

For Release Thursday, July 17, 1947

AN ANALYSIS OF THE CAPITAL STRUCTURE OF ELECTRIC UTILITIES,  
YESTERDAY, TODAY, AND TOMORROW

ADDRESS

of

RICHARD B. McENTIRE

Commissioner, Securities and Exchange Commission

before the

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS

Boston, Massachusetts

Thursday, July 17, 1947

The title of these remarks promises more than I can fulfill; but it is sufficiently broad to give me the opportunity to make some rather discursive remarks about certain problems of concern to us in this regulatory business -- problems in the financing of today's and tomorrow's construction program in the electric utility industry. If you will allow, I would like to approach the subject directly at first, then amble back somewhat to draw a bead on it from a more distant point, and then finally come forward again and try to tackle some of the implications I see in it.

As we all know, the electric utility industry is going through a period of unprecedented growth. We hear that fact stated over and over again. But do we realize the magnitude of that growth? Speaking for myself, I must confess that I find it hard to visualize the extent to which this business is being called on to expand. This most unusual growth is national in character and is taking place in every part of the country, although it is more pronounced in some localities than in others. Whether we realize it or not, this is the most significant and important development of the industry for many years. To a great extent the future health of the industry depends upon how successfully these problems are met. The responsibilities that come with this growth are common to all of the industry and to all of us who deal with electric utilities in a regulatory capacity.

Let us look at some figures which forecast what we will have to deal with in the four or five years which are directly ahead of us. Maybe they will help us comprehend the size of our problem.

At the end of 1946, the private electric utilities had approximately 40 million kilowatts of generating capacity. According to the Edison Electric Institute, the industry expects to add approximately 2,200,000 kilowatts of capacity in 1947, approximately 3,450,000 in 1948, approximately 3,700,000 in 1949, and 1,550,000 in 1950 -- a four-year total of about 11 million kilowatts. I have heard responsible estimates that, within the next five years, the electric utilities will increase generating capacity by an amount ranging from 12,800,000 to approximately 16 million kilowatts. Already, the total of unfilled orders of the companies is said to amount to 12,200,000 kilowatts, or about 30 percent of present generating capacity.

The magnitude of this program is perhaps best appreciated by contrasting it with increases in generating capacity made during prior years. Chart 1 indicates the substantial margin by which projected additions surpass the most active periods of expansion during the past 15 years.

Translated into dollars, the program is, of course, of an even more unprecedented nature; in part because unit costs are going up through the roof -- turbine costs being estimated to be up about 40 percent and over-all plant construction costs about 33 percent. For the year 1947, capital expenditures of the electric utilities have been estimated at from \$1 billion to \$1.3 billion. Expenditures of similar or greater magnitude are anticipated in the next three or four years. The Edison Electric Institute currently estimates that the total cost of the construction program through 1951 will aggregate \$5 billion and that average annual expenditures of about \$1 billion will be required over this period. The previous high in construction expenditures for the electric utility

industry was in 1930, when approximately \$919 million was spent; and we may compare the estimates for 1947 with the depression low in 1933 of \$129 million and with the average capital expenditure of \$451 million for the period 1936 through 1940.

Of course, in these national average figures are buried the below-average and the above-average growth company. Some of the projected construction programs far exceed the national average. Florida Power & Light Company, for example, with a gross utility plant of approximately \$115 million, plans construction expenditures for the next five years of approximately \$85 million, or nearly 75 percent of its present plant.

The industry's construction program does not appear to be built on roseate Mississippi bubble dreams, but is the response to equally unprecedented demands for power. The war resulted in the development of many new industrial uses of electric power; these apparently are now being exploited and, in general, the electrification of industry appears to be going on at an accelerated pace. The national average residential use of electric power has doubled in the past twelve years, and shows no signs of stopping. But despite all of this rationalization, the increase in demand seems almost to defy explanation. Veteran utility men have told me that it has so far exceeded any of their predictions that they are somewhat baffled and bewildered.

How much more the demand will increase is a matter of conjecture. The development of the famed "heat pump" for domestic heating and air conditioning could accelerate the growth substantially.

According to the Federal Power Commission, electric utility production for the month of May 1947 was 16.9 percent greater than for the month of May 1946. Present peak loads are running an average of 15.4 percent in excess of last year. Such peak loads are 50 percent in excess of the 1940 figures and exceed the wartime high by 13 percent. The problem now is whether the electric utility industry can expand sufficiently and quickly enough to meet domestic, commercial, and industrial demands. Possible power shortages in various parts of the country during the coming year may be a reality. Indeed, they may already be here. Reduction of voltage has already been resorted to from time to time by many systems and more of that is in prospect. Load shedding may yet occur in some critical areas. It has been estimated that the average margin throughout the country between capacity and peak load is only about 6 percent. Obviously, this is dangerously low. Industry power pool committees, the existence of which was permitted to lapse after the war, have been revived in many areas and it is said that the more progressive elements in the industry are in a state of alertness comparable almost to that which existed during the war. Power shortages are, of course, world-wide and much more acute in other countries, particularly those that were ravaged by war. But even this rich and industrially powerful country may experience them.

Speaking generally, the electric utility industry appears to be following a somewhat different pattern of growth from non-utility industries. In 1946 expenditures by non-utility industries for plant, equipment, and inventories were of unprecedented volume. Industrial plant and equipment expenditures for 1946 were 83 percent above the

total for 1945 and 37 percent above the prewar peak in 1929. The aggregate of such expenditures by non-utility industries, as estimated by the SEC and the Department of Commerce, was approximately \$11 billion. They are continuing at a high level this year, particularly during the second and third quarters.

Conversely, the total of such expenditures of public utility companies increased only moderately until the last part of 1946. Immediately after VE Day, in June 1945, the electric utility industry's planned outlays for gross additions to utility plant during the next 12 months period was only \$529 million--just about equal to the rate of expenditures for 1941 and 1942. The phenomenal load increase which was to occur in 1946 was almost entirely unanticipated. The plans of the electric utility industry as a whole for 1946 included but 1,462,311 kilowatts of new capacity, but, apparently owing primarily to delays in the manufacture of almost all the categories of materials, only 361,172 kilowatts were installed, of which 302,172 kilowatts were installed by the private utilities. Moreover, because of necessary retirements of equipment, only 200,000 kilowatts appear as a net increase to load-carrying ability, according to the Edison Electric Institute. Not since the valley years of the Thirties was expansion so slight in the electric utility industry as in 1946. Thus, the great bulk of the expansion lies ahead.

Unlike the electric utility industry, however, some industrial companies report that a substantial proportion of their postwar construction programs are now nearing completion and it appears that the programs of others are being postponed because of high costs. The steel industry, always considered as an economic bellwether, has elected to

stand pat on its 91,000,000 net ton present annual capacity, claiming that such capacity is adequate to meet potential demand and predicting over-capacity in the postwar years as it refuses to expand to meet current steel shortages.

