

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-275/82-32 and 50-323/82-15

Docket No. 50-275 and 50-323 License No. DPR-76 and CPPR-69 Safeguards Group _____

Licensee: Pacific Gas and Electric Company

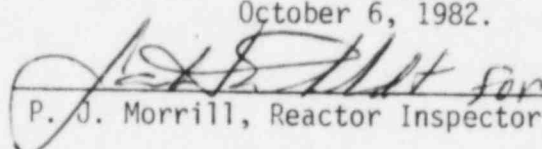
P. O. Box 7442

San Francisco, California 94120

Facility Name: Diablo Canyon Nuclear Power Plant

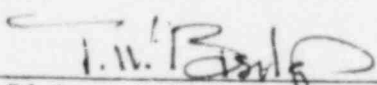
- Inspection Location and Date(s):
- (1) R. L. Cloud and Associates, Berkeley, California
October 4, 1982.
 - (2) Teledyne Engineering Services, Hayward, California
October 5, 1982.
 - (3) R. F. Reedy, Inc., Saratoga, California
October 6, 1982.

Report by:


P. J. Morrill, Reactor Inspector

11/4/82
Date Signed

Approved by:


T. W. Bishop, Chief, Reactor Projects Branch, No. 2

11/4/82
Date Signed

Date Signed

Summary:

Inspection during period of October 4-6, 1982 (Report Nos. 50-275/82-32 and 50-323/82-15)

The inspector examined implementation of the Independent Verification Program including independence and qualifications of personnel, implementation of Quality Assurance programs and Project Procedures, as well as conducting confidential interviews with personnel. This inspection effort involved 18 inspector-hours by one NRC inspector.

DETAILS

1. Persons Contacted

R. L. Cloud and Associates (RLCA)

R. L. Cloud, President

*E. Dennison, Project Manager

*Denotes those present at the exit meeting on October 4, 1982.

Teledyne Engineering Services (TES)

**A. Nitka, Administrator

**Denotes those present at the exit meeting on October 5, 1982.

R. F. Reedy, Inc. (RFR)

***W. Gibbons, W. Gibbons Inc., Associate

***R. Swayne, Gilbert/Common Wealth, Associate

***F. Greenwood, IDVP Project Manager

***Denotes those present at the exit meeting on October 6, 1982.

The inspector also conducted confidential interviews with individuals as described in the following section of this report.

2. Verification of Independence for Technical Reviewers

A Region V inspector continued to evaluate the independence of IDVP technical reviewers. The purpose of this program is to assure that the individuals performing the IDVP will provide an objective, dispassionate technical judgement, based solely on technical merit. The following factors were considered in evaluating the question of independence:

- 1) Whether the individuals involved had been previously hired by PG&E or Bechtel to do similar design work.
- 2) Whether any individual involved had been previously employed by PG&E or Bechtel (and the nature of the employment).
- 3) Whether the individual owns or controls significant amounts of PG&E or Bechtel stock.
- 4) Whether members of the present household of individuals involved are employed by PG&E or Bechtel.
- 5) Whether any relatives are employed by PG&E or Bechtel in a management capacity.

To verify that the individual participants meet the established independence criteria the inspector reviewed conflict of interest statements, reviewed resumes, and confidentially interviewed participants. The examination of resumes and confidential interviews were also used to evaluate the professional experience and competence of the participants, and to evaluate the possibility of pressure being applied to suppress findings. The following is a summary of these efforts.

a. R. L. Cloud and Associates (RLCA)

The inspector examined RLCA files P105-4-850-060 through P105-4-850-266 which contain the Conflict of Interest Statements (CIS) of individuals who have been assigned to work in the Independent Verification Program (IDVP). The inspector observed that there were CISs for 40 individuals, 22 who had signed a CIS which included both PG&E and Bechtel and 18 who had signed a CIS which included PG&E only. The inspector was informed that of these 18, 10 had been employed in the IDVP before Bechtel was included in the CIS, 4 worked at the RLCA East Coast office where more recent CISs (including Bechtel) were located, 3 were consultants whose CISs were examined during other inspection effort, and one was a part time employee not present during the inspection. Subsequently, a RLCA representative stated to the inspector that the part time employee had completed the CIS which included both PG&E and Bechtel. The inspector observed that the RLCA files contained a memo to file (P105-4-850-254) which documented the RLCA personnel who worked on the IDVP from October 1981 through February 1982, before the CIS became an IDVP requirement. The CISs examined indicated that three individuals had previously worked on the seismic interaction study for Diablo Canyon and that the father of one of these people owned 63 shares of PG&E stock.

