COST OF MONEY AS AN ELEMENT IN THE VALUATION OF PUBLIC UTILITIES

There never has been any question of the right of a public utility enterprise to be reimbursed for the cost incurred in obtaining capital funds devoted to the development and expansion of its plant and business. After the ascertainment of the exact cost of raising the funds used by the utility in its business, the problem then arises as to the method by which this cost may be equitably apportioned between the owners of and investors in the enterprise, and the customers of the utility.

The decisions of the courts and commissions show that there are two distinct ways in which the cost of money may be handled. On the one hand, the expenditures incident to raising money may be regarded as constituting an unavoidable expense in the acquisition of capital funds necessary to initiate and develop the business, and as such properly to be considered in the same class as the cost of professional services rendered by engineers, attorneys, and the administrative organization of the company in connection with the construction and development of the property; in brief, a cost upon which a reasonable amount for interest and profit should be earned. Thus to add the expenditures incurred in getting capital funds to the total investment in the plant and hence to consider it as an integral part of the total sum upon which a fair rate of return should be allowed, is one way in which an equitable arrangement may be effected between the investors and the customers of the utility. The addition of the cost of money to the physical property investment of the utility enlarges the sum of money representing the value of the plant upon which a fair return is to be allowed. The second method of treating the cost of money is gradually to write off the original cost by charging a sufficiently high rate to the customers immediately following the acquisition of the capital funds invested in the business, so that over the period of years for which the securities run, the entire cost will be written off through operating expenses. For example, a cost of \$100,000 incurred in the sale of a \$2,000,000 bond issue, running for twenty years, may be extinguished for a public utility enterprise having five thousand cus-

tomers by equal annual payments during the life of the bonds of \$1 per customer a year, or by an increase of \$5000 per annum in the ordinary rates over and above the rates necessary to cover operating expenses, including depreciation and reasonable amounts for interest and profits. When amortized in this manner, the cost of obtaining money becomes only a temporary charge against the customers, but is shifted from all of the customers of a plant to only that part of them attached during the period for which the securities run. The total cost of obtaining money is thus extinguished at the expense of those people who may be customers during the amortization period.

Before attempting to reach any conclusions concerning the proper method of handling the cost of money in determining the fair value of a public utility, the real nature of the item must be understood: a thorough appreciation of the significance of this term is especially needed where the discussion for and against capitalization or amortization respectively has become so pronounced.¹ At the outset it should be noted that the dispute as to the method of handling the cost of obtaining money is in part due to a confusing nomenclature growing out of the careless phraseology of courts, commissions, lawyers and public utility operators. What is unquestionably the cost of money has been variously called "cost of money," "cost of financing," "brokerage" and "discount." However, an analysis of the foregoing terms discloses real differences between them. The "cost of financing" is a general term and embraces two distinct elements, (a) the mechanical cost of financing, including therein all costs of preparing, printing, engraving, registering, and distributing security issues, whether stock, bonds or notes as well as the cost of recording mortgages and other necessary papers, trustees' fees and expenses, etc., and (b) the cost of money realized from the sale of such securities, whether such cost be incurred in the form of direct expenses paid by the company—where securities are sold direct by the company to the investor—or as sums paid to

¹ While perhaps more apposite words than "amortize" and "capitalize" might be used here, the succinctness of these words facilitates clarity of expression and hence they will be used throughout this discussion.

bankers for their services in effecting the sale of the company's securities. Thus it will be perceived that the "cost of money" is not so inclusive a term as "cost of financing," that "brokerage" is synonymous with "cost of money" as the latter term has just been defined, and that "discount" is distinctly different from any of the foregoing items.

