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Regulation of Bond Discount

BY ROBERT D. ARMSTRONG

The proper treatment of discount suffered in the sale of bonds is one of the most controversial questions which public service commissions have had to face. As the result of considerable discussion and consideration, however, the fundamental principles seem to have emerged with a fair degree of clearness and, in their general outlines, are fairly well defined.

NATURE OF BOND DISCOUNT

In order to have a concrete example to which we can refer in this discussion, the following typical case will be found useful.

A public utility has made extensions and betterments, properly chargeable to capital account, of \$100,000. Its method of financing provides for the issuance of twenty-year five per cent bonds under its mortgage to the extent of 85 per cent of the value of such extensions, viz., \$85,000. It finances the remaining \$15,000 either from reinvested earnings or from the sale of stock, resorting to the latter only when necessary. This is a fairly conservative plan of financing extensions and betterments. The company is able to sell these bonds at 90 per cent of par. It, therefore, realizes \$76,500 on the sale of \$85,000 of such bonds. This amount will be referred to as the realization, and the sum of \$8,500 will be referred to as the discount.

The utility has contracted mortgage obligations to the face value of \$85,000, but it has received in cash in consideration of such obligations only \$76,500. The rate of interest aside from the discount, which the bondholder receives and the utility pays, viz., its annual interest charge for the face value of the bonds divided by the realization therefrom, is 5.88 per cent.

From the point of view of the utility, the essential features of the situation are that it must provide from some other source \$8,500, to reimburse its treasury for that amount of the extensions and improvements, and also that at the end of twenty years it must be in position to repay or refund the full face amount of the bonds, viz., \$85,000, although it has received for them in cash only \$76,500. If the utility makes annual payments into a fund,

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which, with compound interest at the rate of four per cent, would equal \$8,500 at maturity, the annual payment will be \$285.44. The annual interest charge upon the \$85,000 of bonds is \$4,250. The annual interest paid on the face value of the bonds, plus the annual payment into the sinking fund to amortize the bond discount, will be \$4,535.44 or 5.93 per cent of the realization, \$76,500.

In the example cited above the discount of \$8,500 is a part of the interest which must be paid for the use of the realization, \$76,500. It will be paid, not annually, but in one sum at maturity when the bonds are redeemed or refunded. This is the only difference between this form of interest and the interest which is paid to the bondholder year by year. The real rate at which the utility has borrowed its \$76,500 is not the nominal rate of 5 per cent nor 5.88 per cent, but 5.93 per cent.

In the last analysis bond discount is simply a concession to the psychology of the investment market. Essentially, it represents a form of interest: the investor desires a certain interest rate on his investment and the corporation can secure money at a certain borrowing rate. The reason why bonds are sold at a discount with a low rate of interest, rather than at par with a rate of interest representing the borrowing rate, is that bonds are issued at various times under mortgages which are fixed in their terms, while the conditions of the investment market are constantly changing.

BOND DISCOUNT NOT CAPITAL CHARGE

Practically all commissions are agreed that no allowance for bond discount should be made in fixing the value of a utility for rate-making purposes.

In the following cases it was held that no allowance should be made for bond discount in fixing the original cost:

Lincoln v. Lincoln Water and Light Company, Illinois, P. U. R. 1917, B.

Thomas v. Jefferson City Light, Heat and Power Company, Missouri, P. U. R. 1917, B, 745.

Pine Lawn v. West St. Louis Water and Light Company, Missouri, P. U. R. 1917, B, 679.

Greensburg v. Westmoreland, Pennsylvania, Pennsylvania, P. U. R. 1917, D, 478.

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In the following cases it was held that no allowances should be made for bond discount in estimating the cost of reproduction :

Re Colorado Springs Light, Heat and Power Company, Colorado, 4 Colo. P. U. C. 199.

Re Western Colorado Power Company, Colorado, 5 Colo. P. U. C.

Re Denver and Inter-Mountain Railroad Company, Colorado, P. U. R. 1918 E, 831.