In the electric utility industry however (as well as in other utilities such as telephone), expenditures, as we have observed, are expected to increase considerably in 1947 and to continue to increase for some time to come. Thus, we can see that electric utility expansion is not only of major importance to its investors and consumers, but seems destined to be an important factor in our economy in the next five years.

This is the situation facing the electric utilities, looking at it from the asset side of the balance sheet. Looking at it from the liability side, we come to the questions: "What will be the corresponding entries to the increase in assets promised by the construction program?" "How will this construction program be financed?" This is extremely important because the methods of this financing will undoubtedly determine the health and welfare of the electric utility industry for many years to come.

From a financing standpoint, the electric utility industry, as one might expect from the construction figures, is confronted with a situation substantially different from that which it has faced for many years. It appears that, for the ten-year period 1932-1941, only approximately 18 percent of the gross capital expenditures of the utility industry was raised from the issuance of securities. The rest came from cash in the till. During the war new capital issues totalled only about 15 percent of the increase of the value of plant and equipment over the

same period. During 1946 the volume of new capital issues to reach the market was the heaviest since 1931. The total of \$172,846,000 was, however, only slightly more than half the aggregate charges to depreciation during the year. We can expect the proportions to change sharply in the next four or five years since the industry will be required to rely on outside financing to a substantially greater extent than has been its experience in the past fifteen years. There simply won't be enough cash in the till to pay for the construction costs.

A study of the composite income statement for 1946 of Class A and Class B electric utilities, prepared by the Federal Power Commission, indicates that the total of net additions to earned surplus (after preferred and common dividends) and non-cash charges and reservations amounted to somewhat in excess of \$500 million during that year. Assuming that this amount represents resources available for construction and that comparable amounts will be available for that purpose in 1947, we can further assume that the industry, with an estimated program for this year of at least \$1 billion, may require new funds in 1947 to the extent of approximately one-half billion dollars. Funds derived from internal sources, on these assumptions, would produce only approximately 50 percent of the total construction program for 1947. These are, of course, very rough calculations. Projections of a similar nature made for the next four or five years would also indicate that a very substantial proportion of the construction for these years will also have to be financed through outside sources. So it seems that a greatly increased percentage of this tremendously increased program must be financed by bringing "new money" into the industry.



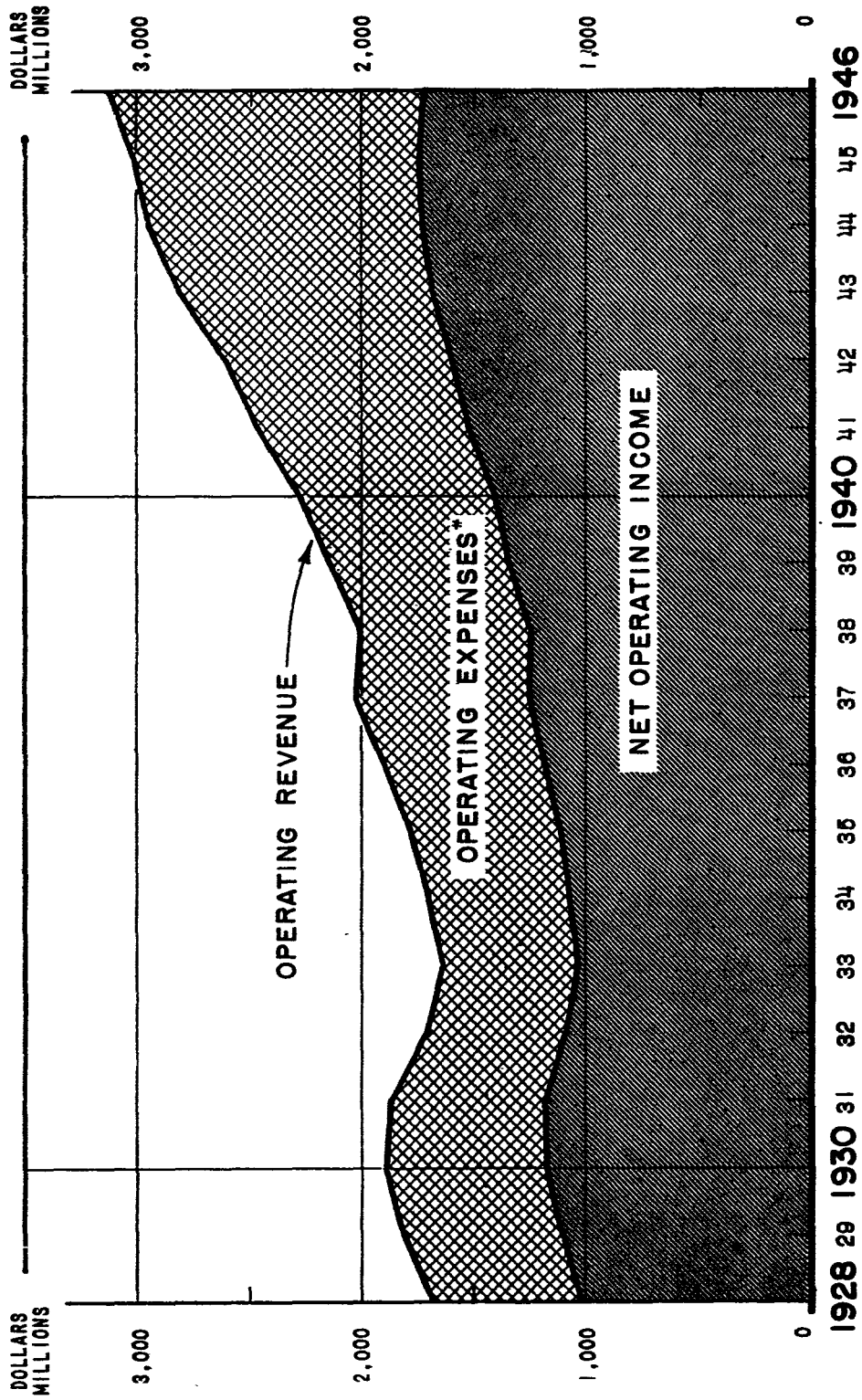
Now, I would like to digress for a moment and recall some history, the lessons of which, I believe, throw light on the regulatory problems involved in the financing of this construction program.

It is perhaps difficult for us to remember just how sick the electric utility industry appeared to be only ten to fifteen years ago. From September 1, 1929 to April 15, 1936, 36 public utility operating companies, with outstanding securities in the hands of the public of \$345 million, went into bankruptcy or receivership. Sixteen additional companies, with \$154 million of securities outstanding in the hands of the public, offered readjustment or extension plans after defaulting on interest payments. Public investors in the preferred stocks of operating companies also suffered seriously. As of December 31, 1938, there were \$140 million of accumulated arrears on operating company preferred stocks.