DISTINCTION BETWEEN COST OF MONEY OR BROKERAGE AND DISCOUNT

In view of the fact that much of the muddled terminology centers about brokerage and discount it is relevant to distinguish briefly between these two terms. Discount represents the difference between the par value of the securities and the price paid therefor by investors. Discount represents an adjustment of the stated rate of return on securities to current yields prevailing in the investment market at the time the security is offered to the public. The difference between the par value of a bond and the price paid for it by the investor represents an adjustment of interest which, when averaged over the life of the bond—in conjunction with the interest periodically paid by the company—gives the investor an average yield approximating the current yield for securities of the character in question. Thus, for example, the utility may be able to sell to an investment banker a ten-year first mortgage seven per cent. bond at a price which will enable the latter to offer this bond to the public at par. In this event there is no bond discount as the term has heretofore been defined. On the other hand, the utility may sell a six per cent. ten-year bond to the bankers at a price which will enable them to offer it to the investing public at 92.8938, which represents a seven per cent. basis when interest is paid semi-annually. In either event the bondholder buys a security which, if he holds it until maturity, will show him a yield of seven per cent. per annum on the money which he has invested. In the first case, he receives seven per cent. in each and every year, while in the second case he receives in advance the equivalent of something over one-half of one per cent. per annum for the entire period (representing the difference between the price which he pays for the bond, *viz.* 92.8938, and par) and thereafter interest at the rate of six per cent. per

annum upon the face amount of the bond, which is equivalent to 6.46 per cent. per annum on the cash price which he paid for the bond. It is clear from this illustration that a corporation about to issue securities has at least in theory the choice between the issue of a security carrying a rate of interest sufficiently high to enable it to be sold to the ultimate investor at par, or, on the other hand, of issuing a security of the same characteristics, except that its rate of interest is lower, in consequence of which it can be sold to the ultimate investor only at a discount.

As distinguished from discount, the cost of money or brokerage represents the difference between the price at which securities are sold to the banker by the utility and the price at which the banker in turn sells them to the investing public. It includes a reasonable compensation for the banker's services in marketing the securities and forwarding the funds yielded to the utility; the services and expenses of examination, negotiation, advertising and selling through all of the various stages until the sale to the final investor is effected.

FACTORS RESPONSIBLE FOR AMORTIZATION OF COST OF MONEY

There are seventeen public service commissions in favor of amortizing the cost of money.² Largely as the result of regarding brokerage and discount as connoting the same class of costs to a public utility, some commissions view the cost of money as "an advance payment of interest and not to be treated as a capital investment," declaring that "it should be made up out of income by the creation of a sinking fund reserve sufficient to cover the item by the time the bonds mature."³ Indeed, this erroneous conception of the cost of money as an item synonymous with discount not only pervades the decisions of courts and commissions but has been fostered by the authors of legal texts dealing with the jurisprudence of public utilities,⁴ by the National

² A list of the states whose commissions have decided that the cost of money should be amortized out of operating revenues follows: Colorado, Idaho, Illinois, Indiana, Kansas, Maine, Maryland, Massachusetts, Missouri, Montana, New Jersey, New York, Ohio, Oregon, Washington, Wisconsin and Utah.

³ *Lincoln v. Lincoln Water & Light Co.*, P. U. R. 1917, B 1.

⁴ WHITTEN: VALUATION OF PUBLIC SERVICE CORPORATIONS, p. 268.

Association of Railway and Utilities Commissioners,⁵ and, curiously enough, by public accountants. Generally, the members of the accounting profession have been very definitely against the capitalization of brokerage charges. Reference to accounting textbooks and the various classification of accounts adopted by the different public service commissions shows first, an unmistakable tendency to treat brokerage and discount as identical items, and, second, an almost uniform adherence to the practice of amortizing over the life of the securities any brokerage charges incident to their sale.⁶ While a misconception of the significance of two terms meaning markedly different thing is hardly to be considered a sound argument for amortizing the cost of money, yet due recognition must be given to this misconception as an outstanding cause of the fallacious treatment by many courts and public service commissions of the cost of money as an element in the valuation of a public utility. However, it should be recognized that inasmuch as discount involves an adjustment of the stated rate of return on securities to current yields prevailing in the investment market and does *not* represent any payments made by the utility for services rendered to it; and since the discount on securities is applicable only to the period for which the securities run and hence could not be capitalized without artificially inflating the capital account, and since ordinarily the amount of this discount, except in excessively speculative enterprises never reaches large proportions—discount may well be amortized out of operating expenses without unduly burdening the consumer of the utility during the life of the securities and without depriving the stockholders of any funds which they have actually contributed to the enterprise.

Certain considerations of policy have also influenced the judgment of commissions confronted with the problem of handling the item of brokerage. Admitting that the cost of getting money represents a legitimate part of the cost of the property, the statement is encountered "that it is wiser to allow a rate of

⁵ Proceedings for 1920—Appendix 1, p. 30.