Re Chicago Railways Company, Illinois, P. U. R. 1919 D, 572, 596.

Thomas v. Jefferson City Light, Heat and Power Company, Missouri, P. U. R. 1917 B, 745.

Re Kansas City Electric Light Company, Missouri, P. U. R. 1917 C, 728.

Greensburg v. Westmoreland, Pennsylvania, P. U. R. 1917 D, 478.

The interstate commerce commission refuses to allow discount on bonds as a part of the construction account.

In the following cases, it was held that no allowance should be made for bond discount in fixing the fair value for rate-making purposes :

Lamar v. I. R. L. and P. Company, Colorado, P. U. R. 1918 B, 86.

Re Colorado Springs Light, Heat and Power Company, Colorado, P. U. R. 1917 F, 385.

Re Western Colorado Power Company, Colorado, P. U. R. 1918 E. 629.

Re Chicago Railways Company, Illinois, P. U. R. 1917 B, 572, 596, P. U. R. 1919 D, 575.

Re Atchison, Topeka and Santa Fe Railroad Company, Kansas, P. U. R. 1917 F, 272.

Re Baltimore County Water and Electric Company, Maryland, P. U. R. 1918 F, 522.

Joplin v. Home Telephone Company, Missouri, 4 Mo. P. S. C. R. 64, 72.

Re City Water Company, Missouri, P. U. R. 1917 B, 624.

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Louisiana v. Louisiana Water Company, Missouri, P. U. R. 1918 B, 774.

Mississippi R. and B. T. R. Company, Missouri, P. U. R. 1918 C, 221.

-Borough v. Spring Water Company, Pennsylvania, P. U. R. 1919 C, 404.

The only case that I have been able to find in which the courts have ruled upon this matter is a Pennsylvania case. The public service commission refused to make any allowance for bond discount in fixing the value for rate-making purposes, for the reason that the evidence was not sufficient that such discount had been suffered.

Ben Avon v. Ohio Valley Water Co., Pennsylvania, P. U. R. 1917 C, 391.

The superior court overruled the commission (P. U. R. 1918 A, 161, 68 Pa. Sup. Ct. 561). The court said:

Discount on securities should be regarded as a part of the capital investment which is to be taken as the basis for fixing rates.

On appeal, however, this decision was reversed by the supreme court of Pennsylvania on February 25, 1918 (103 Atlantic, 744). The court said:

No allowance should be made for an item of this kind in the fixed capitalization of the company as a basis for a permanent charge against the public.

However, the practice of three commissions is otherwise. In the case of the *Potomac Electric Power Company*, District of Columbia, P. U. R. 1917 D, 563, bond discount was allowed as part of the original cost, because when the expense was incurred, it was so classified by the system of accounts prescribed by the commission. The commission said, however, that bond discount should not be considered as a part of the cost of reproduction or in the fair value to be taken as the base for rates. In the case of *Paulhamus v. Puget Sound Electric Railway Company*, Washington (*Railroad Commission Report* 1910, p. 17) an allowance was made for bond discount of five per cent of estimated investment which had been funded in bonds. In his *Valuation of Public Service Corporations* (p. 278) Mr. Whitten says that this rule has been adhered to by the Washington commission in later decisions.

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In a number of decisions the Wisconsin railroad commission has considered this question, the principal ones being the following:

Hill v. Antigo Water Company, 1909, 3 W. R. C. R. 623, 646.

Janesville v. Janesville Water Company, 1911, 7 W. R. C. R. 628, 659.

Marinette v. City Water Company, 1912, 8 W. R. C. R. 334, 342.

Green Bay v. Green Bay Water Company, 1913, 9 W. R. C. R. 236, 253.

In summarizing the practice of the Wisconsin commission. Mr. Whitten says:

The rule appears to be that bond discount actually incurred will be considered in determining original cost and actual investment, but that it will not be considered in an estimate of the cost of reproduction.

