TESTIMONY OF CHARLES E. OLSON
Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
A. My name is Charles E. Olson and my business address is 2000 L Street, N. W., Washington, D. C. 20036.
Q. WHAT IS YOUR OCCUPATION?
A. I am an economist and President of Olson \& Company, Inc.
Q. PLEASE OUTLINE YOUR EDUCATION AND EXPERIENCE.
A. I attended and received the following degrees from the University of Wisconsin at Madison: B.B.A. in 1964 (Senior Honors), M.S. in 1966, and Ph.D. in 1968. My doctoral dissertation analyzed the structure of the electric power industry.

I joined the University of Maryland in 1968 as an Assistant Professor and taught full-time in the College of Business and Management. I have taught graduate courses in managerial economics, public utilities and transportation and undergraduate courses in public utilities and transportation.

In 1971 I was promoted to Associate Professor, the rank I held until I left in September, 1976, to join H. Zinder \& Associates as Senior Economist. In December, 1977, I was elected Vice President and in December, 1979, I was elected Senior Vice Presicant, in September, 1980 I resigned my position with H. Zinder \& Associates and assumed my present position.

During the past ten years I have authored or coauthored many papers, articles, reports and other published material. I have published in the Public Utilities Fortnightly, Land Economies, the Transportation Journal, Business Horizons, and the Highway Research Record. The Institute of Public Utilities at Michigan State University published a revised version of my thesis which is titled Cost Considerations for Efficient Electricity Supply. I also have contributed to two other volumes, Regional Economic Effects of Alternative Highway Systems (Ballinger Publishing Co., 1974) and Studies in Electric Utility Regulation (Ballinger

Publishing Co., 1975).
I have given speeches, workshops and papers to many groups, both academic and business. I have been a coordinator and lecturer in the American Gas Association's annual Rate Fundamentals Course at the University of Wisconsin since 1971. The topics I have lectured on in this course include pricing, utility accounting, rate level determination, cost of capital and rate of return, and cost of service analysis. I have also lectured to other American Gas Association short courses.

During the past several years as a consultant, I have worked on more than 125 rate and certificate cases and have presented testimony more than 100 times. I have testified before the Federal Communications Commission, the Postal Rate Commission, the Federal Energy Regulatory Commission, the New York Energy Planning Board, the Dallas City Council, and public utilities commissions in 26 states and three Canadian provinces. The cases involved electric, gas, water, and telecommunications utilities. I have also testified in oil pipeline and taxi cases. My testimony has covered numerous subjects, including: fair rate of return, rate base, revenue requirements, revenue and expense adjustments, pricing, and rate design.

In addition, I have been a consultant on numerous projects and studies, including a study of the Uniform System of Accounts for telephone companies and a study of entry and fare determination policy for the taxicab industry in Washington, D. C. Working for the Development Advisory Service of Harvard University, I advised the government of Columbia on public utility rates in 1969. In 1977-1978 I directed a gas demand study for the gas distribution utilities in New York. Finally, I directed a study on gas rate design for the ERA in 1977-1978.

I have also done a significant amount of community service work, testifying in a number of cases on a pro bono basis. I have presented testimony before two Congressional committees. I was a member of two Federal Power Commission

National Power Survey Advisory Committees. Finally, I was Vice Chairman of the FPC's Gas Policy Advisory Counsel, Transmission, Distribution and StorageTechnical Advisory Task Force-Rate Design.

I am a member of the American Economic Association and its Transportation and Public Utilities Group, the Association for Evolutionary Economics, the Transportation Research Forum, and the American Society of Traffic and Transportation.
Q. WHAT IS YOUR ASSIGNMENT IN THIS CASE?
A. The management of Dallas Power \& Light Company (DP\&L) has requested that I make a study to determine the appropriate return on common equity capital for the Company. The return on equity capital that I develop will be utilized in the Company's presentation on the fair rate of return.
Q. WHAT MATERIALS DID YOU UTILIZE IN THE PREPARATION OF YOUR TESTIMONY AND EXHIBITS?
A. Most of the information I utilized was from standard financial sources, including s inual reports, prospectuses, published financial reports, market reports and so on. In addition, I have met with the financial management of Dallas Power \& Light Company. Finally, I presented return on equity testimony for the Company in Docket Nos. 1526 and 2572.

## Q. WILL YOU PLEASE EXPLAIN THE MEANING OF THE FAIR RATE OF RETURN?

A. Any business, whether regulated or unregulated, must earn enough dollars of profit to compensate present investors if new capital is to be attracted on reasonable terms. If new capital cannot be attracted on reasonable terms, a business will have difficulty providing reliable and adequate service. The fair rate of return is a percentage figure, which, when applied to the appropriate rate base, will yield the earnings required to attract capital on reasonable terms. This amount, known as the earnings requirement, must be added to reasonable operating expenses, depreciation, and taxes to determine the total revenue requirement that must be
obtained from the rates charged.
Q. HOW SHOULD THE RATE OF RETURN BE DETERMINED UNDER PUBLIC UTILITY REGULATION?
A. The prevention of monopoly profits, i.e., a competitive result, suggests that the purpose of public utility regulation with respect to rate of return is to permit the regulated company to earn its cost of eapital. By permitting a regulated company to earn its cost of capital, regulation prevents inadequate earnings as well. Earnings levels above the cost of capital in the long-run imply monopoly profits; linewise long-run earnings levels below the cost of capital indicate inability to attract capital on reasonable terms. The principle has been stated as foliows:

Regulation should assure that the average expected rate of return on desired new investment is equal to the utility's cost of capital. 1/

This statement is a correct one, but can be expanded upon for sake of clarity and proper application to the present case.

Under competition a firm cannot expect to earn more on a project it is about to undertake than its cost of capital. If more were expected the project would be undertaken by the firm's competitors and the actual rate of return would be driven down. While more than the cost of capital may be hoped for, the rational firm operating in a competitive market cannot expect more than the competitive rate of return or cost of capital from a given project. In a similar fashion there is no reason to expect any nonregulated firm to undertake a project that will produce a rate of return that is below the cost of capital.

Presumably, a regulated firm such as DP\&L can earn more than its cost on at least some of its projects; otherwise there would be no reason for its being regulated. If the rate level objective of utility regulation is to approximate what would happen in competitive markets, then it follows that the average expected

[^0]return on all new investments is held to the cost of capital. This does not mean that all new investments should be expected to earn the cost of capital because the regulatory agency may have public policy dictated nonrate level objectives that call for cross-subsidy between investments. The point is that the average expected rate of return on new investment in total should be equal to the cost of eqpital if the comperitive norm is taken as the standard.

