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In the Matter of Pacific Gas and Electric Company
Diablo Canyon
Docket No. 50-275

Gentlemen:

Transmitted herewith in the captioned matter is the "Testimony of Charles A. Lovejoy" concerning the financial qualifications of the applicant.

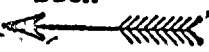
Sincerely yours,

Original Signed by Troy B. Conner, Jr.

Troy B. Conner, Jr.
Trial Counsel

cc: Algie A. Wells, Esq.
Mr. Stanley T. Robinson, Jr.
Mr. Richard H. Peterson
John Morrissey, Esq.
Mr. Gene A. Blanc
Mr. Lyle F. Carpenter

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UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

In the Matter of)
PACIFIC GAS AND ELECTRIC COMPANY)
(Diablo Canyon Nuclear Power Plant))

Docket No. 50-275

TESTIMONY OF CHARLES A. LOVEJOY
OFFICE OF THE CONTROLLER, AEC

My name is Charles A. Lovejoy. I live at 9205 Wadsworth Drive, Bethesda, Maryland.

I am a graduate of Benjamin Franklin University with an MCS Degree in Accounting.

From 1933 to 1941 I filled a variety of accounting and auditing positions with the U. S. Government. I was Controller of the United Services Life Insurance Company for two years before entering the military service in 1943. After discharge from the Army, I served for seven years in various staff and supervisory positions in the audit and accounting divisions of the Reconstruction Finance Corporation where my duties included financial analyses and review of the operations of borrowing institutions.

Since 1953, I have been a staff accountant in the Office of the Controller of the Atomic Energy Commission. My duties include the preparation of financial analyses of firms applying for special nuclear material and facility licenses and construction permits. I have appeared as the financial witness for the AEC staff in hearings on the applications for such licenses held over the past several years.



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I have reviewed the financial information presented in the application and amendments thereto of the Pacific Gas and Electric Company for a permit to construct a nuclear reactor with a net electrical output of 1,060 megawatts (3250 mwt) to be known as the Diablo Canyon Nuclear Power Plant and to be located at the applicant's Diablo Canyon site in San Luis Obispo County, California. Based on this information, including 1966 and previous annual reports of the Company, it is my opinion that the Pacific Gas and Electric Company (PG&E) is financially qualified to design and construct the proposed nuclear facility.

My opinion is based upon the following facts and considerations:

1. PG&E states that the estimated construction cost of the Diablo Canyon Nuclear Power Plant (exclusive of any fuel cost) is about \$188.5 million. This cost is made up as follows:

Production Plant:

Land and land rights	\$ 273,000	
Structures and improvements	16,800,000	
Reactor plant equipment	50,300,000	
Turbogenerator units	44,200,000	
Accessory electric equipment	5,530,000	
Miscellaneous power plant equip.	<u>1,890,000</u>	
Total direct cost (includes contingencies & startup)		\$118,993,000

Engineering, superintendence and accounting (including design and inspection)		6,760,000
Construction plant, warehouse, etc.		1,790,000
Overhead construction cost		<u>26,090,000</u>
Total capital cost		\$153,633,000

Step-up and terminal substation facilities 15,187,000

Transmission 19,593,000

Total plant construction costs \$188,413,000



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The Division of Construction has reviewed the details of the estimated total capital costs and has advised me that the cost estimate is reasonable.

2. As stated on page 3 of amendment 5 to the application, the first core of the nuclear unit is estimated to contain 87,210 kilograms of uranium at levels of enrichment ranging from 2.2% to 3.2%. The applicant plans not to lease this material from the Commission. The dollar value of the SNM, based upon the AEC published price schedule currently in effect, is \$19,346,000; the cost of fabricating the fuel is estimated at \$9,432,000; the total estimated cost of the first core fuel to PG&E is \$28,778,000. The Division of Reactor Development and Technology has reviewed the fuel requirements for the first core of the proposed nuclear plant and finds them reasonable for a reactor of this type and power level.
 3. PG&E estimates that the fund requirements of its construction program (which includes the nuclear plant) for the five year period 1967-71 (including sinking fund and bond maturity requirements) will amount to \$1,666 million. Such funds will be obtained from treasury funds on hand, unappropriated earnings and provisions for depreciation, short-term bank loans and sale of equity and debt securities when and as required. As presently estimated, \$996 million will be provided from internal sources and \$670 million from debt and equity securities.
- Based on PG&E's record of unappropriated earnings and provisions for depreciation over the past five years and on the reasonable assumption



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of the continuation of the same rate of increase over the next five years, it is my opinion that the applicant's expectation that these sources can supply the portion of the estimated annual construction requirements as indicated on page 3 of amendment 5 is a reasonable one. In view of the magnitude of PG&E's resources, the strength of its financial position and the high regard held for its bond issues, it is reasonable to assume that the Company will have little difficulty in selling sufficient securities to provide the remaining funds needed to finance the planned construction program to meet expected customer demand.