Whether it should be considered in estimating original cost depends altogether upon whether the realization or the total face value of the bonds was originally charged to capital account. If the former, it is not objectionable to charge bond discount to capital account; if the latter, the item is charged twice. The real criterion is the actual physical value of the property purchased with the securities or the proportion of such value that is funded in bonds. It is immaterial whether this is charged in two entries—one the realization and the other the discount—or in one entry, viz., the full value. But in no case should both face value and discount be charged.

The Indiana commission set forth its views at some length in the case of the *Citizens Telephone Company of Columbus*, No. 4050, November 22, 1918, (P. U. R. 1919 B, 352). In this decision, the commission ruled that bond discount is essentially a form of interest which if capitalized would be a permanent charge, even though in the meantime the original bonds had been discharged with a profit; that patrons should not be obligated to bear the lack of credit of the utility; and that there should be no relation between a utility's means of securing money and the valuation on which consumers should be called to pay a reasonable rate of return. It was also said that if bond discount is to be capitalized, the public is entitled to demand that the interest rate alone shall be the rate of return and that there shall be no differential between the rate of return allowed and the interest rate.

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In a recent letter H. C. Spurr, of the Lawyers' Co-Operative Publishing Company, said:

I have always been of the opinion that bond discount should neither be capitalized nor allowed as an operating expense; that when rate-payers provide for adequate return for the full amount of the investment, they have done all they ought to be asked to do; that it is immaterial to them whether the owners of the utility put up their own money or borrow somebody else's; that bond discount is part of the interest the borrowers have to pay on borrowed money; that if the consumer is to pay interest on the borrowed money, he should, in addition to that, be required to pay a return merely on the equity of the owners of the utility in the property.

The best thought on the question whether or not bond discount should be charged to capital account in a rate-making valuation seems to be summarized in the statement of the Indiana commission in the case of the *Citizen's Telephone Company*, mentioned above:

The proposal to capitalize discount cannot stand in the light of analysis. Large interests have abandoned such contentions. It is the policy of this commission to require the amortization of discount on securities. The purpose is to maintain a parity between the par value of the bonds sold and the value of the property added from the proceeds of the sale.

AMORTIZATION CHARGE NOT OPERATING EXPENSE

It is therefore improper to charge bond discount to capital account, for the very purpose of the amortization requirement is to put the discount on an annual basis and to pay off and retire it annually. As an annual charge there are two places to which it might conceivably be charged:

1. Operating expense.
2. Net income.

While in some cases the annual amortization charge has been allowed as an operating expense, the overwhelming weight of authority is to the contrary. In the following cases the charge was not allowed as an operating expense but required to be deducted from net income:

Re Southern Counties Gas Co., California, P. U. R. 1915 E. 197.

Re Chicago G. W. R. Illinois, P. U. R. 1915 A. 800.

Re Peoria Railroad Co., Illinois, P. U. R. 1915 A. 804.

Re Nat. Tel. and Tel. Co., Illinois, P. U. R. 1915 A. 872.

Re Tyrone Tel. Co., Illinois, P. U. R. 1916 E. 708.

Re City Water Co., Missouri, P. U. R. 1917 B. 624.

In the case of the *Hydro-Electric Light and Power Company* No. 2895, October 17, 1918 (P. U. R. 1918 A 325), the Indiana commission allowed the amortization payment as an operating charge in a rate case charge. In the modified order of June 3, 1919, this ruling was reversed and no allowance made. In the case of the *Madison Light and Fuel Company*, No. 4580, July 23, 1919, the Indiana commission allowed amortization of bond discount as an operating charge, in view of special circumstances of that case.

I have been able to find only one other case where an allowance was made for bond discount in operating expenses, and even there the ruling is not clear. (*Re Blue Hill Street Railroad Co.*, Massachusetts, P. U. R. 1915 E 370). The company was allowed to amortize the item "from earnings," but it is not clear from the decision whether the charge is to an operating account or to net income. Apparently, however, the company was allowed as an operating expense the interest on the floating debt incurred to borrow money to the amount of the discount.