⁶ HAYES: PUBLIC UTILITIES—THEIR COST NEW AND DEPRECIATION—*In re* Terminal Taxicab Co., P. U. R. 1915, B 546; *Campbell v. Hood River Gas & Electric Co.*, P. U. R. 1915, D 855; *Re Cincinnati Gas & Electric Co.*, P. U. R. 1916, F 416.

return higher than would otherwise have been assigned and to require that a portion of such return be turned into a fund to amortize such losses." ⁷ On the other hand, certain commissions deluded by notions of public policy maintain that the consumers should not be burdened with a rate of return on imaginary values representing the bond discount suffered by the utility due to the stockholders' financial inability to furnish the needed capital for improvements and betterments through stock subscription.⁸ Again, some commissions refuse to permit the cost of money to be capitalized due to the difficulties that might ensue were this policy pursued in the case of refunding bond issues, for it is claimed that the capitalization of the cost of money on refunding issues would continually add sums to the total capital account of the utility until this account might be entirely out of proportion to the fair value of the property.⁹

Another reason for the insistence by legal tribunals that the cost of money cannot be regarded as a contribution to the capital investment of the utility is to be found in the carelessness displayed by the utilities themselves in the preparation and presentation of their cases. An examination of the transcripts of record too frequently divulges the failure of the utility to base its claim for cost of money upon the actual expenses incurred in the sale of its securities. The failure to provide concrete evidence of such expenditures furnishes the courts and commissions with adequate provocation for denying the validity of the claim altogether. Thus, in a comparatively recent decision bearing upon this question the Supreme Court of the United States categorically refused to recognize the cost of money as an element to be included in the investment of a public utility property, since the evidence submitted thereon savored of being hypothetical and conjectural and of not being positively grounded on the experience of the utility.¹⁰

While an imposing catalog of reasons resorted to by courts and commissions in justification of amortizing the cost of money might be adduced, it is doubtful whether such an array would

⁷ *Lima v. Lima Telegraph & Telephone Co.*, P. U. R. 1916, E 670.

⁸ *Re Citizens Telephone Co.*, P. U. R. 1919, B 352.

⁹ *Re Wisconsin-Minnesota Light & Power Co.*, P. U. R. 1920, D 428.

¹⁰ *Galveston Electric Co. v. Galveston*, P. U. R. 1922, D 159, 258 U. S. 388.

add anything of significance. A careful reading of the decisions in which the item of brokerage has been amortized almost invariably discloses the fact that the tribunal has not perceived the essential differences between brokerage and discount. As will appear subsequently, to imply that the amortization of brokerage lightens the rate-burden of the utility's customers is to fly in the face of the facts. To state that the capitalization of brokerage gives an unwarranted advantage to the utility of comparatively weak credit by enabling it to aggrandize its investment¹¹ and thus secure a differential advantage over the utility in a strong credit position, is to assert that the credit status of the utility is the predominant and outstanding factor determining its cost of money, and to ignore conditions existing in the money and investment markets, the kind of security issued, the general reputation among investors of the type of utility seeking capital, the location of the enterprise, the extent to which the territory served by the utility has been developed and the character and extent of local and state regulation and control, as very positive and pertinent factors affecting the amount of brokerage. To amortize the cost of money because of the possibility of duplicating the addition of the brokerage item to the utility's total investment whenever a refunding security is issued is to conjure an argument out of a pretense, for the exercise of the supervisory and administrative powers over the issuance of securities by public utility corporations granted to most public service commissions, would effectively prevent any such excessive capitalization.

ECONOMIC JUSTIFICATION OF BROKERAGE

Much of the misconception concerning the cost of money arises through a failure to appreciate the nature of the transaction by which bankers are used as intermediaries in the distribution of securities. It is erroneously regarded as essentially different from a transaction by which the original owners of a public utility enterprise, living in the community in which the enterprise is developed, contribute the initial capital for its organization and devel-

¹¹ *Reno Power, Light & Water Co. v. Public Service Commission of Nevada*, P. U. R. 1923, E 485, 298 Fed. 790 (D. C.).

opment. Where the citizens of a community are desirous of having a public utility supply them with electricity, water or gas, they would immediately be confronted by the difficulties of raising sufficient capital to build the plant and set it in operation. If the money is raised by capital stock, an advertising and selling campaign would be necessary to persuade the investors of the particular community to subscribe to the stock of the proposed enterprise. If the stock were sold at par directly by the utility itself, with no bankers or any other intermediary serving as an agent in the distribution of the securities to the public except perhaps the employees of the new company, there would still be the cost of raising money by the sale of preferred and common stock equivalent to the total expenditures incurred in marketing the stock to the local investors, and represented by sales commissions, advertising, printing and stationery, transportation, postage, etc. The cost of selling these securities locally is to be measured by the experience of other utilities in the local distribution of their stock through customer ownership campaigns, and will range from two to fourteen per cent. of the net cash received by the utility. A fair determination of the actual money invested in such a property could hardly recognize less than the total amount of money contributed by the stockholders, although the net cash per share invested in tangible property would be the balance left after the legitimate selling expenses had been deducted from par.