In practice there is a significant complication that must be considered if the rate of return is to be based on the competitive standard. It results from the fact that actual or embedded debt costs at any given time are not equal to current debt costs. When embedded debt costs are combined with the cost of equity capital (which is the current cost), the result is a weighted cost of capital that is above or below what the cost would be if both the debt and equity were priced on a current bssis.

The difference between the current cost of capital and the traditional or embedded cost can be shown using a simple example. Assume that a utility has 60 percent debt capital and 40 percent equity. If the equity cost is found to be 16 percent and the embedded cost is 8 percent, the weighted cost is considered to be 11.2 percent, as computed below:

| Capital <br> Component | Cost <br> Rate | $\%$ of <br> Capital | Weighted <br> Cost |
| :--- | :---: | :---: | :---: |
|  | $8 \%$ | $60 \%$ | $4.8 \%$ |
| Debt <br> Equity | 16 | 40 | $\frac{6.4}{11.2 \%}$ |

The 11.2 percent figure is the one that is assumed to meet the so-called cost or competitive standard. But it does not if the current cost of debt capital is not 8 percent. If the same utility would have to pay 12 percent for its debt capital in the current market, its weighted cost of capital would be 13.6 percent as computed below:

| Capital Component | Cost <br> Rate | \% of Capital | Weighted Cost |
| :---: | :---: | :---: | :---: |
| Debt | 12\% | 60\% | 7.2\% |
| Equity | 16 | 40 | 6.4 |

Why does the 11.2 percent cost of capital figure not meet the competitive standard whils the 13.6 percent does? The answer is straightforward. The competitive norm is forward-looking while the embedded cost concept is historical. Expected rates of return govern what the cest of eapital is, not historical ones. New projects must be financed with new capital and the market price must be paid for such eapital. A firm operating in a competitive market could obtain a profit or loss depending on the timing of its debt issues. If debt capita' was issued for a 30 year term in the 1950's at a 4 percent rate of interest, a profit will result from the use of this capital when interest rates on comparable debt exceed 4 percent. Likewise, if a firm issued 11 percent bonds in 1974, it suffered losses once interest rates declined. Thus, to repeat the point that was stated earlier: Under competition the relevant cost of debt capital is the cost at the margin which is the current cost. No other cost is consistent with this standard.
Q. IN ANSWERING THE LAST QUESTION YOU STATED THAT THE COST OF CAPITAL SHOULD BE EARNED ON DESIRED NEW INVESTMENT. WHAT RETURN SHOULD BE EARNED ON THE EXISTING INVESTMENT?
A. I will again frame my answer in terms of the competitive standard. This standard is important in terms of proper resource allocation. The incremental or current cost of capital should be earned on the competitive market value of the firm's assets. In other words, whatever the assets of a utility are worth in a competitive market should determine their value for ratemaking purposes. This approach to ratemaking is equivalent to long-run marginal cost pricing. Depending on the relationship between marginal cost and average costs, the rate of return on a rate base determined under the competitive market value approach could be higher or lower than on a book value rate base.
Q. WOULD YOU NOW DISCUSS THE HISTORIC GUIDELINES TO THE DETERMINATION OF THE FAIR RATE OF RETURN FOR REGULATED UTILITIES?
A. The Bluefield and Hope cases as decided by the U. S. Supreme Court provide the background to the determination of a fair rate of return. In 1923 in the Bluefield

Water Works case the U. S. Supreme Court set forth criteria as follows:
A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally. 262 U.S. 679, 692-93 (1923)

In 1944 in the Hope Natural Gas Company case, the Court elaborated on this as follows:
. . . the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital. 320 U.S. 591, 603 (1944)

What do these decisions mean in terms of how the rate of return should be calculated? The Bluefield case states that a utility should be permitted a return "equal to that generally being made . . . on investments in other business undertakings attended by corresponding risks and uncertainties." Likewise, the Hope case states that "the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks." These statements imply that the fair rate of return to a regulated utility should be comparable to the returns on investments in other businesses having corresponding risks. The opinions of the Court appear to raise more questions than they answer. The Bluefield case implies that the fair rate of return should be equal to that being
earned by businesses having corresponding risks but the Hope case refers to the return on equity capital only. What is meant by corresponding risks? Against whose investment should the return be measured, that of the original owner or equity holder in the business or that of the prospective buyer of the business or the stock in the business?

Given that there are differences in the embedded cost of debt capital between companies and given that the Court referred to the equity owner in the Hope case, it would appear that the so-called comparable earnings standard is intended to be a measure of the cost of equity capital when it can be measured and not the overall return. In practice this is the way the standard has been applied.

Finally, if we decide that we understand just what the Court meant by corresponding risks and have found a sample of companies for measurement purposes whose stocks are publicly traded, against what investment do we measure the returns? That of the potential investor who would buy stock today? Or do we measure the returns on book value? And do we take the Court seriously in its statement in Bluefield that the measurement should be limited to the "same time and in the same general part of the country?"

Fortunately, the Court spelled out another standard in both the Bluefield and Hope cases which is far eas er to understand and implement; it is also consistent with the comparable earnings standard. In Bluefield the Coust said the following: "The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties." Likewise, in Hope the Court said: "That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprises, so as to maintain its credit and to attract capital." The so-called capital attraction standard is a far easier one to deal with. It means that the regulated utility should be permitted to earn its cost of capital
because this is what is necessary to attract the capital that is adequate to enable the utility to discharge its public duties. It also meets the basic objectives of rate level regulation as discussed above.
Q. HOW DOES THE CAPITAL ATTRACTION TEST OF THE HOPE AND BLUEFIELD CASES SQUARE WITH THE COMPARABLE EARNINGS STANDARD? ARE THEY CONSISTENT?
A. The answer is a gualified yes. The market place will adjust the paices of common stock to the level at which the cost of capital is just being earned through the actions of buyers and sellers action in their own best interests. Presumably, the market takes into account differences in risk, taking care of one of the problems discussed above. Thus, when comparable earnings are viewed in the context of rational capital markets, there is no problem because risk adjusted opportunities are equivalent.
Q. HOW IS THE FAIR RATE OF RETURN DETERMINED FOR A REGULATED ENTERPRISE SUCH AS DP\&L?
A. The fair rate of return is determined through the use of the cost of capital approach. Under the cost of capital approach, separate determinations are made of the cost of each type of capital utilized by the utility. If, for example, a utility is financed with long-term debt, preferred stock, and common equity, the cost of each of these components is estimate individually. Then the cost rate of each component is weighted by the appropriate percentage that it bears to the overall capitalization. The sum of the weighted cost rates is the overall cost of capital and is used as the basis of the fair rate of return.
Q. DR. OLSON, DID YOU PREPARE ANY EXHIBITS FOR USE IN THIS CASE?
A. Yes. CEO Exhibit Nos. 1-12 were prepared under my direction and supervision.
Q. WHAT IS THE CAPITAL STRUCTU:.E THAT IS PROPOSED BY DP\&L FOR THE PURPOSES OF DETERMINING THE WEIGHTED COST OF CAPITAL IN THIS CASE?
A. As shown on CEO Exhibit No. 1, the capitai structrue of DP\&L at June 30, 1980, as adjusted, consisted of 39.33 percent long-term debt, 0.02 percent notes payable, 11.82 percent preferred stock, 6.18 percent accumulated deferred investment tax credits, and 42.65 percent common equity.
Q. IS THE PROPOSED CAPITAL STRUCTURE OF DP\&L A REASONABLE ONE FOR RATEMAKING PURPOSES IN THIS CASE?
A. Yes, in my opinion, it is. As is explained in Mr. Karney's testimony, the Company must attract substantial amounts of additional capital during the next several years in order to finance the ongoing construction program. Unlike the construction programs of most electric utilities, the DP\&L program is largely replacement related rather than growth related. The Company must continue to replace its gas and oil-fired base load units with lignite and nuclear generation because of the declining availability of gas and oil. The Company, of course, must also be prepared to supply the growth related electric power needs of its service territory.