If bond discount is a form of interest, as has been shown above, the charge belongs with other interest charges, viz., deductions from net operating revenue. In other words, out of the funds available for return on investment should be paid the interest for the use of money borrowed to purchase part of that investment.

AMORTIZATION CHARGE AND RATE OF RETURN

Bond discount, therefore, should not be regarded as a capital charge, nor should an annual payment to amortize it be regarded as an operating charge. As a form of interest, it is part of the cost of obtaining the money, and as such is an important element in fixing a reasonable rate of return. Reverting to the concrete case cited above, the rate of interest that should be considered in fixing the rate of return is not 5 per cent—the nominal rate—nor yet 5.88 per cent—the nominal interest payment divided by the realization—but 5.93 per cent—the nominal interest payment plus the annual payment to amortize discount, divided by the realization.

The following cases hold that the annual amortization payment should be considered in fixing the rate of return:

Re Southern Counties Gas Co., California, P. U. R. 1915 E 197.

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Lincoln v. Lincoln Water and Light Company, Illinois, P. U. R. 1917 B 1.

C. N. S. and M. Railroad Company, Illinois, P. U. R. 1918 A 338.

In a brief recently filed with the Indiana commission by the Laporte Gas and Electric Company in a rate case, the following statement was made :

Nothing is included in this valuation for the cost of financing, such as discount on sale of securities, brokers' commissions and similar items, as it is thought that this should be taken care of in the rate of return allowed on the value of the property.

In its brief on questions connected with the valuation of railroads, filed with the interstate commerce commission, the presidents' conference committee said :

The rate of return should, of course, cover the element of discount, for discount is simply a method of equalizing interest.

There has been much controversy whether bond discount should be considered in connection with the valuation or the rate of return allowed in rate-making cases. In a sense, this is purely a matter of accounting; if the practice is consistent, estimated revenue requirements of the utility will probably be about the same.

The first objection to considering it as a part of the rate base is that a temporary disparity is produced between the actual value of the property and the rate base, which, if not properly regulated by a continuing policy, will become permanent and will be charged against the public indefinitely. On the other hand, if it is not considered in determining the valuation, but instead the annual charge for amortizing it is considered in estimating reasonable rate of return, no permanent capital charge is incurred by what is essentially a result of temporary circumstances. If bond discount is charged to capital account, the rate of return should be correspondingly lower, so that the desired net income will be the same as if it were not so charged and as if the amortization requirement were considered in connection with the rate of return.

The second objection is that there is a real distinction between the two elements which must be considered in estimating the revenue to which a utility is entitled above its operating expenses. The valuation should be determined by the cost of the property

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used and useful in the public service. The main consideration in fixing the rate of return is the annual interest charge which must be incurred, including the amortization of the discount, in order to secure the money to fund that cost. After rates are fixed upon a reasonable value and a reasonable rate of return, the purpose of the amortization requirement is to see that the revenue derived from such rates is devoted to the purposes for which it was allowed, and that the deferred interest is paid year by year.

In the case of the *Southern Illinois Gas Company*, Illinois, P. U. R. 1916 C, 704, the commission said:

Bond discounts are but another way of expressing rate of interest. Should a study be made of the findings of the various state commissions in rate-making proceedings, it will be discovered that the commissions, in determining a reasonable rate of return, have taken into consideration the interest rate which should be allowed in order that bonds may be sold to net par to the company and have considered bond discounts as an interest rate in another form.

AMORTIZATION OF DISCOUNT

Bond discount amortization requirements have one of two ends in view:

- (1) The paying off and retirement of the sum of the discount, or
- (2) The annual reinvestment of earnings in the property to the total amount of the discount.