As might be expected, because of the greater leverage factor present, holding companies were even sicker. From September 1, 1929 to April 15, 1936, 53 holding companies went into receivership or made application for relief under Section 77 B of the Bankruptcy Act. The aggregate capitalizations of these holding companies represented by their outstanding securities in the hands of the public totaled in excess of \$1,600,000,000. Twenty-three additional holding companies with publicly held securities exceeding \$530,000,000 offered readjustment or extension plans after defaulting on interest payments. As to the preferred stocks of holding companies, the statistics show that, as of December 31, 1938, registered holding companies had outstanding in the hands of the public \$2,083,000,000 of preferred stock (on an involuntary liquidating basis), of which more than half, or \$1,169,000,000, was in arrears, the total arrearages as of that date aggregating approximately \$282,000,000.

Chart 2

# DISTRIBUTION OF OPERATING REVENUE FOR PRIVATE UTILITIES



\* Depreciation and taxes are excluded.

SOURCE: Moody's Manual of Investments, Public Utility Securities

What happened to the electric utility industry during the early Thirties which caused these catastrophies? The following graph (Chart 2), based on composite industry income statements compiled by the Edison Electric Institute and published in Moody's Manual of Investments, Public Utility Securities for 1946, shows the operating revenues, operating expenses (excluding depreciation and taxes), and net operating income before depreciation and taxes for the utility industry from 1928 through 1946. A study of the graph reveals that the net operating income of private utility companies (before depreciation and taxes) was greater in any single year of the Thirties than it was in 1928, a year which itself exceeded all previous years. Going beyond the graph and further into the composite industry income statements during these years, we find that gross income was actually higher through 1932 than in 1928. Then, because of increased taxes, increased depreciation accruals, and declines in "other income" and "non-operating income," gross income turned downward, but to an average of only 5.7 percent below the 1928 level for the years 1933 through 1938, reaching a low in 1934 only 10.3 percent below the 1928 level. These composite figures indicate that, as a whole, the electric utility industry during the depression had elements of strength almost unparalleled in our economy.

Part of the answer, at any rate, to the question of what happened to cause the extreme "sickness" of the industry, may be found in the some 90-odd volumes of the Federal Trade Commission's reports on the utility industry. There certainly is no need to reargue the facts which led to the passage of the Public Utility Holding Company Act of 1935. But so

that we won't forget, let us recall the unrefuted story told in the F. T. C. reports of speculative financing, pyramided holding company structures, excessive leverage, write-ups, excessive service charges, inadequate depreciation, excessive dividends, excessive prices paid for utility properties, discordant property acquisitions, etc. By and large, the facts seem to indicate that much of the troubles of the electric utility industry through the Thirties can be laid to these factors rather than to any severe dip in electric utility operations.

An analysis of why many of the operating companies got into trouble indicates that extreme leverage -- the lack of any substantial common stock equity -- was a major cause. In others this factor was associated with some of the specific abuses which I have just enumerated; still others had transit properties and other non-related businesses which helped get them in trouble. Some of the operating companies, it is true, were located in predominately single industry territories and thus, to a considerable extent, assumed the characteristics of that industry almost more so than their own; even so, however, many of such companies were among the worst offenders in terms of having insubstantial common stock equities. One of them, for example, had a \$30 million common stock equity account, per books, but that equity consisted entirely of "wind and water", which had to be entirely written off in the recent reorganization of the company.

Since 1935 the electric utility industry, as we all know, has made very substantial strides toward basic financial soundness. Improved economic conditions have provided a favorable backdrop for such development and all industries have shared, to a greater or lesser degree, in

the increasing prosperity. With respect to the electric utility industry, however, the combined regulatory efforts of the States, the FPC, and the SEC may not be overlooked as powerful factors promoting better health. Substantially over a billion dollars of inflation has been eliminated from utility plant; depreciation reserves have more than doubled; outstanding long-term debt has substantially decreased; corporate structures have been substantially simplified and unnecessary companies eliminated; actual investment in common stock equity capital has been materially increased as a result of reorganizations, equity contributions by the parent, sales of equity securities, etc. Moreover, as I shall indicate at greater length, the bonds and preferred stocks issued and sold contain protective provisions which are of great value in safeguarding the financial integrity of the companies.

The \$140,000,000 of arrears on operating company preferred stocks which existed at the end of 1938 has been worked down to \$42,000,000, and plans are now on file with the SEC to eliminate all but \$4,000,000 of these arrears. Moreover, electric or combination electric and gas companies account for less than \$300,000 of this latter amount so that, for all practical purposes, no arrearages may be said to exist now in such companies.

Not only have arrearages been eliminated, but coverage of fixed charges and preferred dividend requirements has shown marked improvement. In 1935 the electric and gas utilities subject to the Holding Company Act covered these requirements 1.23 times. In 1946 charges and preferred dividend requirements were earned, on the average, 2.49 times. That is considerably better than the average coverage of triple-A credit utilities in 1935.

Perhaps the best single indication of a company's state of health is its capitalization. Let us look at some interesting statistics for a group 70 companies which constitutes nearly all the electric utilities whose common stock are traded in sufficient quantity to provide a reliable market. At the end of 1946 these companies averaged about 50 percent debt, 17 percent preferred stock, and 33 percent common stock and surplus. Only nine of these companies carried as much as 60 percent debt; five of these nine had no preferred stock outstanding, so that common equity accounted for the remainder of the capitalization. Only two of these 70 companies had an equity of less than 20 percent at the end of last year and only nine others fell under 25 percent in this respect. At the close of 1935 the books of nearly a third of these 70 companies showed less than 25 percent equity. This ratio was per books, and, as we know, reflected much "water" now eliminated by regulatory action.

In addition, the ratios, per the books of 1935, were also overstated because of inadequate depreciation reserves. In 1935 an 8.75 percent depreciation reserve was about average and a reserve of as much as 15 percent was rather exceptional. Today the average company in our 70-company sample has depreciation reserves amounting to 22.5 percent and the reserves of only seven companies fall below even a 15 percent level.

By and large, then, the electric utility industry is entering this period of growth in a strong position. The industry furnishes an essential service and can contemplate continued growth for many years. Its improved financial condition commends its securities to investors and it appears that equity financing will be possible over

a greater part of the business cycle than was true when tremendous leverage characterized many utility common stocks. Moreover, to an increasing extent as the Section 11 program rolls along, electric utility operating companies are ceasing to be captive to holding companies running them by remote control; the ability of such operating companies to raise equity capital is not linked to the ability of the holding companies to supply it -- they are now free to tap the capital markets of the entire nation. The relatively few holding company systems which will remain will be those controlling integrated properties, and they will possess such simplified capital structures that their own equity security issues should be attractive to investors. We must not assume, however, that the present condition of the industry is such that we in the regulatory commissions can take for granted the continued financial health of this industry. The great danger, I think, is that all of us -- the industry, regulatory authorities, and buyers of utility securities -- become complacent on this subject and permit, almost unnoticed, a gradual erosion of the ground gained in the last ten years.