In order to be able to finance a construction program that continues at relatively high levels, the company must be capitalized in a prudent manner. In simple terms, the equity ratio must be high enough to permit additional debt capital to be issued at any time without an adverse effect on the company's credit rating. 'f the capital structure does not permit some margin for additional debt financing at all times, the company is subject to the potential adverse impact of tight eredit conditions.
Q. PLEASE DISCUSS IN MORE DETAIL THE RELATIONSHIP BETWEEN CREDIT CONDITIONS AND CAPITAL STRUCTURE FOR A REGULATED UTILITY SUCH AS DP\&L.
A. The Federal Reserve Board controls the supply of money in the United States. Because it is widely believed that there is a close relationship between growth in the money supply and inflation, the possibility always exists that the growth in money supply will be slowed or even halted by the Federsl Reserve Board. Thus,
when inflationary pressures exist, a natural policy reaction is to slow monetary growth. This in turl produces tight eredit conditions, difficulty in borrowing, and a depressed stock market.

Currently (September, 1980), we have seen how changes in Federal Reserve Board policy can impact on the cost and availability of money. In October, 1979 the Fed announced tishter policies with respect to growth rates in money and credit. In large measure this was due to the decline of the dollar relative to other currencies. Further tightening was done earlier this year. The result was record interest rates. Since then, interest rates declined but have now begun to move up again.

The problem facing a company such as DP\&L is that it is difficult to anticipate the timing and duration of Federal Reserve Board credit and monetary policy. All a company such as DP\&L can do is develop and maintain a strong credit rating so that borrowing is possible whenever it is required.
Q. WOULD YOU NOW EXPLAIN THE METHODOLOGY YOU WILL USE TO ESTIMATE THE COST OF EQUITY CAPITAL IN THIS CASE?
A. Yes. Equity owners share in the residual that remains from revenues after expenses, including interest, are paid. Thus, there is no contractual relationship as to required earnings between the common shareholder and the corporation. Earnings on equity can only be judged in terms of whether they prcduce market prices for the common shares that permit capital attraction on terms that are considered fair and reasonable.

From an investor viewpoint the cost of common equity capital to a given company is the minimum expected return which will induce him to buy stock at the going market price. For example, if an investor will buy a stock that is selling at $\$ 50$ per share but will not buy it at a higher price, and expects to receive $\$ 5.00$ in dividends and to sell it in exactly one year at $\$ 53$, the investor's expected return is 16 percent $(\$ 8.00+\$ 50.00)$. Unfortunately, the task is not this easy because we do
not know what investors really do expect when they decide to buy or sell a given stock.

In my opinion, the most reasonable way to go about estimating the cost of common equity is to utilize the so-called discounted cash flow (DCF) approach. The discounted cash flow approach to estimating the cost of equity capital is based on the premise that the investor is buying two things when he purchases common stock - dividends and growth. Investors in American corporations have come to expect growth in earnings and dividends per share of common stock because of a public policy that is committed to increasing Gross National Product. In addition, the experience of most U.S. corporations since the end of World War II has been one of increased dividends and earnings per share. The cost of equity capital using the discounted cash flow method is that discount rate which equates a given market price of a stock with the expected future flow of dividends.
Q. WILL YOU ESTIMATE THE COST OF EQUITY CAPITAL FOR DP\&L USING THE DCF METHODOLOGY?
A. Yes, although not directly. Most of the common shares of DP\&L are owned by Texas Utilities Company. Texas Utilities is a holding company and also owns all of the common shares of Texas Power \& Light Company, Texas Electric Service Company, and five other subsidiaries which perform specialized functions within the system. The common shares of Texas Utilities Company are widely held and its cost of equity capital can be reasonably estimated. I will determine the cost of equity capital for Texas Utilities using the DCF approach and impute the result to DP\&L.
Q. IS THE DCF METHOD THE ONLY APPROACH YOU CONSIDER IN DETERMINING THE COST OF EQUITY CAPITAL FOR DP\&L?
A. No, I review and analyze all the information that is available to me in estimating the cost of equity eapital for DP\&L or any other utility. In this regard I will present several checks on my DCF estimate of the cost of equity to DP\&L.

However, it is my view that the DCF approach is the best single method for determining the cost of equity capital when it can be applied to the company whose rates are at issue.
Q. WHAT INFORMATION IS AVAILABLE AND USEFUL FOR PURPOSES OF MAKING A DCF ESTIMATE OF THE COST OF EQUITY CAPITAL TO TEXAS UTILITIES?
A. We know, and presumably investors are aware, of current conditions in the economy. During the second quarter of 1979 GNP growth flattened; a recession began in January, 1980. Consumer prices have increased at a rapid rate, as shown below:

| Year | Increase in <br> Consumer Prices |
| :---: | :---: |
| 1974 | $12.2 \%$ |
| 1975 | 7.0 |
| 1976 | 4.8 |
| 1977 | 6.8 |
| 1978 | 9.0 |
| 1979 | 13.3 |

Inflation rates accelerated early in 1980 and the best that can currently be hoped for is a 12 percent increase in consumer prices in 1980. Here it should be again noted that the wage-price guidelines have had little impact on the rate of inflation. The prime rate reached 20 percent in April but has since eased to the 11 percent range. Unemployment is currently at 7.8 percent and is expected to rise as the recession deepens. Finally, money supply growth has been slowed by current Federal Reserve Board policy.