The first is based on the theory that only the realization, viz., \$76,500, has been borrowed, and that the discount, viz., \$8,500, is interest, to be paid in one sum at maturity. The second is based on the theory that the entire sum, viz., \$85,000, has been borrowed, but property only to the amount of the realization has been secured therefor, property to the amount of the discount to be added year by year by the amortization payment. In the former case, the proceeds of the amortization payments are held in cash against the maturity of the bonds; in the latter case they are invested in property which is not charged to capital account, since it was capitalized in advance when the bonds were issued and the money borrowed. The Indiana and Illinois commissions, among others, hold to the former theory, and the New Hampshire commission holds to the latter theory. (*Re Hampton Water Works Company*, New Hampshire, P. U. R. 1918 C 171.)

A variation from the first form of amortization is permitted by the Illinois commission. (*Re Tyrone Electric Company*, Illi-

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nois, P. U. R. 1916 E 708.) Instead of making equal annual payments into the bond discount amortization fund, the utility is permitted, if the commission finds it proper, to make only one payment, which is equal to the total discount. This is done by charging the discount to profit and loss when the bonds are issued, and thus withholding it from net income applicable to dividends.

This is not objectionable, for it secures the same result. Either method forces the utility to pay the total cost of the money it borrows and prevents it from paying out in the form of dividends the part of such cost that is deferred.

BOND DISCOUNT AT MATURITY

In the case cited above the utility realizes from the sale of bonds \$76,500 and from the sale of stock \$15,000, a total of \$91,500, as compared with a total capital liability and property added to its plant of \$100,000. If not permitted to issue further securities to the amount of the discount, it must provide \$8,500 from reinvested earnings or temporary loans to pay for the property it has purchased. This reinvestment of earnings must not be confused with the amortization payments, which properly are not deductions from earnings at all, but merely a form of annual interest payment during the life of the bonds. Its purpose is to solve the problem created by the difference between the face value of the bonds assumed and the money that was received from their sale. This money must be provided in some way, and to provide it is an immediate problem.

Whether by reinvestment of earnings or by temporary loans, it will be provided, and property thereby will be purchased whose value is equal to the stocks and bonds issued on account of such purchase, although in addition there will be a temporary debt to the amount of the discount or a deduction from earnings that otherwise would be applicable to dividends. Since the capitalization and property value will be equal, it will be entirely proper at maturity to refund the entire bond issue on which the discount was incurred, if so desired, and with the amortization fund pay the floating debt assumed on account of the discount. If such floating debt has been repaid from reinvested earnings, it will be proper to transfer the amortization fund to surplus or distribute it in the form of dividends. The alternative would be to use the amortization fund to retire bonds to the amount of the discount, leaving outstanding

the floating debt or forcing the stockholders to leave their earnings permanently in the property.

In other words, the utility has paid for the property, including property to the amount of the discount, and has also accumulated an amortization fund equal to the discount. To pay for such property it has incurred floating debt. This debt either is still outstanding or has been retired by the stockholders; foregoing dividends which they have earned and to which they are entitled.

It goes without saying that if the utility retired bonds to the amount of the discount, it would be entitled to fund in bonds capital expenditures to the amount of the discount, which on account of the discount it has been forced to carry by temporary loans or temporarily reinvested earnings. It was not entitled to do so while the other bonds were outstanding, but the moment they are retired no reason longer exists for refusal to grant such authority.

From the point of view of the public interest, it is immaterial whether

- (1) Bonds to the amount of the discount are retired, and
- (2) New bonds are issued to the same amount to reimburse the treasury for property paid for by floating debt or foregone dividends, or
- (1) The par value of the old issue is refunded, the value of the property purchased therewith originally being equal thereto, and
- (2) The amortization fund is used to reimburse the treasury for the property paid for by floating debt or foregone dividends.

Either course would produce exactly the same result, the same amount of outstanding securities, the same value of property and the same floating debt. Whichever course is followed, at the maturity of the bonds, after all adjustments have been made, the problem of bond discount has disappeared. The utility is in exactly the same position, except for temporary inconvenience, as if it had issued bonds at an interest rate of 5.93 per cent and sold them at par.