Essentially, there is no difference between the foregoing situation and one where the utility hires an investment banker whose business it is to sell securities, who has an organization and trained staff, the technical knowledge, the banking connections and the clientele to do the thing for it. Viewing the matter from the standpoint of cost alone, much is to be said in favor of distributing securities through bankers. A wide and varied experience in the sale of similar securities, the gradual development extending over a period of years of an established clientele, familiarity with the current preferences and dislikes of investors, an intimate knowledge of the availability of funds in the money and investment markets, and the flexibility of underwriting syndicates in adapting themselves to unforeseen and untoward events,

qualify the banker to distribute securities rapidly and at a minimum cost. Indeed, the figures afford substantial evidence that enterprises lacking established earning power and operating in comparatively undeveloped territories can frequently obtain their funds cheaper through bankers than through direct sales to the public.

The repeated assertion that the cost of obtaining money can be eliminated or avoided by increasing the face interest rate of the security to meet prevailing market conditions ignores the conditions confronting corporations seeking to raise money through the sale of securities. Arbitrarily to increase the face interest rate of the security might avoid bond or stock discount as the term is herein applied, but it does not warrant an assumption that the sale and distribution of securities, whether conducted by the utility itself or by bankers, can be prosecuted without expense. The cost of obtaining money invariably represents a legitimate expenditure for services that have actually been rendered in the sale and distribution of securities. Indeed, the attempt to eliminate bond discount and the cost of obtaining money by raising the face interest rate of the securities in question might actually result in the utility experiencing unwonted difficulty in marketing its securities or in stressing the two factors which were sought to be eliminated. The problem is one involving conditions somewhat more complicated than a simple arithmetical computation. For example, the mere fact that a utility recently organized in a relatively new territory was attempting to market its bonds bearing a face interest rate of eight or nine per cent. when the current yield then prevailing in the investment market was but seven per cent. would immediately arouse the suspicion of investors. Investors might well look askance at a security whose face interest rate was so far out of line with current yields of similar securities, and might regard the attempt to dispose of such a security as a complete confession of lack of credit on the part of the utility or of some inherent defect in its business or financial program. The effect would be much the same as that produced by a merchant possessing a supposedly A-1 line of credit hawking his promissory notes bearing an interest rate of ten per

cent. about a market where the prevailing cost of money was only six per cent. Conservative investors seldom expect to get something for nothing, particularly in the matter of interest rates, and the mere offer of a security bearing a face rate of interest disproportionately out of line with the current yields would in all probability prove such a deterrent to prospective purchasers as to hinder effectually the distribution of the security. With this situation confronting either the utility or the banker, it is evident that the amount of time and effort required to complete the sale of the security will be tremendously enhanced—the expenses incident to administration, sales and advertising will undoubtedly increase—and this advanced cost of selling will be reflected in a higher cost of obtaining money.

ARGUMENTS FOR CAPITALIZING COST OF MONEY

There are sound economic reasons for capitalizing the cost of money.¹² From the customer's viewpoint there is something to be said in favor of the method by which the amount expended in acquiring funds is added to the value of the plant upon which a fair return is to be allowed. Even though by such a method the cost of money becomes a permanent charge upon the customer, this charge will be relatively low compared with that which the customers of the first few years following the inauguration of the enterprise will have to bear in case the cost is written off through operating expenses. Moreover, the amortization method of handling the cost of money accentuates the financial burden which the customers of the utility during the earlier years have to bear, not alone because during this period the customers are fewer in number, but also because it is likely that necessary changes in plant, personnel, and services dictated by cumulative experience with the community served, render inevitable higher rates during the inaugural stages of the enterprise.

From the standpoint of the stockholder cogent reasons exist for including the cost of money to a public utility corporation in

¹² The following public service commissions have at some time declared in favor of adding the cost of money to the capital investment of a public utility: District of Columbia, Maine, Missouri, Nebraska, Pennsylvania and Utah.

the investment upon which a fair rate of return is to be calculated. For it must be remembered that the value of most public utility properties is represented both by bonds and by stocks. The bonds have prior claim on the earnings while the stockholders take what is left after all of the preferred claims have been met. The amount deducted from the so-called fair value of the property in case the cost of money is written off through operating expenses would, therefore, have to come out of the stockholder's share alone instead of being distributed over the entire value of the property as it should be. For the purpose of illustrating the effect which the failure to capitalize the cost of money to a public utility would have upon the equity of the stockholders, the calculations set forth in the following table were made, the relationship existing between the money raised by bonds and the money raised by stock being predicated upon the interim report of the Sub-committee on Electric Securities of the Investment Bankers Association, which stated that money raised by the sale of bonds should not exceed fifty to sixty per cent. of the total value of the utility's property, including intangibles, and that the remainder, representing the equity money, should consist of equal parts of preferred stock and common stock. It is assumed that a public utility enterprise is to be organized with a total investment of \$10,000,000, over and above the cost of obtaining that capital, the money to be raised by the sale of bonds and stocks according to the proportions just described. The cost-of-money figures represent the actual cost of money on bonds or stock to public utilities in the United States as determined by a computation covering a nine-year period from 1914 to 1922, inclusive, embracing 600 public utility companies of all types and involving security issues aggregating \$1,750,000,000 par value.¹³ To simplify the illustration, it has been assumed that the securities without exception will be sold to the ultimate investor at par so that the investor's money contribution to the physical plant of the utility will in fact exactly equal the par value of the securities outstanding in every case.

¹³ See earlier articles by the author entitled *Cost of Money to Public Utilities in United States, 1914 to 1922, Inclusive.*—JOUR. LAND AND PUBLIC UTILITY ECONOMICS, Jan., 1926.

TABLE

SHOWING EFFECT OF STOCKHOLDERS' INVESTMENT
IF COST OF MONEY IS EXCLUDED FROM FAIR VALUE OF PUBLIC UTILITY WITH A TOTAL INVESTMENT OF \$10,000,000*

	Bonds	Stock		Total Par Value of Common Stock	Equity for Common Stock Assuming no Allowance for Cost of Financing in Valuation Made on Original Cost Basis	Percentage of Par Value of Common Stock Represented by Allowed Value	Percentage of Par Value of Common Stock older not Represented by Allowed Value
		Preferred	Common				
<i>Example A</i> Assuming investment to be represented by cost of money.*	60.00% 5.907%	20.00% 8.488%	20.00% 12.00%	\$2,240,000	\$1,475,820	65.88	34.12
<i>Example B</i> Assuming investment to be represented by cost of money.	60.00% 6.324%	20.00% 8.532%	20.00% 12.00%	2,240,000	1,449,920	64.73	35.27
<i>Example C</i> Assuming investment to be represented by cost of money.	60.00% 5.599%	20.00% 7.203%	20.00% 12.00%	2,240,000	1,590,000	67.86	32.14
<i>Example D</i> Assuming investment to be represented by cost of money.	60.00% 5.920%	20.00% 6.791%	20.00% 12.00%	2,240,000	1,508,980	67.37	32.63
<i>Example A1</i> Assuming investment to be represented by cost of money.	50.00% 5.907%	25.00% 8.488%	25.00% 15.00%	2,875,000	1,992,450	69.30	30.70
<i>Example B1</i> Assuming investment to be represented by cost of money.	50.00% 6.324%	25.00% 8.532%	25.00% 15.00%	2,875,000	1,970,500	68.54	31.46
<i>Example C1</i> Assuming investment to be represented by cost of money.	50.00% 5.599%	25.00% 7.203%	25.00% 15.00%	2,875,000	2,039,975	70.96	29.04
<i>Example D1</i> Assuming investment to be represented by cost of money.	50.00% 5.920%	25.00% 6.791%	25.00% 15.00%	2,875,000	2,034,225	70.76	29.24

*The cost of money raised through the sale of bonds, preferred and common stock varies according to the actual cost incurred by each type of utility. Examples A and A1 are based upon the average cost of money to all public utilities in United States from 1914 to 1922, as determined in the calculation previously referred to, B and B1 upon the cost of money to electric light and power companies, C and C1 street railway companies, and D and D1, gas companies, for the same period.