The type of information mentioned above is available in detail. Presumably, investors understand the state of the economy and have their own opinions about GNP growth, interest rates, and other factors. This influences their return expectations, and thereby determines the maximum price they will pay for a security. Thus, because investors take the economic situation into account in their decision-making, information concerning the economy is reflected in the prices of stocks and bonds at any given time.

If the discounted cash flow methodology is employed to determine the cost of equity capital of Texas Utilities, the significance of the economic situation is properly thought of in terms of its effect on the share price of the Company's common stock. Just exactly how economic information is translated into share prices is not clear. But it is evident that, to the extent investors are rational, they at least make their best judgment as to the effect of economic conditions on their buying and selling decisions. In this sense, investor perceptions are embedded in Texas Utilities' share price and do not have to be considered separately.
Q. WHAT MARKET INFORMATION IS AVAILABLE TO INVESTORS CONCERNING TEXAS UTILITIES COMPANY?
A. Investors are likely to have the following information regarding Texas Utilities:
(1) Market price data for Texas Utilities' common shares
(2) Past and presenit dividends
(3) Past and present earnings
(4) Past, present, and forecasted capital expenditure Jata
(5) Yields on the bonds and preferred stocks of Texas Utilities' subsidiaries
(6) Short-term forecasts by security analysts for Texas Utilities' earnings and dividends
(7) Rate decisions of the Texas PUC
Q. HOW IS THIS INFORMATION UTILIZED BY INVESTCRS?
A. It is reasonable to assume that it is utilized in investment decision making. In all likelihood, the more recent the information, the more weight it is given. However, it is not reasonable to expect that past trends are ignored. In addition to the above market information, investors are aware of statements by Company management and know that the Texas Utilities subsidiaries are involved in regulatory proceedings.
Q. PLEASE EXPLAIN HOW YOU HAVE IMPLEMENTED THE DCF APPROACH IN DETERMINING DP\&L'S COST OF EQUITY CAPITAL.
A. As I indicated earlier, my analysis focuses on the cost of equity to Texas Utilities, the parent of DP\&L. I will begin by considering the dividend yield. At the present time the dividend rate on the common shares is $\$ 1.76$ and price is $\$ 17.25$; the current yield is therefore 10.2 percent. It is, however, conceptually undesirable to base the return on equity on conditions that exist at a given point in time as they may not be representative of conditions that will exist when the new rates will be in effect. Instead, it is preferable to obtain a current average that eliminates market extremes while still being reflective of present interest rate levels.

CEO Exhibit No. 2 shows market prices, dividends and dividend yields for 10 years ending December 31, 1979. As shown, Texas Utilities' dividend yield increased from 3.35 percent in 1970 to 8.89 percent in 1979. The information presented on this schedule is intended to present a historical profile of Texas Utilities' cost of common equity capital, but does not purport to show actual cost levels yep.s by year. CEO Exhibit No. 3 presents dividend yields by quarter from the beginning of 1977 into the third quarter of 1980 . Yields were in the 6.5 to 7.0 percent range in 1977 and have incressed since then. For the first quarter of 1980 the Texas Utilities' dividend yield was 10.51 percent. The second quarter yield was 9.88 percent and so far in the third quarter the avera ${ }_{6}$ ? yield is 9.68 percent.

I believe that the best dividend yield to utilize for purposes of a current פCF analysis is one based on the indicated dividend rate of $\$ 1.76$ and a simple average of the high and low prices during 1980 (to date). During this period the low price was $\$ 14-7 / 8$, the high $\$ 19-3 / 8$ and the average $\$ 17.12$. Using this average price and current dividend the indicated yield is 10.3 percent.
Q. WHAT WAS THE DIVIDEND YIELD IN EARLY MARCH, 1980 WHEN TEXAS UTILITIES OFFERED FIVE MILLION COMMON SHARES FOR SALE TO THE PUBLIC AT $\$ 15.50$ PER SHARE?
A. Based on the indicated dividend rate of $\$ 1.76$, the yield to the buyers of the new shares was 11.4 percent. This is well above the yield of 10.3 percent that I have
proposed.
Q. IN ITS PAST PRESENTATIONS THE PUC STAFF UTILIZES A FORWARD DIVIDEND YIELD CONCEPT THAT UTILIZES THE EXPECTED DIVIDEND PAYMENT DURING THE COMING YEAR. WHAT WOULD THE TU DIVIDEND YIELD BE ON THAT BASIS?
A. The TU dividend has been increased by 129 per common share during each of the past three years; in all of these years the increase was declared in February. In my opinion it is reasonable to assume that the dividend will be increased to an annual rate of $\$ 1.88$ per common share or $47 \Phi$ per quarter in February. Combining one quarter at the present rate of $44 \%$ with three quarters at the "expected" 47 © rate results in a forward dividend of $\$ 1.85$. When $\$ 1.85$ is divided by the current price of $\$ 17.25$, the result is 10.7 percent. This of course is identical to the dividend yield that my analysis produced.
Q. PLEASE EXPLAIN HOW YOU DERIVED YOUR ESTIMATED GROWTH RATE FOR TEXAS UTILITIES.
A. My exhibits present data on Texas Utilities' growth rate in recent years. As was indicated earlier in my tostimony, investors buy both yield and anticipated growth in purchasing a common stock. The growth they buy is expected future growth; this must be estimated using past and current data for tie company and the economy. I have utilized earnings, dividends, and book value data for purposes of evaluating what investor growth expectations for Texas Utilities are likely to be, but have placed more weight on the dividend and earnings growth rates.

CEO Exhibit No. 4 presents earnings data and growth rates for the 11 years ending December 31, 1979. Earnings data are important to investors because they reveal what each share produces; they also provide the basis for the payment of dividends. The figures in the column entitled "Percentage Increase Over Prior Year" show tive year-to-year increases in earnings per share. The column entitled "Rate of Increase to 1979 " shows the compound rate of increase for each of the

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years shown through 1979. For example, the increase from $\$ 1.51$ in 1959 to $\$ 2.45$ in 1979 meant that the compound rate of increase for the period was 5.0 percent. If $\$ 1.51$ had been put in the bank at 5.0 percent interest at the end of 1969 , and interest had been earned on both that amount and the ye riy accumulations of interest, there would have been $\$ 2.45$ at the end of 1979 .

CEO Exhibit No. 5 presents data on Texas Utilities' dividends and dividend growth since 1969. As can be seen, the compound rate of increase in dividends per share was 6.9 percent for the entire period. Further, dividends were increased in each of the years shown.

CEO Exhibit No. 6 presents similar information for the 11 -year period beginning in 1970. Estimated dividends can be utilized for 1980 because of the recent dividend increase (February, 1980). Again, the pattern is one of steady increase at a level above 6 percent per year.