ISSUANCE OF SECURITIES TO COVER DISCOUNT

We now pass to a consideration of whether utilities should be permitted to issue additional securities to the amount of the dis-

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count suffered in the sale of bonds. The cases on this question are about equally divided. In the case of the *Chicago Great Western Railroad Company*, Illinois, P. U. R. 1915 A, 800, a railroad company was authorized to issue bonds to provide for discount on an issue of bonds for refunding capital expenditures. In the case of the *St. Louis and Santa Fe Railroad Company*, Missouri, P. U. R. 1916 F, 49, the Missouri commission made allowance for discount of bonds in authorizing securities in a railroad re-organization. In the case of the *Bronx Gas and Electric Company*, New York 1st District, 2 P. S. C. R. (1st district N. Y.) 178, decided in 1910, the New York commission authorized bonds to cover premiums and commissions on bonds previously authorized, but required the expense to be amortized.

On the other hand, in the case of the *San Diego Consolidated Gas and Electric Company*, California, 2 Cal. R. C. R. 264, cited in P. U. R. 1917 D, 853, decided in 1913, the California commission makes a very convincing argument to the effect that debenture bonds cannot be authorized to cover discount on bonds. In the case of the *Westbrook Gas Company*, Maine, P. U. R. 1915, B, 358, the Maine commission refused to consider discounts and commissions on previous capital issued in authorizing issues under a mortgage providing for an issue of bonds to the extent of 90 per cent of the cost of extensions. In the case of the *Joplin and Pittsburg Railway Company*, Missouri, P. U. R. 1919 B, 388, the Missouri commission said:

This item has been excluded by this commission in all cases, and has practically ceased to be considered a proper item for capitalization, even by companies seeking a valuation of property.

In the case of the *Indiana General Service Company*, Indiana No. 3351, decided January 12, 1918, the Indiana commission refused authority to fund bond discount in bonds, upon the theory that this indebtedness should not be capitalized but should be extinguished by an amortization account provided for that purpose.

In the case of the *Muncie Electric Light Company*, Indiana No. 1556, decided May 26, 1916, the Indiana commission denied this company, which was the predecessor of the Indiana General Service Company, authority to fund bond discount in preferred stock, even though the discount was being amortized from earn-

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ings and the proceeds were being invested in additions and betterments to the plant. The commission said:

The commission is of the opinion that said company should not be given authority to sell its preferred stock to cover said bond discount. The proceeds arising from said amortization account should be applied in extinguishing the remainder of said loan, to wit, \$106,351.25, and not in making additions and betterments. The proper application of an amortization account is to the extinguishment of a debt and not to the creation of betterments and additions.

In the case of the *Merchants Heat and Light Company*, No. 4732, September 23, 1919, the Indiana commission refused the company authority to fund bond discount in common stock. The commission said:

The commission has refused to authorize securities to cover bond discount, or to allow for bond discount in valuing utility property (citing cases), and has taken the position that bond discount is a form of interest, and is not properly chargeable to capital account or operating expenses (citing cases). Instead it requires that bond discount be amortized during the life of the bonds, and that the annual amortization charges be deducted from income.

In its last case involving this question, No. 4938, March 31, 1920, the Indiana commission reiterated its position, and denied the United Public Service Company of Rochester authority to issue \$62,500 of bonds to refund \$50,000 of bonds maturing. The commission said:

The commission cannot approve the issuance of \$62,500 of bonds to refund \$50,000 of bonds now maturing. In similar cases it has consistently held that refunding issues should be of the same total par value as the bonds refunded. To adopt the position which petitioner asks the commission to assume would result in increasing the mortgage indebtedness of utilities each time a refunding is negotiated. Where the total outstanding bonds approach or equal the value of the property, such a course would be doubly unwise. It would soon make the total of the mortgage indebtedness greater than the value of the property mortgaged. Bonds issued under such circumstances would be of questionable value.

In the last analysis this is a petition to issue bonds to cover bond discount. It proposes permanently to capitalize petitioner's lack of credit and the high interest rate it is forced to pay. The commission has consistently refused to authorize the issuance of any kind of securities to cover bond discount (citing cases). