

g. Implementation of the licensee's physical security plan.

h. Plant housekeeping and cleanliness.

The inspectors talked with operators in the control room, and other plant personnel. The discussions centered on pertinent topics relating to general plant conditions, procedures, security, training, and other topics related to the work activities involved.

The inspectors examined a licensee nonconformance report (NCR), DCO-82-MM-N059 Pressure Transient in ASW System, to verify that deficiencies were identified, tracked and resolved as specified by the NCR system. During ASW system operations, water hammer indications (pressure spikes) were observed on ASW pump starts and stops. This nonconformance is to investigate the phenomenon and is in the resolution process (See paragraph 4, Surveillance, of this report for further information). This item will be examined during a future inspection. (50-275/82-29-01).

No items of noncompliance or deviation was identified.

3. Maintenance

Maintenance activities for the diesel generators were reviewed by the inspectors during the month. Observations by the inspectors verified that proper approvals, system clearance and tests of redundant equipment were performed, as appropriate, prior to conducting maintenance on safety related systems or components. The inspectors verified that qualified personnel performed the maintenance using appropriate maintenance procedures. Replacement parts were examined to determine the proper certification of materials, workmanship and tests. During the actual performance of maintenance activities, the inspectors verified proper fire protection controls and housekeeping. Upon completion of the maintenance activity, the diesel generator was tested prior to returning the system or component to service (see paragraph 4 on Surveillance).

No items of noncompliance or deviations were identified.

4. Surveillance

Surveillance testing on the diesel generator (Surveillance Test Procedure M-9A) and the Auxiliary Saltwater System (Startup Test Procedure 17.8 Ad 2) were reviewed by the inspectors. The diesel generator test was terminated due to high cooling water temperature. The problem was believed to be caused by the ventilation paths to the radiator not being configured as designed (a roll down door was open). The licensee verified that with the door closed the diesel passed the test. The licensee plans a special test program to establish acceptable ventilation system configurations. This will be carried as an open item until the special test program is satisfactorily completed (50-275/82-29-02).

The auxiliary saltwater system test program was at the tsunami drawdown stage when indication of a potential pipe break (i.e., high pump motor amperage and reduced system flow) was observed. System hydrostatic tests and inspections were conducted to find the break, but no leakage was found. On retest, the system passed the tsunami drawdown test. This problem of potential pipe break indication is continuing and will be covered under the open item previously discussed in paragraph 2 (Operational Safety Verification) of this report (82-29-01).

No items of noncompliance or deviations were identified.

- 5. TMI Task Action Plan Items
 - a. <u>Auxiliary Feedwater System Evaluation</u>, Short Term Requirements (II.E.1.1)

The inspector verified that emergency operating procedures have provisions for transfer of pump suction to the fire water tank (safety grade) on loss of the Condensate Storage Tank (CST) level and that valve position is verified by two operators in accordance with a sealed valve checklist subsequent to testing or maintenance. This closes this item.

No items of noncompliance or deviations were identified.

b. Auxiliary Feedwater System (AFWS) Evaluation, Long Term Requirements (II.E.1.1)

The inspector verified that:

- . CST level indication is redundant and safety grade
- . AFWS flow is safety grade
- The AFWS suction valve position pointer has been replaced with a steel plate that was drilled and secured in place with a tack welded bolt. Additionally, this valve is on a sealed valve checklist

The 48 hour endurance runs for the motor driven AFW pumps has been reviewed and accepted.

Outstanding Items Are:

- 1) Review the 48 hour endurance test data for the turbine driven AFW pump; and
- 2) Verify that vital power supplies are installed for the steam supply valve to the AFW pump turbine, for the automatic actuation instrumentation, and for the Steam Generator level and AFW flow instrumentation. Installation of redundant power supplies is not complete.

This item will be held open.

No items of noncompliance or deviations were identified.

c. Thermal Mechanical Report (II.K.2.13)

Per the NRC licensing project manager, this item will be incorporated in the generic issue on pressurized thermal shock (PTS) and will be resolved as a PTS generic issue. Therefore, this item is closed on this basis.

d. Primary Coolant Sources Outside Containment (III.D.1.1)

The licensee has performed leak measurements and reduction measures. The inspector has reviewed these actions for all required systems except the Hydrogen Purge/External Recombiner System, the Gaseous Radwaste System, Containment Spray System, and the NSSS Sampling System Measures. Further, the licensee has instituted a leak reduction program. This item will remain open pending review of the previously mentioned leak measurements and reduction measures.

No items of noncompliance or deviations were identified.

6. Exit Interivew

The inspectors met with licensee representatives (denoted in Paragraph 1) on October 1, 1982. During this meeting, the scope and findings of the inspection were summarized by the inspectors.