CEO Exhibit No. 7 presents data on Texas Utilities' payout ratio from 1969 to 1979. The payout ratio is the percentage of earnings that is paid to the common shareholders in a given period of time. For example, if a company earned $\$ 1.00$ per share in 1979 and declared cash dividends of $\$ .50$ per share, the payout ratio would be 50 percent. Payout ratio data should be considered in the evaluation of dividend growth rates because they indicate how likely it is that past dividend increases will be maintained, decreased, or increased. A rising payout ratio indicates that dividends are increasing relative to earnings; other things being equal this is a sign of financial weakening.

The data presented on CEO Exhibit No. 7 reveals that Texas Utilities' dividends have increased relative to earnings since the early 1970's. Payout ratios averaged less than 55 percent from 1969 to 1974; for 1979 the payout was nearly 67 percent of earnings. This raises a serious question as to whether investors perceive that the 7 percent dividend increases of the past decade can be maintained.

CEO Exhibit No. 8 presents data on Texas Utilities' book value per common
share from 1969 through 1979. Column 2 shows the data without the Job Development Investment Credits while column 5 includes these credits. As shown, the rates of increase are rather substantial, averaging 7 percent without the investment credits and 8 percent with them. In my opinion, the rates of increase in the book value figures are not sustainable. An important reason that they are so high is that there were numerous common stock issues at prices above book value during the early part of this period. With market prices currently being close to book value it is no longer reasonable to assume that issues of stock in excess of book velue will contribute significantly to growth. On the other hand, if investors expect the Commission to grant some return on the accumulated investment tax credits, then it is clear that book value growth is being maintained at a high level.
Q. DR. OLSON, DO YOU HAVE A CONCLUSION AS TO THE PROPER GROWTH RATE TO UTILIZE IN COMBINATION WITH THE DIVIDEND YIELD OF 10.3 PERCENT THAT YOU ESTIMATED EARLIER?
A. Yes. In my opinion, the appropriate growth rate to utilize with the previously estimated dividend yield of 10.3 percent is between 5.5 and 6.0 percent. This figure is above the 10 -year earnings growth rate but below the rates of increase in dividends during the past 10 years. When it is combined with the previously estimated dividend yield of 10.3 percent the result is an investor return requirement of between 15.8 and 16.3 percent.

In my earlier discussion relative to Texas Utilities' payout ratio I pointed out that historical dividend growth rates could not be maintained in the face of a declining retention ratio, other things being held constant. By itself, the decrease in Texas Utilities' retention ratio is an indication that an expected growth rate of 5.5 to 6.0 percent is not likely. But another factor has been at work that has slowed Texas Utilities' rate of increase in earnings below what investors would expect for the future. Texas Utilities' realized return on common equity capital has declined in recent years, from approximately 15 percent in the 1969 to 1972
period to 12.2 percent in 1379. Rational investors do not expect this pattern to continue for Texas Utilities because they are aware that its subsidiaries (including DP\&L) are being authorized common equity returns of approximately 15 percent. Earned returns of 15 percent on common equity would produce internal growth of 6 percent if 60 percent of carnings are paid out ( 15 percent times 0.40 is 6.0 percent).

CEU Exhibit No. 9 demonstrates this point. Earnings per share are computed at a 15 percent return level for each of the years 1969 through 1979 on book value figures that are adjusted to eliminate the sales of stock at prices above and below book value. As shown, the growth rates are generally above 5.5 percent. This growth pattern is evidence that the underiying growth in Texas Utilities' earnings is above the actual level of the past several years.
Q. DO YOU HAVE ANY CHECKS ON THE REASONABLENESS OF THE 15.8 TO 16.3 PERCENT INVESTOR REQUIREMENT FOR TEXAS UTILITIES?
A. Yes. My first check makes use of current returns oin net worth for leading manufacturing corporations. According to the April, 1980 Monthly Economic Letter, a publication of Citibank, the returns on net worth in 1978 and 1979 for 1,280 manufacturing corporations were 15.9 and 18.4 percent. I realize there are limitations in utilizing such data for ecmparative purposes, but I do so keeping two factors in mind. Firsi, investment by American industry is linging because expected returns on many projects are inadequate. To the extent that expected reiurns are a function of current returns, present equity earnings are not considered attractive by industry. This point has been made in the Economic Report of the President. In the 1978 Report at page .6, the President made the following statement:

Business investment has lagged curing the recovery for several reasons. Some of the fears engendered by the steep recession and severe inflation of 1973-75 have remained and have reduced the incentive for businesses to invest. Uncertainties about energy supplies and energy prices have also been a deterrent to investment, and so have
concerns about governmental regulations in a variety of areas. Finally, high costs of capital goods and a depressed stock market have diminished the incentives and raised the costs to businesses of investment in new plant and equipment.

Second, stock market prices in general are close to book value. The Dow Jones Industrial Average is about 95 percent of book value. The S\&P 400 Industrials are trading about 25 percent above book value. This is a strong indication that the returns earned by most corporations do not include monopoly profits.

A second alternative estimate of the cost of common equity can be obtained by reviewing the common equity returns of a broad cross-section of American industry. This information is presented on CEO Exhibit No. 10. Average returns on common equity have increased from about 14 percent in 1973-74 to 16.6 percent in 1979. These returns would be even higher if they didn't include the utilities whose realized common equity returns have not been high enough to maintain market prices at levels above book value. A review of the data present on CEO Exhibit No. 10 indicates that many firms have the opportunity to earn in excess of 17 percent on their common equity capital. Most of these firms have common equity ratios that are far higher than that of DP\&L.

A third check on my estimate of the cost of common equity can be obtained by utilizing the interest premium approach. In that the payment of bond interest must be made before dividends can be distributed, the cost of debt capital is clearly below the required comme squity return. Information on the premium that investors require over the bond yield can be obtained from a Paine Webber Mitchell Hutchins Inc. publication titled "A Survey of Investor Attitudes Toward the Electric Power Industry." Large institutional investors numbering 158 were surveyed in April-May, 1980 and 115 responded. When asked to assume that Double A long-term utility bonds were yielding 12.5 percent, 63 percent of institutional investors in the sample said they would require a return of 16 percent or higher. Some 27 percent said they would require a return of 15 to 16 percent and only 10
percent said that less than 15 percent would be required. In that Texas Utilities' bonds currently yield about 12.5 percent, it is clear that most investors would require 16 percent or mort to invest in Texas Utilities.