With the foregoing factors affecting this calculation in mind, the amount of bonds which would have to be issued to the investors at par to yield \$6,000,000 in cash, as illustrated in Example A, would be determined by the cost of money applied in this instance, or 5.90 per cent. In brief, the total par value of bonds that would have to be sold to net the company \$6,000,000 subsequently to be invested in its plant, would exceed \$6,000,000 by the total expenditures made in obtaining the money. This amounts to \$354,420, so that the utility would have to sell \$6,354,420 of bonds in order to receive net \$6,000,000. With preferred stock exactly the same method of calculation is applied and the result in this case, with preferred stock money costing on the average 8.5 per cent., shows that \$2,169,760 of preferred stock would have to be sold to the investor at par in order to net the company \$2,000,000. By the same process the amount of common stock that would have to be issued with a cost of money of twelve per cent. to net the company \$2,000,000 is shown to be \$2,240,000.¹⁴ Consequently, \$10,764,180 of securities will have to be issued at par to the ultimate investor to yield to the company \$10,000,000 to invest in its property after the cost of money has been defrayed.

The relationship between the cost of money expressed in dollars and the equity which the common stockholders now possess in the \$10,000,000 property is as follows: The total cash received by the company from the bankers is \$10,000,000 and the total par value of the bonds and preferred stock outstanding, representing dollar for dollar the money contributed by the ultimate investor, is \$8,524,180. The balance, representing the equity for the common stock, assuming that no allowance is made for the cost of money in any valuation of the public utility's property immediately following the construction of the property, amounts to \$1,475,820. While the common stockholder has paid

¹⁴ It is believed that allowances of 12 and 15 per cent. for the cost of obtaining money through the sale of common stock is not excessive, especially in view of the fact that in a decision of the New Hampshire Public Service Commission an allowance of \$10 a share to a banking house for selling a 7 per cent. preferred stock at par was held to be reasonable. *Re Utilities Power Company*, P. U. R. 1923, A p. 338.

\$2,240,000 in cash for this stock, yet if the cost of this money is excluded from the total value of the utility's property, then the equity in the property, representing the allowed part of the rate base belonging to the stockholder, would amount to \$764,180 less than the actual amount of money which he has contributed to the enterprise. If the cost of money is not regarded as an element of value in the public utility's property, approximately 34.12 per cent. of the common stock equity has immediately disappeared. In brief, the percentage of par value of the common stock not represented by an allowed value, when the cost of money is excluded from the investment value of a utility's property, ranges from thirty to thirty-five per cent.

It is to be noted particularly that the basis of all of the foregoing calculations with the exception of common stock, is the actual cost of money as revealed in the investigation previously referred to.

The preceding calculation definitely demonstrates that the cost of money is something which the security holders have generally contributed to the enterprises. The need for recognizing cost of money as an essential part of the value of any public utility enterprise is further accentuated by the fact that utilities are continually seeking to attract capital with which to finance the improvements and extensions demanded by their customers. Should stockholders find that through the arbitrary refusal of public service commissions and the courts to recognize legitimate expenditures incurred in obtaining money for the utility as a part of the money invested in the property, thirty-five per cent. of their investment disappears immediately after the purchase of their stock, then the keystone in the structure of finance, representing the investment in common stock, becomes practically impossible. No investor is likely to invest in a business enterprise where his profits are not only regulated, but where at the outset he must face a loss of thirty-five per cent. of his investment because the regulatory bodies have decided that the cost of money must be amortized through operating expenses rather than be added to the property investment.

The soundness of the reasoning by which public utility commissions justify the amortization of the cost of money out of operating expenses and refuse to permit it to be included in the investment in the property diminishes when it is realized that one of the standard measures adopted by commissions for determining a fair rate of return sufficient to attract capital into the industry is the cost of money, or, as it is generally phrased, "the cost of attracting capital," in the open market. In the mechanics of fixing rates for public utility enterprises, the value of the property is generally regarded as constituting the base upon which the rates are to be fixed—this value representing a finding by some government tribunal that there has been and is as of the date of the valuation a certain amount of money invested in the property that is used and useful and dedicated to the public service. A fair rate of return is the interest which when applied to the money invested in the property produces the return which, in the judgment of the regulatory body and the owners of the property, including its creditors or bondholders, it should be allowed to earn. The rate of return measures the sum which the public utility is allowed to collect from the public for the service rendered. The purpose of determining the fair value of a public utility is to give to the security holder and particularly to the owners of the property, namely preferred and common stockholders, some estimate of the actual money investment in back of their security. As a matter of fact, the reputable investment banker is extremely careful before he sells any utility bonds or stock to his customers to ascertain whether there is a dollar-for-dollar investment value in back of the securities marketed, for he realizes the precariousness of his position if he is detected selling securities which will not at all times be recognized as having a right to a return. It is sheer casuistry to say that the amortization of the cost of money adequately protects the investment of the bondholder and stockholder. Unfortunately under our capitalistic regime the investor or owner measures the adequacy of his protection by whether or not he has returned to him at the maturity of his investment the same dollars of purchasing power that he has originally contributed to the enterprise. Blandly