Eternal vigilance is not only the price of liberty; it also is the price of a well regulated industry. What we have learned in the past ten years, I think, is that the regulatory agencies have been right in insisting upon the development of high standards of corporate finance. Many sound utilities have gladly accepted these standards. But each of these standards was resisted by some of the companies and many battles were fought in the conference rooms and hearing rooms of regulatory agencies, State and Federal, over adequate equity ratios, adequate depreciation accruals and reserves, strong indenture and preferred stock protective provisions, etc.

Management is frequently under too many immediate pressures to see the forest for the trees. Often, its interest in maximizing the immediate return to the common stockholder is bad for the latter in the long run, and worse still for the senior investors, the consumers, and the economy. We at the SEC constantly are faced with stridently urged requests, usually based on inadequate reasons, to modify or eliminate this or that protective provision which had been worked out over many years. I am quite sure that you of the State commissions have the same type of experience. A few managements seem constantly to wet their fingers to the political winds and look to each election or to a change in the personnel of commissions as offering them the opportunity to effectuate the elimination of some, or many, of the protective standards. The standards of conservative finance are not, however, in the exclusive possession of any political party or any particular group of men.

As long as the bulk of the electric utility industry was subject to holding company control, the job of improving the financial standards of the industry was shared by the State commissions, the SEC, and the FPC. But as the statistics on compliance with Section 11 show, the SEC is gradually dropping out of the picture. Nearly \$8 billion of assets have thus far been divested under Section 11, of which \$5.5 billion are no longer subject to the Holding Company Act. Speaking in terms of electric utilities alone, 144 companies, with assets of \$4-1/4 billion, have already passed from the jurisdiction of the SEC to local regulation. Thus, the State commissions are rapidly assuming more and more of the responsibility for most utility regulation. As a former State commissioner, I, naturally, believe in the ability of the States to see to it



that the construction program of the industry is financed safely and sanely. This task is not an easy one, however, and in order to be successful we must not depart from the lessons we have all learned in the past years. For the rest of this discussion, I want to summarize, briefly, what I think some of those lessons are.

First and foremost, the construction program must be financed in such a way that we will not return to the distorted, thin-equity security structures of the past. A balanced capital structure with a substantial amount of common stock equity provides a considerable amount of insurance against the dips of the business cycle; it enables the utility to raise new money most economically; and, if there is a decline in earnings, it minimizes the possibility of deterioration in service to consumers comparable to that experienced in the railroad field. The NARUC, through its Committee on Corporate Finance, has consistently stressed this point of view to the individual commissions and to the industry. For example, back in 1940, the Committee on Corporate Finance adopted as its recommendations for the capitalization of public utility properties certain general standards advocated by the late Judge Robert E. Healy, S. E. C. Commissioner from the inception of the Commission to his untimely death last November:

- "(1) Keep the ratio of debt to total capitalization and to the property account minus write-ups and minus adequate depreciation at as low a point as possible;
- (2) Keep the ratio of common stock capital to total capitalization and property account as thus defined at as high a point as possible;
- (3) Press the companies to adopt a program of systematic debt reduction."

Institutional investors who constitute the principal market for utility bonds, to a considerable extent for utility preferreds, and more and more for utility common stocks, are, of course, keenly aware of the need for conservative capitalizations. Some of you may have read the recent article in the June 5, 1947 issue of Public Utilities Fortnightly by William W. Bodine, formerly president of The United Gas Improvement Company and now financial vice-president of Penn Mutual Life Insurance Company. After pointing out the desirability of maintaining a conservative capital structure and making adequate provision for debt retirement, he there stated the views of his company on minimum standards of utility capitalization as follows:

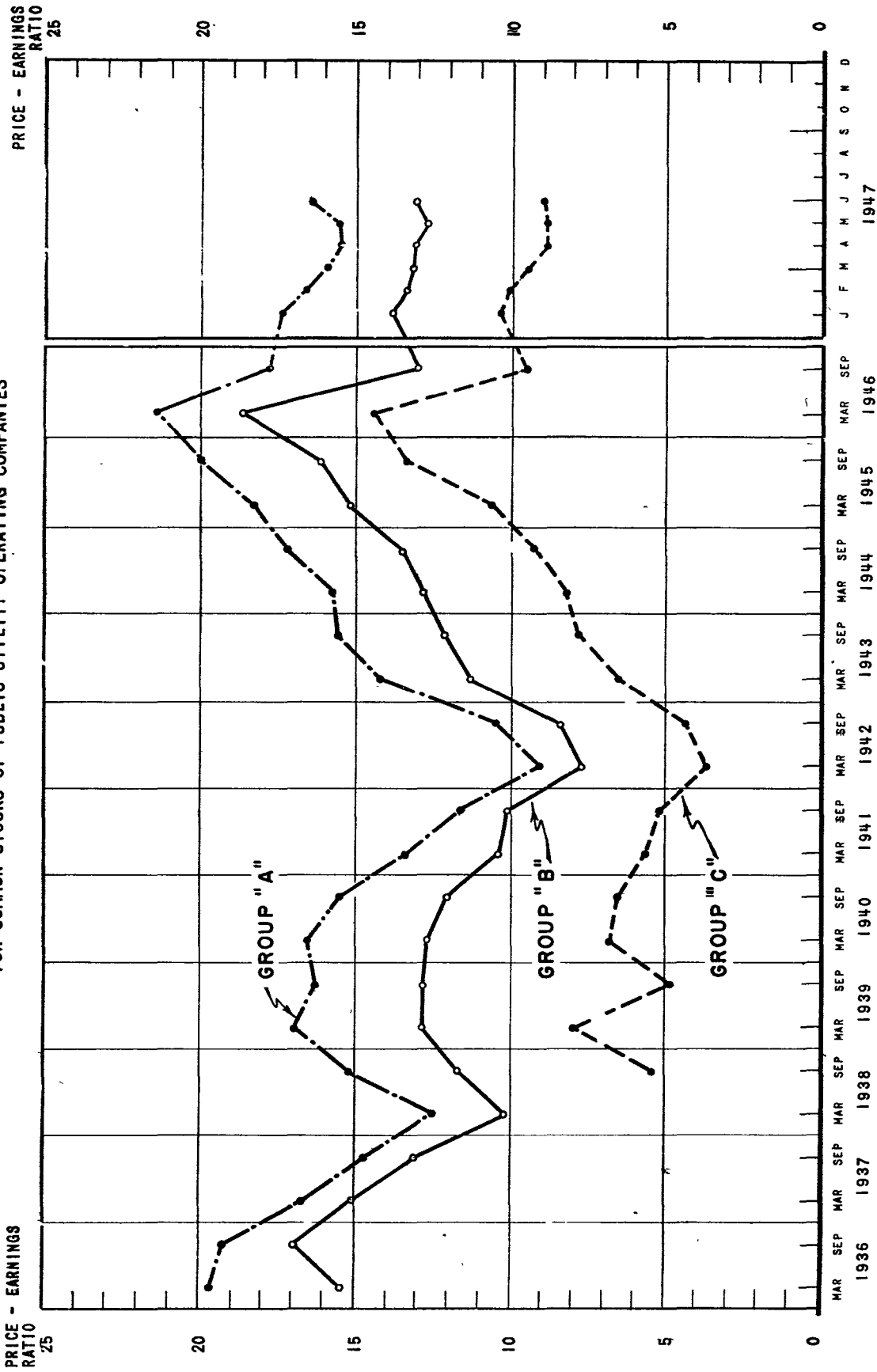
"We like to see not more than 50 percent of the capitalization represented by debt, and certainly not more than 75 percent represented by debt and preferred stock. Common stock and surplus should not be less than 25 percent. Only on rare occasions do we buy public utility preferred stocks where debt and preferred stock equal as much as 75 percent of the total capitalization."