A risk premium of at least 3.5 percent ( 16 percent less 12.5 percent) above the corporate bond return is consistent with actual investor experience over the last 50 years. in Stocks, Bonds, Bills, and Inflation: The Past (1926-1976) and the Future (1977-2000), Roger G. Ibbotson and Rex A. Sinquefield have shown that common stocks have produced returns that average 5 percentage points more than corporate bond returns. This is consistent with the Mitchell Hutchins survey which showed a mean spread of 4.2 percentage points.
Q. IS THE 15.8 TO 16.3 PERCENT INVESTOR RETURN REQUIREMENT THE COST OF EQUITY CAPITAL TO TEXAS UTILITIES?
A. $\mathrm{N} o$, it is not. The 15.8 to 16.3 percent investor requirement must be increased to allow for financing costs and market breaks. Fairness to existing investors dictates that Texas Utilities should be able to issue common equity at prices that produce net proceeds per share that are above book value.

In my opinion the market-to-book ratio should be set high enough to permit equity financing with net proceeds equal to or in excess of book under most market conditions. The minimum market-to-book ratio under most conditions should be 110 percent and the average higher, depending on the volatility of the common shares of the company whose rates are at issue.

The market-to-book premium, in addition to protecting the investor against market volatility, is also required to compensate for the transactions costs that are incurred when common equity is issued. CEO Exhibit No. 11 presents a\&ta on the transactions or financing costs associated with Texas Utilities' common s* i< offerings during the past 4 years. The January, 1979 issue was at $\$ 19.50$ per share and the net proceeds were $\$ 18.91$; the transaction cost was thus 3.0 percent.

Financing costs tend to increase sharply during down markets. For example, when Texas Utilities issued common shares at $\$ 19.50$ in October, 1974 net proceeds were $\$ 18.45$ and the financing costs were 5.4 percent. Thus, the risk of down stock markets is compounded; it pulls down the market price and increases the transactions cost. This double-barreled effect must be taken into account by allowing for an adequate market-to-book equity ratio. As I stated earlier, the minimum market-to-book ratio under most conditions should be 110 percent.

When the 15.8 to 16.3 percent investor requirement is increased by 10 percent the resulting cost of equity is between 17.4 and 17.9 percent. When it is increased by 20 percent the cost is between 19.0 and 19.6 percent.

The financing cost adjustment must be applied to the entire investor requirement in order to avoid dilution on a given issue. Assume that a utility has a book value of $\$ 25.00$ per common share and financing costs are 5 percent of the issue price. If a return on common equity that is just equal to the investor requirement is authorized and earned, the shares will trade at $\$ 25.00$. If new shares are issued, net proceeds available for investment will be $\$ 23.75$ per share; this of course dilutes the investment of existing shareholders. In order to avoid dilution, the share price must be increased by 5 percent; this is done by increasing the investors' required return by 5 percent.
Q. IF A PREMIUM OF BETWEEN 10 AND 20 PERCENT IS APPLIED TO THE DIVIDEND YIELD INSTEAD OF TO THE INVESTOR REQUIREMENT WILL THE COMMON SHARES TRADE AT 10 TO 20 PERCENT ABOVE BOOK VALUE UNDER NORMAL MARKET CONDITIONS?
A. No. It is unreasonable to assume that if an investor requirement of between 15.8 and 16.3 percent wili produce a market-to-book equity ratio of 1.0 , that a return on equity of less than 17.4 percent ( 15.8 times 1.10 ) will produce a market-to-book ratio of 1.10 . Such an assumption implies irrational investor behavior.

Careful reasoning makes it clear that the market-to-book equity ratio will
increase in proportion to the percentage increase in the equity return above the investor requirement. For example, if the expected return on Texas Utilities' common shares were zero percent, the shares would trade at zero price. If the expected return on book value were one-half the investor requirement, the shares would trade at one-half of book value. At a return on book value equal to the investor requirement, the shares would trade at book value. Why then should the shares trade at 10 percent above book value if the investor requirement is increased by less than 10 percent? The answer is they will not.
Q. IF THE MARKET-TO-BOOK PREMIUM WERE APPLIED TO THE DIVIDEND YIELD AS A MATTER OF REGULATORY PRACTICE, COULD A UTILITY INFLUENCE ITS AUTHORIZED RATE OF RETURN?
A. Yes. The application of the market-to-book premium to the dividend yield would mean that a utility could increase its return on equity by increasing the dividend payout ratio to 100 percent.

Assume, for example, that the regulatory authority determines that a utility's dividend yield is 10.0 percent and the investor requirement is 15.0 percent. Further, assume a 10 percent market-to-book premium is deemed to be appropriate. If this is applied to the yielc, the required equity return is 16.0 percent (. 10 times 10 percent plus 15 percent). But then if the utility increases the payout ratio to 100 percent then the premium rises to 1.50 percent ( 15.0 percent times 10 percent) and the return on equity to 16.5 percent.
Q. ASSUME THAT A UTILITY PAID NO DIVIDENDS AND HAD TO OBTAIN ADDITIONAL AMOUNTS OF EQUITY CAPITAL EXTERNALLY. IF THE MARKET-TOBOOK PREMIUM WERE APPLIED TO THE DIVIDEND YIELD, WHAT WOULD THE PREMIUM BE?
A. Zero. This of course demonstrates the fallacy of applying the market-to-book premium to the dividend yield. A company such as Texas Utilities that retains a high percentage of its earnings to help finance its construction program is
penalized for keeping its payout ratio low if the market-to-book premium is applied to the dividend yield.
Q. WHAT IS YOUR RECOMMENDED RETURN ON EQUITY?
A. In my opinion the return on equity should be set between 17.0 and 18.0 percent. This level of return includes no implicit allowance for attrition, i.e., it must be earned if capital is to be attracted on reasonable terms under most market conditions.
Q. DR. OLSON, HAVE THE RETURNS ON COMMON EQUITY THAT HAVE BEEN AUTHORIZED FOR THE TEXAS UTILITIES SUBSIDIARIES IN RECENT YEARS BEEN ADEQUATE?
A. No. As shown on CEO Exhibit No. 12, Texas Utilities' market-to-book ratio has declined since the implementation of the Public Utility Regulatory Act. The authorized returns have increased, but not rapidly enough to keep pace with the increases in other interest rates.
Q. DOES THIS COMPLETE YOUR TESTIMONY?
A. Yes, it does.

## DALLAS POWER \& LIGHT COMPANY <br> Capital Structure at June 30, 1980 As Adjusted

| Capital <br> Component | Amount | Percent of <br> Capital Structure |
| :---: | ---: | :---: |
| Long-Term Debt | $\$ 348,463,018$ | 39.33 |
| Nites Payable | $0.02,821$ | 11.82 |
| Preferred Stock | $104,721,530$ | 6.18 |
| Accumulated Deferred <br> Investment Tax Credits | $54,754,385$ | $\underline{42.65}$ |
| Common Equity | $\underline{377,887,842}$ | $\underline{100.00}$ |

[^1]
## DALLAS POWER \& LIGHT COMPANY

Market Prices, Dividends, and Dividend Yields
Texas Utilities Company
$\qquad$

| (1) | (2) (3) <br> Market Price Per Share |  |  | (5) <br> Dividends <br> Declared | (6) <br> Dividend Yield |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Year | High | Low | Average |  |  |
| 1970 1/ | \$30.81 | \$22.94 | \$26.88 | \$. 90 | 3. $35 \%$ |
| 1971 1/ | 32.31 | 27. 44 | 29.88 | . 96 | 3.21 |
| 1972 | 36.00 | 25.75 | 30.88 | 1.00 | 3.24 |
| 1973 | 34. 50 | 20.50 | 27.50 | 1. 04 | 3. 78 |
| 1974 | 25.00 | 15.25 | 20.12 | 1.12 | 5. 57 |
| 1975 | 25.25 | 16.75 | 21.00 | 1.24 | 5. 90 |
| 1976 | 22.25 | 17. 00 | 19.62 | 1. 32 | 6.73 |
| 1977 | 23. 375 | 18.875 | 21.12 | 1. 40 | 6.63 |
| 1978 | 22.25 | 18.00 | 20.12 | 1. 52 | 7. 55 |
| 1979 | 20.125 | 16.75 | 18.44 | 1. 64 | 8.89 |

1/ Adjusted for two for one stock split May 19, 1972.
Source: Texas Utilities Company, Annual Report 1979; Moody's Dividend Record and Standard \& Poor's Stock Guide.

## DALLAS POWER \& LIGHT COMPANY

Quarterly Average Market Price and Indicated
Dividend Rate for Texas Utilities Company
1977 - 1980 To Date

| (1) |  | (2) | (3) | (4) | $\begin{aligned} & \text { (5) } \\ & \text { Indicated } 1 / \\ & \text { Dividend } \\ & \text { Rate } \\ & \hline \end{aligned}$ | (6) <br> Dividend |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quar |  | High | Low | Average |  | Yield |
| 1977 | I | \$22.00 | \$19.125 | \$20.56 | \$1. 40 | 6.81\% |
|  | II | 22.25 | 18.875 | 20.56 | 1.40 | 6.81 |
|  | III | 23.375 | 20.50 | 21.94 | 1. 40 | 6.38 |
|  | IV | 22.75 | 19.75 | 21.25 | 1.40 | 6.59 |
| 1978 | I | 22. 125 | 19.25 | 20.69 | 1. 52 | 7. 35 |
|  | II | 21.25 | 19.25 | 20.25 | 1.52 | 7.51 |
|  | III | 22.25 | 20.00 | 21.12 | 1. 52 | 7.20 |
|  | IV | 20.375 | 18.00 | 19.19 | 1.52 | 7. 92 |
| 1979 | I | 20.125 | 18.125 | 19.12 | 1. 64 | 8.58 |
|  | II | 19.875 | 18.00 | 13.94 | 1.64 | 8.66 |
|  | III | 19.75 | 18.125 | 18. 94 | 1. 64 | 8.66 |
|  | IV | 19.625 | 16.75 | 18. 19 | 1. 64 | 9. 02 |
| 1980 | I | 18.625 | 14.875 | 16. 75 | 1. 76 | 10.51 |
|  | II | 19.375 | 16.25 | 17.81 | 1.76 | 9.88 |
|  | III | 18.875 | 17. 00 | 17.94 | 1. 76 | 9.81 |

1/ Dividend rate is an annual disbursement based on the last quarterly declaration.
Source: Texas Utilities Company, Annual Report 1979; Barron's and Standard \& Poor's Stock Guide.

DALLAS POWER \& LIGHT COMPANY

Earnings Per Share and Growth in Earnings Per Share for
Texas Utilities Company
1969-1979

| (1) <br> Year | (2) <br> Earnings <br> Per Share | (3) <br> Percentage Increase Over Prior Year | (4) <br> Rate of Increase to $\qquad$ 1979 |
| :---: | :---: | :---: | :---: |
| 1969 | \$1.51 | 11.9\% | 5. $0 \%$ |
| 1970 | 1.66 | 9.9 | 4. 4 |
| 1971 | 1. 74 | 4.8 | 4.4 |
| 1972 | 1.95 | 12. 1 | 3.3 |
| 1973 | 2.01 | 3.1 | 3. 4 |
| 1974 | 2. 18 | 8. 5 | 2. 4 |
| 1975 | 2.02 | $-7.3$ | 4.9 |
| 1976 | 2. 29 | 13.4 | 2. 3 |
| 1977 | 2. 40 | 4.8 | 1.0 |
| 1978 | 2. 54 | 5.8 | -3. 5 |
| 1979 | 2. 45 | -3. 5 | - |

Source: Texas Utilities Company, Annual Report 1979, op. 30-31.

DALLAS POWER \& LIGHT COMPANY

Dividends Per Share and Growth in Dividends Per Share
Texas Utilities Company
1969-1979

| (1) | (2) | (3) dends De | (4) |
| :---: | :---: | :---: | :---: |
| Year | Dividends | increase Over Prior <br> Year | Rate of Increase to $\qquad$ 1979 |
| 1969 | \$.84 | - | $6.9 \%$ |
| 1970 | .90 | $7.1 \%$ | 6.9 |
| 1971 | . 96 | 6.7 | 6.9 |
| 1972 | 1.00 | 4. 2 | 1.3 |
| 1973 | 1.04 | 4. 0 | 7.9 |
| 1974 | 1.12 | 7.7 | 7.9 |
| 1975 | 1. 24 | 10.7 | 7.2 |
| 1976 | 1.32 | 6.5 | 7. 5 |
| 1977 | 1.40 | 6.1 | 8.2 |
| 1978 | 1.52 | 8.6 | 7.9 |
| 1979 | 1.64 | 7.9 |  |

Source: Texas Utilities Company, Annual Report 1979, pp. 30-31.

## DALLAS POWER \& LIGHT COMPANY

Dividends Per Share and Growth in Dividends Per Share Texas Utilities Company
$\qquad$
(1)
(2)
(3)
(4)
$\longrightarrow$ Divi

| Increase | Rate of |
| :---: | :---: |
| Over Prior | Increase to |
| Year | -1980 |

1970

1971

1972

1973

1974

1975

1976

1977

1978

1979

1980

Year
1.00

1. 04
1.12
2. 24
3. 32
1.40
4. 52
1.64
5. 76
6. 3

## DALLAS POWER \& LIGHT COMPANY

Earnings Per Share, Paid Dividends and Payout Ratios
Texas Utilities Company
$\qquad$

| (1) Year | (2) <br> Earnings <br> Per Share | (3) <br> Declared <br> Dividends <br> Per Share | (4) <br> Payout <br> Ratio $(3) \div(2)$ |
| :---: | :---: | :---: | :---: |
| 1969 | \$1.51 | \$ . 84 | $55.6 \%$ |
| 1970 | 1.66 | . 90 | 54.2 |
| 1971 | 1. 74 | . 96 | 35.2 |
| 1972 | 1.95 | 1.00 | 51.3 |
| 1973 | 2.01 | 1.04 | 51.7 |
| 1974 | 2. 18 | 1.12 | 51.4 |
| 1975 | 2.02 | 1. 24 | 61.4 |
| 1976 | 2.29 | 1.32 | 57.6 |
| 1977 | 2.40 | 1. 40 | 58.3 |
| 1978 | 2.54 | 1.52 | 59.8 |
| 1979 | 2.45 | 1.64 | 66.9 |
| Mean | 9-1979 |  | $56.7 \%$ |

Source: Texas Utilities Company, Annual Report 1979, pp. 30-31.

## DALLAS POWER \& LIGHT COMPANY

Book Value and Growth in Book Value
Texas Utilities Company
$\qquad$

| (1) <br> Year | (2) <br> Year-End Book Value Excl. Job Development Credits | (3) <br> Increase Over Prior Year | (4) <br> Rate of Increase to $\qquad$ 1979 | (5) <br> Year-End <br> Book Value <br> Incl. Job Development Credits | (6) <br> Increase Over Prior Year | (7) <br> Rate of Increase to $\qquad$ 1979 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1969 | \$10.42 | 11. $6 \%$ | 7. $2 \%$ | \$10.42 | 11. $6 \%$ | 8. $8 \%$ |
| 1970 | 11.18 | 7.3 | 7.1 | 11.18 | 7. 3 | 9.0 |
| 1971 | 12. 45 | 11.4 | 6.6 | 12. 57 | 12.4 | 8.5 |
| 1972 | 13.40 | 7.6 | 6.5 | 13.68 | 8.8 | 8. 5 |
| 1973 | 15.09 | 12.6 | 5.5 | 15.50 | 13. 3 | 7.7 |
| 1974 | 16.30 | 8.0 | 5.0 | 16.85 | 8.7 | 7.5 |
| 1975 | 17.07 | 4.7 | 5.1 | 17.95 | 6.5 | 7.8 |
| 1976 | 18.09 | 6.0 | 4.8 | 19.37 | 7.9 | 7.7 |
| 1977 | 19.10 | 5.6 | 4.4 | 21.19 | 9.4 | 6.9 |
| 1978 | 20.14 | 5.4 | 3.3 | 22. 94 | 8.3 | 5.6 |
| 1979 | 20.80 | 3 | - | 24.22 | 5.6 | - |

Source: Annual Repoits to Stockholders, 1979.

## DALLAS POWER \& LIGHT COMPANY

Earnings and Growth in Earnings on Adjusted Book Value at a $15 \%$ Return Texas Utilities Company 1969-1979

| (1) Year | (2) <br> Adjusted Year-End Book Value Per Common Share $1 /$ | (3) <br> Earnings <br> Per Share <br> @ $15 \%$ Return | (4) <br> Rate of Increase to $1979$ |
| :---: | :---: | :---: | :---: |
| 1969 | \$10.42 | \$1.56 | 6. $5 \%$ |
| 1970 | 11.18 | 1.68 | 6.4 |
| 1971 | 11.96 | 1.79 | 6.4 |
| 1972 | 12.91 | 1.94 | 6.1 |
| 1973 | 13.88 | 2.08 | 5.9 |
| 1974 | 14.94 | 2.24 | 5.5 |
| 1975 | 15.72 | 2.36 | 5.6 |
| 1976 | 16.69 | 2.50 | 5.4 |
| 1977 | 17.69 | 2.65 | 5.2 |
| 1978 | 18.71 | 2. 81 | 4.3 |
| 1979 | 19.52 | 2.93 | - |

1/ Excludes Job Development Credits.

Returns on Common Eyuity Capital Industry Composites

1973-1979

(1) Oil companies only.

Source: Business Week.

## DALLAS POWER \& LIGHT COMPANY

Offerings of Common Stock for Texas Utilities Company

1976-1980


DALLAS POWER \& LIGHT COMPANY
Book Values, Market Values, and Market-to-Book Equity Ratios for Texas Utilities Company

1969-1979

| (1) <br> Year | (2) <br> Year End <br> Book Value <br> Per Share | (3) <br> Average Market Value Per Share | (4) <br> Market to Book Equity Ratio $(3) \div(2)$ |
| :---: | :---: | :---: | :---: |
| 1969 | \$10.42 | \$27.44 | 2.63 |
| 1970 | 11.18 | 26.88 | 2. 40 |
| 1971 | 12.45 | 29.88 | 2.40 |
| 1972 | 13.40 | 30.88 | 2. 30 |
| 1973 | 15.09 | 27.50 | 1. 82 |
| 1974 | 16. 30 | 20.12 | 1.23 |
| 1975 | 17.07 | 21.00 | 1.23 |
| 1976 | 18.09 | 19.62 | 1.08 |
| 1977 | 19.10 | 21.12 | 1.11 |
| 1978 | 20.14 | 20.12 | 1.00 |
| 1979 | 20.80 | 18.44 | 89 |

Source: Texas Utilities Company, Annual Report 1979, and Standard \& Poor's Stock Guide.

THE DISTRICT OF COLUMBIA )

BEFORE the undersigned authority on this day personally appeared CHARLES E. OLSON, who, having been placed under oath by me, did depose as follows:
"My name is Charles E. Olson. I am of legal age and a resident of the State of $M c \ldots$ and. The foregoing testimony, and exhibits, offered by me on behalf of Dallas Power \& Light Company, are true and correct, and the opinions stated therein are, to the best of my knowledge and belief, accurate, true, and correct."

$$
\frac{\text { Share } \mathrm{M} \cdot \mathrm{Ml}_{\text {Ron }}}{\text { CHARLES E. OLSON }}
$$

SUBSCRIBED AND SWORN TO BEFORE ME by the said Charles E. Olson this 17 th day of September, A.D. 1980.


# DIRECT TESTIMONY OF <br> JOE D. KARNEY FOR <br> DALLAS POWER \& LIGHT COMPANY 

SEPTEMBER 1980


[^0]:    1/ Stewart C. Myers, "The Application of Finance Theory to Rate Cases," The Bell Journal of Economics and Management Science, Vol. 3, No. 1 (Spring 1972), p. 80.

[^1]:    Source: Dallas Power \& Light Company