to assure him at the outset that having paid so much money for his bonds or stock his investment will shrink from thirty to thirty-five per cent. due to the failure of the public service commission or courts to recognize the legitimacy of including the cost of obtaining money in the total investment, is a method par excellence for keeping capital out of the industry.

While bearing traces of confusion between brokerage and discount, the practical necessity of allowing the cost of money to be capitalized is enunciated in the leading decision ¹⁵ in Pennsylvania, in which Judge Kephart laid down the fundamental principles of valuation, which have since been repeatedly affirmed:

"Concerning the item of brokerage, . . . utilities, like other companies, are not able to make their financial arrangements without allowing such discount. The difference between the amounts derived from the sales of its bonds and the amount which the company must eventually pay on the bonds has been regarded as a part of capital charge for construction. While corporations should not be permitted to capitalize their lack of credit, still, where bonds are sold at a reasonable discount and bear a fair rate of interest, such discount should be allowed. What is a fair discount depends upon the condition of the money market and the ability of the organizers to attract capital to the project. It is a well-known fact that the great majority of companies are started without all the available cash necessary to complete the undertaking. This country would not have reached its great stage of industrial development if it had been the rule that all capital must be procured in advance by full-paid stock subscriptions. If a legal rate of return was all that was offered, the investor could very well answer that, without risk and with a safe margin of value, money could be loaned on lands and buildings at this rate of return. When solicited to invest in a new project, with the uncertainty of success before him, the investor demands a return commensurate with the risk involved, and that must be something more than a legal-rate investment. If the venture is a failure, the investor is compelled to take his loss without any

¹⁵ Ben Avon v. Ohio Valley Water Co., P. U. R. 1918, A 161, 68 Pa. Super. 561.

hope of recoupment; but it is equally unfair to require him to suffer all the loss if the enterprise fails, and to deprive him of the chance of additional gain if the venture is a successful one. Moreover, the company should be allowed the expense necessary to give a reasonable discount on bonds and . . . such discount should be allowed as a capital charge. To hold that only the cash received may be considered in a rate-making value would not only deprive the company of property, but would deprive the investor of property; it would drive from the field of legitimate banking the securities of hundreds of utility companies within the state. Many of these securities are held in good faith by banks throughout the commonwealth. We cannot view the present success of utility companies as the medium through which this question must be judged. It is necessary to go back to their formative period, when these securities were sold, and from that viewpoint examine the various critical stages through which the utility company has passed. It has only been through inventive genius that any utility concerns have become successful ventures. The appellant should be allowed a certain per cent. for brokerage or discount. There was sufficient evidence before the Commission to determine the fair amount, and while the Company, in undertaking to allow exorbitant amounts, fell into error, and such issues were clearly unreasonable and grossly in excess of any fair demand, still we cannot deny to the innocent stock and bond holder the justice of securing a reasonable allowance for brokerage as a capital charge."

Upon appeal this case was taken to the Supreme Court of Pennsylvania and the decision of the Superior Court was upheld on this point. The Pennsylvania Supreme Court¹⁶ went so far as to say that the inability to show the actual expenses incurred in the sale of bonds afforded no adequate reason for excluding this item in the determination of the fair value of the property, since "Common experience shows, however, the bonds could not have been marketed without paying brokerage either to the person who sold them, or by reduction from par value on their sale to a purchaser, or both." That the stress laid by the Pennsylvania

¹⁶ *Ben Avon v. Ohio Valley Water Co.*, P. U. R. 1921, E 471, 271 Pa. 346, 114 Atl. 369.