These standards do not vary materially from the minimum objectives of the SEC, many of the State commissions, and a significant proportion of the industry itself.

Of course, you cannot expect the institutional buyers to do the job of enforcing proper capitalization standards. Just as nature abhors a vacuum, institutional investors abhor excessive idle capital and, within limits, they could be expected to buy bonds, at least, of utility companies, even if present standards were considerably relaxed. The mere fact that institutional investors or underwriters stand ready to buy a

Chart 8

# TREND OF MARKET PRICE TIMES EARNINGS RATIOS FOR COMMON STOCKS OF PUBLIC UTILITY OPERATING COMPANIES



particular issue at a price can give you no assurance, of course, that the issue, or the particular terms thereof, meet proper standards.

Is all this talk about balanced ratios only academic as far as the State commissions are concerned? Some people have the impression that, with bond money so cheap, it is foolish to think of issuing common stock securities and that the interests of consumers require a debt ratio as high, or almost as high, as the market will absorb. Along with most, if not all, of the State commissions, we at the SEC do not agree with this line of thinking.

Earlier, I referred to some statistics covering a group of 70 companies, which constitutes nearly all the electric utility companies whose common stocks are traded in sufficient quantity to provide a reliable market. The common stocks of something over half of these companies have been traded for four years or more, and price-earnings ratios for such companies have been computed at six-month intervals. By ranking the companies in the order of their average price-earnings ratios and then dividing the sample into upper, middle, and lowest thirds, designated for convenience as Groups A, B, and C, three distinct levels of market appraisal may be observed. Let us look further at these groups which the market treats as high, medium, and lower grade.

First of all I should like to call your attention to Chart 3, which shows the average price-earnings ratio for each of the three groups at six-month intervals over an extended period of years. You will note that earnings of the highest third have been appraised by the market at from 9 times to nearly 22 times, while the market prices of the lowest third of the sample have at times fallen to less than five times earnings.

I shall not attempt to analyze all of the reasons for these differences in market valuation, but I do want to point out the close correlation between the capitalization ratios of these companies and what the market is willing to pay for their earnings. Chart 4 shows this correlation very plainly.

The 12 companies in Group A, constituting the upper third, have a median debt ratio of 37.5 percent and common equity, including surplus, of 58.7 percent. At June 30, 1947, the common stocks of these companies sold at an average of 16.4 times earnings and 20.5 times dividends.

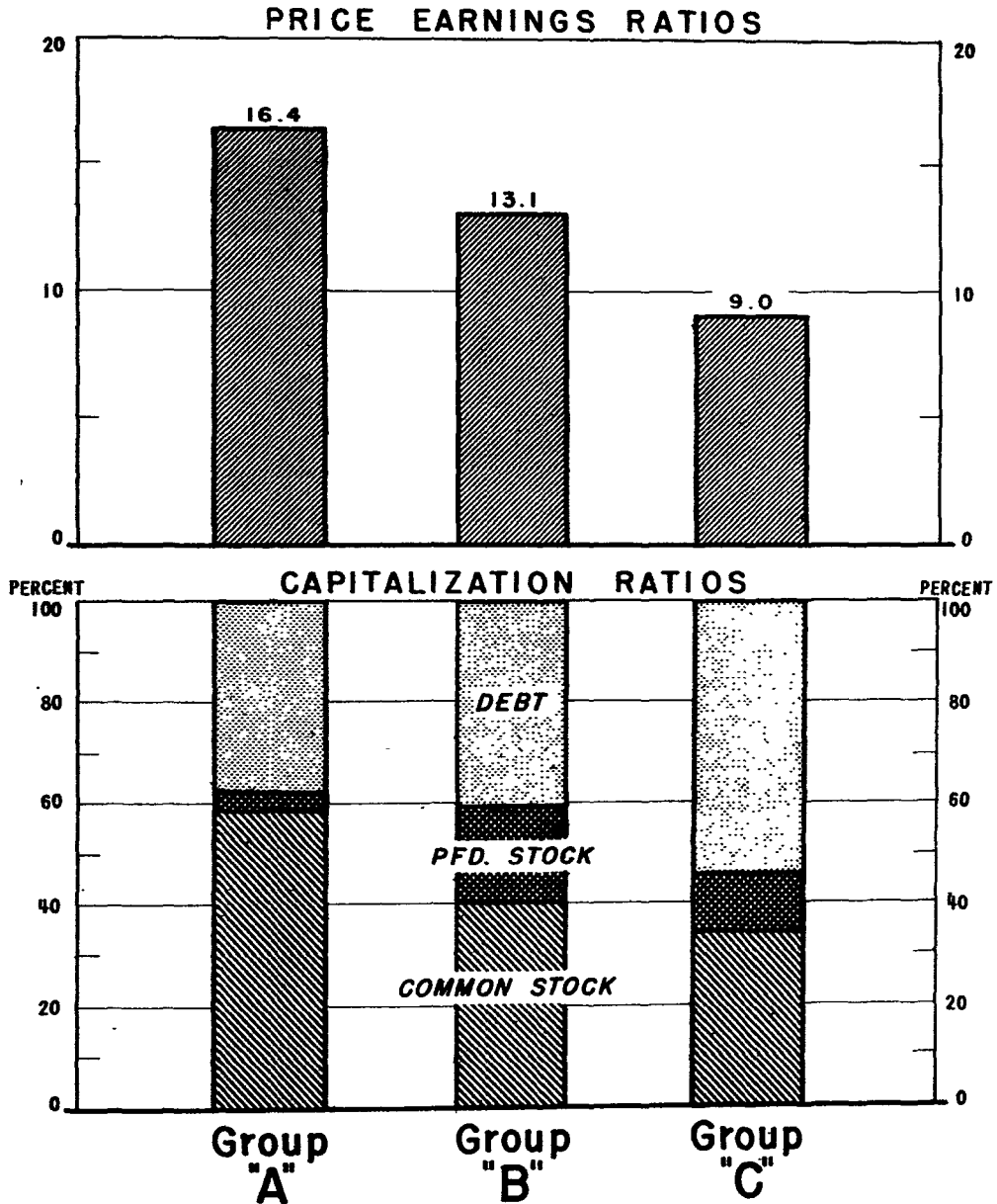
Group B, the middle third, shows only slightly higher debt ratios, the median being 40.8 percent, but due to greater use of preferred stock, the average common equity is 40.1 percent. Earnings of this group were valued at an average of 13.1 times at June 30, 1947, and sold at 17.5 times dividends.