4. The Company is soundly financed and has plentiful resources at its command. As of December 31, 1966, cash and net receivables totaled \$104.2 million. Gross revenues for the year were \$920.7 million. The relationship between long-term debt and capital stock is sound (the debt being 51.7% of total capitalization) and the Company is not overcapitalized on a book value basis, as evidenced by the ratio of net plant to capitalization of 1.03. The Company's current Dun and Bradstreet credit rating is the highest (AaA1) and Moody's Investors Service rates the Company's first mortgage bonds as (high) Aa.

The Company enjoys a high level of earnings. Utility operating revenues have steadily increased over the past 5 years from \$729.4 million in 1962 to \$918.2 million in 1966 or over 26%. The earnings, after taxes, have increased from \$110.7 million to \$149.0 million or 34.6% over the same period. The volume of electricity and gas sales

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

In the second section, the author details the various methods used to collect and analyze the data. This includes both manual and automated processes. The manual process involves reviewing each entry individually, while the automated process uses software to identify patterns and anomalies.

The third section describes the results of the analysis. It shows that there are several areas where the data is inconsistent or incomplete. These areas need to be investigated further to determine the cause of the discrepancies.

Finally, the document concludes with a series of recommendations. These include implementing stricter controls over data entry, improving the accuracy of the automated systems, and conducting regular audits to ensure the integrity of the data.

to customers is also steadily rising; sales of electricity increasing from 26.3 billion kwh in 1962 to 34.9 billion kwh in 1966 or 33%, and sales of gas increasing from 415.6 billion cubic feet in 1962 to 597.4 billion cubic feet in 1966 or 44%. PG&E is thus operating from the excellent position of an increasing volume and an increasing net profit. If present demand continues or increases, it is reasonable to assume that the above level of earnings will continue or correspondingly increase.

5. The pertinent financial ratios computed from the financial data contained in the 1966 and 1965 Annual Reports indicate a strong financial position and compare favorably in the main with those of the electric utilities industry as a whole. A copy of my financial analysis, reflecting these ratios and other pertinent data is attached as Appendix A. In brief, the ratio of the long-term debt of \$1,603.5 million to net utility plant of \$3,209.0 million is .50; the ratio of net plant to capitalization is 1.03; the proprietary ratio is 43% of the total assets of \$3,458 million; the ratio of operating expenses, including income taxes, of \$717 million to operating revenues of \$918.2 million is .78; the rate of earnings on the total investment in PG&E is 5.8% and on the stockholders' investment is 10.0%; the number of times the interest on the bonded debt was earned is 3.4; and PG&E's retained earnings as of December 31, 1966, totaled \$392.1 million.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

In the second section, the author details the various methods used to collect and analyze the data. This includes both manual and automated processes. The goal is to ensure that the information gathered is both reliable and comprehensive.

The third part of the report focuses on the results of the analysis. It shows a clear upward trend in the data over the period studied. This suggests that the implemented measures are having a positive impact on the overall performance.

Finally, the document concludes with a series of recommendations for future actions. These are based on the findings of the analysis and aim to further optimize the processes and improve the quality of the data.

APPENDIX A

PACIFIC GAS AND ELECTRIC COMPANY
Docket No. 50-275
Financial Analysis

	(dollars in millions)		
	Calendar Year Ended Dec. 31		
	<u>1966</u>	<u>1965</u>	<u>1964</u>
Long-term debt	\$ 1,603.5	\$ 1,466.4	\$ 1,407.9
Utility plant (net)	3,209.0	3,034.2	2,850.5
Ratio - debt to fixed plant	.50	.48	.49
Utility plant (net)	3,209.0	3,034.2	2,850.5
Capitalization	3,100.8	2,900.0	2,788.2
Ratio of net plant to capitalization	1.03	1.05	1.02
Stockholders' equity	1,497.3	1,433.6	1,380.3
Total assets	3,458.0	3,277.9	3,090.4
Proprietary ratio	.43	.44	.45
Net income	149.0	140.3	125.8
Stockholders' equity	1,497.3	1,433.6	1,380.3
Rate of earnings on stockholders' investment	10.0%	9.8%	9.1%
Net income before interest	199.5	184.9	169.8
Liabilities and capital	3,458.0	3,277.9	3,090.4
Rate of earnings on total investment	5.8%	5.6%	5.4%
Net income before interest	199.5	184.9	169.8
Interest on long-term debt	58.3	53.3	49.7
No. of times fixed charges earned	3.4	3.5	3.4
Operating expenses (incl. taxes)	717.0	665.1	644.3
Operating revenues	918.2	851.4	815.0
Operating ratio	.78	.78	.79
Utility plant (gross)	4,191.7	3,957.2	3,697.6
Operating revenues	918.2	851.4	815.0
Ratio of plant investment to revenues	4.57	4.65	4.54
Retained earnings	392.1	328.3	275.0
Earnings per share of Common	\$2.23	\$2.08	\$1.87

<u>Capitalization as of 12/31/66:</u>	<u>Amount</u>	<u>% of Total</u>
First mortgage bonds	\$1,603.5	51.7%
Preferred stock	350.2	11.3
Common stock	1,147.1	37.0
Total	<u>\$3,100.8</u>	<u>100.0%</u>

Moody's Bond Ratings:
First Mortgage

Aa

Dun and Bradstreet Credit Rating

AaA1



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