Supreme Court upon the justice of capitalizing cost of obtaining money is based upon the practical experience of public utility properties is shown in the following excerpt from its opinion:

"The last of the five questions is whether or not brokerage on the sale of bonds of the water company should have been allowed? The Commission says that sufficient evidence of actual payment thereof was not produced, but everybody knows that expenses are necessarily incurred in such sales; even our Victory and Liberty Bonds could not be marketed except at a very heavy cost. There is no legal principle standing in the way of making a proper allowance therefor, and it is difficult to understand the basis of the mistake of those who hold it should not be allowed. The matter is in the same situation as if it had placed its bonds in the hands of an agent, with direction to sell them and apply the proceeds, as needed, for construction expenses. These bonds were all that the water company had to apply in payment of the plant, and the use thereof for this purpose, in the final analysis, constituted simply an exchange of one for the other. If it had been remembered that money itself has no value except that given to it by reason of the fact that other commodities can be obtained in exchange for it, the error of refusing to allow this as a principal expense would probably not have been made.

"In the instant case the evidence would seem to justify the conclusion that expenses were paid in selling the bonds, but neither the exact purpose of the payments nor the amount thereof clearly appears. Common experience shows, however, the bonds could not have been marketed without paying brokerage either to the person who sold them, or by reduction from par value on their sale to a purchaser, or both; especially in the case of an investment, somewhat problematical as to safety, as was the fact with regard to all these utilities in the beginning."

It is submitted that the question of whether the cost of obtaining money is being amortized by the company is immaterial in determining whether the cost of money should be included as an item in the fair value of the property. If the principle is adhered to that anything which is amortized should be excluded from the valuation, the entire theory upon which

valuations are universally made would be so greatly impaired as to cause their abandonment as a means of determining the fair value of the property of a public utility. It is universally admitted that interest during construction is an element of the cost of the property and should be included as a part of its fair value. It is also universally admitted that engineering is a proper element in the cost of constructing a property and should be included as a part of its value. But both interest during construction and engineering—together with other elements of cost of a similar nature—are amortized over the life of the various elements of property, in which these items represent a part of the cost, through a reserve for renewals and replacements, sometimes referred to as a reserve for depreciation. The capital which is raised for the purchase of labor and materials, of providing engineering and meeting interest during construction, all passes out of existence with the physical property. In exactly the same way the corporate organization of most enterprises ceases at some time to be suitable for the conditions then existing. The utility outgrows its financial structure and extensive refinancing is, therefore, necessary. This is an element of obsolescence exactly similar in nature to the obsolescence of physical property and must be so regarded.

It requires no minute scrutiny to ascertain the fact that the amount of money expended by a utility in obtaining capital funds is nothing more than a remuneration paid to the bankers for their specialized services. The cost of money, therefore, is directly comparable to the sum paid indirectly to wholesalers, retailers and manufacturers in the purchase of tangible property and equipment, for in every item of physical property bought by a utility, a certain amount of the total purchase price goes toward defraying the costs of sale and distribution thereof, and hence represents specific payments to the individuals or corporations performing such services. To deny the validity of including the cost of money—representing as it does a legitimate item of expenditure incurred in getting requisite funds—as a proper and indispensable element in the cost of constructing and developing every public utility property, is equivalent to a denial that

the purchase price paid for tangible property and equipment represents the true original value of the physical property investment. Money used for plant construction and expansion is a commodity and must be bid for in a competitive market, and the time and energy incident to its acquisition and placement in the hands of the utility should be duly compensated. Actual expenditures made by certain utilities in selling their securities directly to the public averages approximately 4.5 per cent. of the net cash received by the utility. Consequently, when a local investor buys a share of stock at par paying \$100 therefor, it means that of this total sum \$4.50 on the average has been spent in getting his \$100, and the remaining \$95.50 has been honestly and prudently expended in the property. After this cost of obtaining money has been defrayed, there would be little question in anyone's mind that the total value of the property was the par value of the stock which has been paid in by the local investor. As previously suggested, there is no essential difference between this situation and one where the utility hires an investment banker whose business it is to sell securities to do the thing for it. In both instances the utility is compelled to pay the cost of obtaining money, and there is no justification for regarding the intervention of investment bankers between the utility and the investing public as a reason for declining to include the amount of money expended in obtaining capital funds as a part of the fair value of the property.

Frank Parker.

*University of Pennsylvania,
Wharton School.*