The lowest third, Group C, is characterized by a larger debt burden, the median being 54.2 percent. Preferred is less prominent than in Group B and common equity amounts, on the average, to 34.2 percent of the capitalization. The market apparently takes substantial cognizance of the large proportion of long-term debt and the smaller common stock equity, and the average Group C equity was priced at June 30, 1947, at 9.0 times earnings and 15.4 times dividends.

Market appraisal of senior securities follows precisely the same pattern. Significantly enough, all companies in the sample having triple-A bonds fall in Group A; Group B companies, to the extent rated, are all double A credits, while single A and Baa credits uniformly fall in Group C. At June 30, 1947, triple A bonds sold on a 2.53 percent average yield basis. Double A's sold on a 2.60 percent basis, single A's at

Chart 4

# MEDIAN PRICE EARNINGS RATIOS AND CAPITALIZATION RATIOS FOR A, B, & C COMPANY GROUPS\*



\* As of June 30, 1947

2.72 percent, and Baa's at 3.05 percent. Thus, without attempting to define the precise responsibility of capitalization ratios for market appraisals, it cannot be questioned that such ratios are closely related to prices of all classes of securities. Since the cost of capital is an important factor in determining a fair rate of return, I think these figures tend to show the consumers' concern with a balanced capitalization containing a substantial common stock equity. Cheaper money is available to the more conservatively capitalized utilities. Those with weaker capital structures must pay more when they need cash. This is simple and trite, but painfully true.

The market's reaction at any given time to differences in capitalization ratios is not, however, the final answer to our problem. Here, we come to the old quest for the so-called "optimum capitalization". The concept of the "optimum capitalization" has, in general, had the effect of encouraging the growth of common stock equity, which was all to the good in an industry which has needed just that. The concept assumes, however, that the current cost of capital should be the major guide in determining the proportions of senior and junior securities in the security structure.

There is danger, I believe, in making this test a fetish which is substituted for careful consideration of the more complex factors governing the health of a utility company. Suppose it is determined that a company with 40 percent bonds, 15 percent preferred stock, and 45 percent common equity can rearrange its capital structure to an extent that its ratios become 60 percent bonds, 15 percent preferred, and 25 percent common. Now it is quite conceivable that in certain phases of

market activity even a change in the capital structure so drastic as this could be made without seriously disturbing the price of the common and preferred. In fact, speculative fever has sometimes become so rampant that the increased leverage inherent in the common stock after such a change in the capital structure would probably have increased demand for the stock and raised its price. Thus the immediate cost of money might appear to be lowered substantially.

But suppose also that a market reaction has set in while construction needs are unabated. We then find that common stock financing becomes more difficult and even preferred financing, particularly if the company is not top-grade, is fraught with uncertainties. The more timid the market becomes, the more heavily will the company's 60 percent of debt securities weigh upon the sales prospects of new issues--be they common, preferred, or bonds. At this point, the company is faced with the problem of issuing junior securities at a sacrifice or of loading on even more debt and further reducing the quality of its bond credit = also at a sacrifice price. The common stock which sold on a 4-1/2 percent basis in the boom may go to 8 percent or more in dull periods. If a rate of return is then computed on a basis allowing the company to attract new capital, the so-called maximum economy of yesterday can become the millstone of tomorrow.

A broader approach to the problem of capitalization ratios may at times result in a security structure which, at a given moment, may appear to be more expensive from a narrow cost-of-money viewpoint. I don't regard such a circumstance as being contrary to the interests of the consumer, and I should like to urge upon you the conviction that financial strength rather than momentary economy in cost of money is in fact the best ultimate protection for the consumer. I believe that this



is generally true at any time. But certainly the tremendous future financing needs of electric utilities make it doubly true today. It is a matter of great urgency if we are to be able to meet the problems that lie directly ahead.

Now, by financial strength I do not mean that every utility should strive for a 100 percent common equity. But each company should have sufficient equity to insure it full liberty, capitalization-wise, in additional financing and to permit it to face contingencies with reasonable assurance. The emphasis, in fact, should be on over-strengthening the financial structure in terms of today's markets in order to cope with the vicissitudes and demands of tomorrow.

These observations apply with equal, if not greater, force to operating companies remaining under holding company control. Unless total system capitalization, including that of the holding company, follows the principles I have been describing, the operating subsidiaries will inevitably suffer higher costs of raising capital and will incur all other detriments of a poor capital structure.

I would like to make a point or two about the use of short-term debt--bank loans--to provide funds for construction purposes, the loans to be repaid from earnings over a period of years, or to provide funds for construction pending long-term financing. The turnover of capital is very slow in the electric utility industry and long-term financing, therefore, fits its economic pattern best. Past experience has shown that many an issuer has been required to default on preferred stock dividends or pass common stock dividends in order to meet maturities of excessive amounts of short-term loans. That is why charter provisions relating to preferred stock issues permitted to become effective under the Holding Company Act require the consent of a majority of the preferred

stock as a class for the issuance of unsecured debt in excess of 10 percent of the aggregate of secured debt and capital and surplus.

Some companies, however, appear to be tempted by the low rates of interest at which bank capital is available to finance their capital requirements, despite the dangers of substantial amounts of bank debt. These dangers are particularly acute during an extended period of heavy construction. As to the use of substantial bank loans for interim financing during the construction period, simple calculations will show that apparent savings in using bank loans for this purpose, in lieu of obtaining long-term money at the outset, may be wiped out by a relatively small increase during the construction period in long-term interest or preferred stock dividend rates or common stock yields. Generally speaking, I do not think that commercial bankers themselves would quarrel with the proposition that bank loans should not be used for financing utility construction unless the utility company has the ability to repay the loan under adverse business conditions and without disturbing dividend payments too materially.