The inspector subsequently examined 25 professional resumes of RLCA personnel and conducted confidential interviews with 11 participants in the IDVP. The inspector determined that two RLCA employees had previously worked for Bechtel, one from 1971 through 1979, and the other 1965 through 1968 and 1972 through 1976. The inspector was informed by a RLCA representative that the second of these two people no longer worked for RLCA. Subsequently, the inspector verified that neither person had any financial interest in Bechtel or that the first person did not feel constrained in any way by his previous employment. Similarly none of the other ten personnel interviewed indicated that they were constrained or pressured to suppress findings.

When questioned regarding the prior employment with Bechtel of the two RLCA employees, a RLCA representative stated that the work of these personnel was checked by others who had no employment history with either PG&E or Bechtel. The inspector also observed that the two individuals in question had a variety of work experience outside Bechtel and that they were at the working level, not responsible for the management or decision making processes of the IDVP.

The inspector concluded the RLCA personnel employed in the IDVP had previous minor involvement with PG&E (the seismic interaction study), and that one current and one former employee had worked for Bechtel prior to 1980. The inspector observed (1) that the individuals currently working in the IDVP stated that they feel no pressure to suppress findings, and (2) that these people appear competent and experienced in the matters under review by their office.

b. Teledyne Engineering Services (TES)

The inspector examined the TES files at the TES Hayward, California offices to determine the independence and technical qualifications of these TES personnel for the IDVP. Since the IDVP West Coast Manager was out of town, the inspector conducted the inspection with the project administrator. The inspector had previously (Inspection Reports 50-275/82-20 and 50-323/82-10) met with the TES Hayward office IDVP West Coast Manager, examined his CIS and resume and conducted a confidential interview at that time.

During the current inspection effort the inspector examined seven conflict of interest statements, examined six professional resumes, and conducted five confidential interviews with the TES personnel working in the IDVP. Based on these examinations and interviews the inspector determined that these TES personnel had no financial involvement with PG&E or Bechtel and that they had no current or previous employment experience with PG&E or Bechtel. The inspector also verified that these people feel no pressure to suppress possible findings and that they appear competent and experienced in the matters under review by their office.

c. R. F. Reedy, Inc. and Associates (RFR)

The inspector examined conflict of interest statements, personal resumes and interviewed available personnel to determine the independence and technical qualifications of R. F. Reedy personnel for the IDVP. A total of 17 conflict of interest statements were examined of which 9 addressed independence from PG&E only. When questioned concerning this, a R. F. Reedy representative stated that these 9 people left RFR

employment prior to the implementation of the Teledyne procedure (September 1982) requiring independence from both PG&E and Bechtel. The R. F. Reedy representative also stated that two temporary employees had no conflict of interest statements since they left RFR employment before the conflict of interest statements became a requirement. One of these two persons reportedly owned 500 shares of PG&E stocks through an investment fund.

The inspector examined 16 resumes of personnel who had been assigned to work on the IDVP by RFR. The inspector observed that of these 17 people, three had previous employment by Bechtel (10 years, 7 years and 7 years respectively) in the Quality Assurance, Quality Control and/or engineering areas. Two of these individuals were key managers in the R. F. Reedy organization. When questioned concerning his previous employment with Bechtel a RFR representative stated that neither he nor the other personnel employed by RFR had any financial involvement with Bechtel at this time, since people who left Bechtel were required to withdraw all the money invested in the Bechtel thrift and trust plans within 1 year of leaving. (The inspector confirmed this by discussions with one other previous Bechtel employee). Both of these persons stated that their previous Bechtel employment and personal relationships would not detract from their ability to inspect Bechtel since they were professionals and would not allow their reputations to be undermined, nor would they let previous associations compromise doing the best possible job. They also stated that they felt that their previous involvement would help them do a better job auditing the Bechtel/PG&E organization due to their enhanced knowledge of the Bechtel organization, program, and procedures. Another point the RFR employees raised was that personal relationships were not involved since the Bechtel people assigned to the Diablo Canyon project were not people with whom they had established close friendships, but may have worked with professionally in the past. The third individual who had previous work experience with Bechtel was traveling at the time of the inspection and was not available to be interviewed. Subsequent discussions between this person and the inspector (October 8, 1982) indicated that he also had no professional, personnel, or financial ties with Bechtel.

The inspector conducted confidential interviews with a total of four RFR personnel. All of the personnel interviewed stated that they felt no pressure to suppress possible findings.

The inspector concluded that three RFR personnel did have extensive prior Bechtel employment. One of these individuals was previously employed by Bechtel in the engineering area, where as the current R. F. Reedy work is in the area of quality assurance. It appeared that this individual is sufficiently independent of the PG&E and Bechtel organization at this time and that he is technically qualified to do the work assigned. The fact that two of the former Bechtel employees were now key managers in the Reedy organization has been identified to NRC management and is being addressed separately.

3. Exit Interview

At the conclusion of each segment (by dates and locations) of the inspection the inspectors met with appropriate representatives of the entities inspected to explain the scope and findings of the inspection.