I am sure there is little disagreement among us as to principles of sound utility capitalization. But general propositions do not necessarily decide concrete cases. In a great many instances, the utilities come to both the State commissions and the SEC with a specific program which, either through the selection of a particular type of security or through the terms thereof, does not adequately reflect these principles of conservative capitalization. They assure us that buyers are waiting to purchase the issue and that they must have approval promptly on a rush schedule basis in order to finance urgently needed construction or in order not to miss this or that interest or preferred stock dividend date.

Sometimes, underlying their statements, one feels the almost explicit premise that this is a matter solely for practical businessmen which the regulatory agency can't really be expected to appreciate fully.

Such pressure is difficult to withstand, particularly when it comes from competent utility executives, who are capable operating men and whose sincerity and interest in the welfare of their companies cannot be questioned. The bald fact is, however, that regulation must sometimes put restraints on particular financing plans of utilities. The public interest in so doing has manifested itself repeatedly. That is one of the major reasons for the creation and maintenance of regulatory agencies. Sometimes the long range interests of the consumers may be as opposed to the immediate desire of a utility company in a financing application as they are in a fully contested rate proceeding.

The experienced and wise agency, therefore, will not succumb to this type of pressure and will step back and, in a more calm atmosphere, attempt to appraise the advantages and disadvantages of the particular type of security the utility desires to issue in the light of its capital structure and future requirements. The agency will also examine the terms of the particular security to assure that it contains adequate protective provisions in the light of present-day standards of corporate finance.

My own limited experience indicates that the State commissions, quite as much as the SEC, are alerted to the necessity of attempting to preserve or attain balanced capitalization ratios. I am not so sure, however, that many of the State commissions have attempted to use their powers to obtain the various protective provisions which have become standard in a bond or preferred stock issue under the Holding Company Act. Parenthetically, let us remember that many States, as yet, do not

require competitive bidding in security issues. I don't wish to launch into any discussion of competitive bidding today. But I do want to point out that it has proved its usefulness for a number of years now in cutting underwriting costs and obtaining capital as cheaply as possible. Moreover, it serves to prevent the investment bankers from virtually "staking out claims" on the companies in your State. The provisions for exemptions in the competitive bidding rules have proved sufficiently elastic to permit negotiated transactions upon a specific showing; even then "shopping around" among various banking groups should be required.

The various protective provisions in bond indentures and preferred stock charter provisions are not merely designed to protect investors; they provide a continuing requirement that the company maintain proper capitalization ratios and, as such, it seems to me that you should consider them even though your statutory concern is primarily with that of the consumer. I think they are a part of the tools of our trade as members of regulatory agencies; they are the techniques by which we provide automatic controls which keep ratios in line and minimize the occasions for the pressure situations I have outlined above.

Unless your State statute is particularly restrictive, I think the imposition of these protective provisions as a term or condition to your order of approval should withstand attack in the courts. The entire industry subject to the SEC's jurisdiction has, by and large, accepted these conditions for a number of years now without any attempt at litigation.

I would like to give them to you here in capsule form. The details as to them may be found in indentures and charters relating to recent operating company bonds or preferred stocks permitted to be issued under the Holding Company Act.

BOND ISSUES

1. Initial Debt

Wherever possible, it is sought to limit funded debt to 50 percent of net fixed assets.

2. Additional Bonds

The maximum allowed is 60 percent of the cost or fair value, whichever is lower, of net additions to fixed property. The standard of 60 percent should give the issuer sufficient flexibility to meet exigencies of the future while at the same time requiring it to provide a reasonable proportion of junior capital in meeting its growth requirements. Of course, the fact that the indenture permits the issuance of additional bonds at 60 percent does not bind the agency to approve such issuance at some future time should common stock financing be then more appropriate and feasible. Before additional bonds may be issued, earnings of the issuing company must also be tested under the indenture to ascertain if interest charges thereafter will be adequately covered. Usually it is required that net earnings before taxes cover interest charges, including interest on the debt to be issued, at least two times.

3. Definitions of "Net Additions"

"Net additions" are defined carefully to exclude property or cash certified or delivered to the Trustee in satisfaction of any other provisions of the mortgage; e.g., requirements of the Maintenance and Depreciation Fund, Sinking Fund, property previously used as a basis for the issuance of additional bonds, etc.

4. Maintenance and Depreciation Fund

The purpose of creating a Maintenance and Depreciation Fund is to assure, as certainly as possible, that the net value of the property securing the mortgage will not decrease and thereby distort the ratios,

contemplated in the mortgage, of bonds to net property. The issuer is required to set aside annually a fixed percentage, frequently 15 percent of its gross operating revenues, for maintenance, replacements, or other property additions, or for the reacquisition of bonds issued under the indenture. In some cases the requirement as to depreciation has been measured in terms of fixed property. Such portion of the stipulated minimal amount as is not expended for these purposes is required to be deposited with the indenture trustee and cannot be used for any other purpose under the mortgage, not even including sinking fund requirements.

The fixing of an over-all percentage for maintenance and depreciation is clearly not a prediction of what depreciation and maintenance charges will be in future years, nor is it a determination of such charges for rate purposes. It is rather a minimum protection for the bondholders to insure preservation of the pledged assets.

##### 5. Dividend Restrictions

Inasmuch as the sum calculated by the formula used in setting up the Maintenance and Depreciation Fund sets a standard from the point of view of the indenture as to what is necessary in order to maintain the property intact, it is quite obvious that the total of this sum should be provided for before any calculation can be made as to the amount of surplus available for dividends. Subsequently accumulated earned surplus is restricted, therefore, to the extent that operating expense has not been charged with the stipulated amount of depreciation and maintenance. In addition, earned surplus as of the date of the issue, except for a year's dividends in some instances, is "frozen" for dividend purposes.

## 6. Sinking Fund

In contradistinction to the Maintenance and Depreciation Fund, the operation of which merely maintains the agreed ratio between debt and net property, the function of a sinking fund is to improve that ratio. A minimum sinking fund of 1 percent of the largest principal amounts outstanding is required; where the initial ratios are unfavorable, this percentage is increased. Frequently, where the company has heavy serial payments to make on unsecured debt, the sinking fund on the bonded debt commences near, or at, the final serial maturity.

Although institutional investors prefer a cash sinking fund, the SEC has usually permitted the sinking fund to be satisfied by the certification of property, which property may not, however, be used for any other purpose under the mortgage. If the company elects to satisfy the sinking fund by the certification of property, the mortgage should require that the property so certified should be equivalent to that necessary for the issuance of additional bonds--i.e. under the typical 60 percent provision, \$1,666.67 of property would be required in lieu of each \$1,000 in cash or bonds.

Before outlining the preferred stock protective provisions, I want to make a few rather obvious observations about the nature of the contract which a preferred stockholder has with his company. As you know, preferred stocks are securities of a rather anomalous nature. A preferred stock carries a fixed return and cannot share in the profits of the company. There is no maturity date, however, and, in the absence of special protective provisions, there are no rights whatsoever upon default except that, in a cumulative stock, no dividends may be paid on the common stock until the arrears are paid off on the preferred. The

arrears, of course, carry no interest and, thus, the common stockholder is permitted, through the discontinuance of preferred dividends and the utilization of the cash saved thereby, to build up his equity at the expense of the preferred. Generally speaking, State corporation laws give rather inadequate protection to preferred stock and when the common stock seeks to wipe out arrears in a recapitalization under State law, the preferred stock is usually presented with a Hobson's choice. In addition, apart from these other factors, a relatively permanent rise in the level of preferred stock yields will cause losses to investors owning present-day low-dividend preferreds even though the dividend coverage remains substantial. In the case of bonds, a similar rise in interest rates can be offset by holding the bonds to maturity. But low-dividend preferreds, like Tennyson's brook, run on and on forever.

While utility money rates are determined, by and large, by broad economic factors and government fiscal policy, there is an area undoubtedly in which the specific terms of the issue influence the rate. There is a ceaseless war of nerves going on all the time between institutional investors, on the one hand, and utility issuers and underwriters, on the other, over the "going price" for new bond and preferred stock issues. For a long time, institutional investors have been on the defensive, being forced time and again to exchange high-interest bonds and preferred stocks for low-yield refunding issues. The result has been that, for the first time in history, the net yield on life insurance companies' invested funds fell below 3 percent in 1946. There are strong indications, however, that institutional investors are beginning to take the offensive. Their bargaining power may be increasing substantially as the supply of



new utility securities increases and as utility issuers are faced with the necessity of raising new money. . There have been certain signs of unwillingness of institutional buyers to subscribe fully to offerings at prices designated by underwriters . In some instances there has been a tendency on the part of institutional buyers to sit out public offerings after making token first-day subscriptions and to fill the rest of their needs at cut-rate prices when the syndicate broke up. In the case of preferred stocks below the top grade, they sometimes indicate such a lack of interest that, for the time being at least, the issue cannot be sold. Reluctance to buy at present prices may be heightened if the issues are made less attractive by deterioration in ratios or elimination or modification of protective provisions.

It is a combination of these reasons, as well as others, no doubt, which has led, I think, to some stickiness in the market for utility preferreds, particularly those which cannot claim to be of top-grade quality. It is quite possible that many a utility company which now considers preferred stock issues as an important source of financing its construction program will be required to reappraise its availability as compared with other media of financing. A number of industrial preferreds which have been sold recently have had sinking funds and it is not at all improbable that pressure from institutional investors will require utility preferreds to contain this provision.

For the reasons I've indicated--to improve the basic quality of new preferred stock contracts, to make preferred stock a more attractive medium for investment and thereby ultimately to lower money costs, to maintain the financial integrity of an issuer, etc.--it appears to me

that the State commissions should also insist upon the protective provisions in preferred stock issues. Briefly summarized, they are:

#### PREFERRED STOCK PROTECTIVE PROVISIONS

1. The preferred Stock as a class is given the right to elect a majority of the board of directors upon default in the payment of four quarterly dividends. Since preferred arrears bear no interest and since a default in preferred dividends does not otherwise lead to any necessarily unfavorable results for the common stock, this right is an essential minimum protection for preferred stockholders.

2. The Preferred Stock as a class is given the right to vote as to certain matters vitally affecting its interests. Depending upon the nature of the corporate action involved, the required percentage of approval ranges from a majority to 66-2/3 percent. A majority of the preferred stock voting as a class is required as to the issuance of any unsecured debt in excess of 10 percent of the aggregate of the company's secured debt and capital and surplus and upon any merger or consolidation. A two-thirds vote of the preferred stock as a class is required for the authorization of any prior-ranking preferred stock, the amendment of the articles of incorporation to change the express terms and conditions of preferred stock in any manner substantially prejudicial to the holders thereof, the issuance of pari passu preferred stock when stipulated earnings levels are not met, and the issuance of any series of preferred stock where the capital represented by the common stock and surplus does not equal the involuntary liquidation value of the present preferred and the preferred stock proposed to be outstanding.

3. A common stock dividend restriction automatically comes into play if the common stock equity is or becomes less than 25 percent of total capitalization and surplus. We consider this dividend restriction one of the most important safeguards developed for the protection of preferred stockholders and for the maintenance of a sound corporate structure. This dividend restriction operates as follows:

(a) It prevents the payment of more than 75 percent of net income if the common stock equity is above 20 percent but below 25 percent;

(b) It prevents the payment of more than 50 percent of net income if the common stock ratio is less than 20 percent;

(c) Except to the extent permitted by the restrictions I've just mentioned, it prevents the payment of a common stock dividend if such payment reduces the ratio to below 25 percent.

These are the highlights of the protective provisions contained in the indentures and charters of companies issuing bonds or preferred stock under the Holding Company Act. They have been accepted by a very large segment of the utility industry and are welcomed by all classes of informed investors, but many of them will be quickly eliminated or suffer the process of substantial erosion through artfully worded legal jargon unless your staff members are trained to become familiar with them and to insist upon them as necessary in the interest of the statutes administered. Certain recent utility issues, which took place after the companies ceased to be subject to the Holding Company Act, demonstrate how quickly some managements will move to discard these provisions when they can.

With the SEC gradually leaving the field as the Section 11 program progresses, and with the State commissions taking over, I think it would be most appropriate if the NARUC, through its Committee on Corporate Finance, would develop the following program:

- (1) Prepare recommendations, in detailed form, as to standard protective provisions for indentures and preferred stocks;
- (2) Discuss and debate thoroughly these recommendations, particularly in the light of the problems of the various State commissions;
- (3) Publish a finally approved recommended list of standard provisions for bond and preferred stock issues in booklet form, available for staff use in State commissions throughout the country. This list would not be regarded as either eternal or immutable, nor necessarily definitive; relaxations from it should, of course, be permitted by individual agencies where a strong showing for an exception is made. Conversely, tighter standards should be insisted upon in situations where greater protections are needed.

I do not think that financing the new construction program of electric utilities will be an easy job even perhaps for the most soundly capitalized utility. Gigantic undertakings are never easy. But regardless of the size of this task, it must be performed well -- by the industry and by the regulatory bodies. Our relative success or failure will doubtless spell the difference between continued smooth sailing or stormy days ahead. I earnestly urge that careful analysis of the capital structure and requirements of electric utilities calls for serious thought and determined effort, so that we, as guardians of the public interest, may faithfully discharge our obligations.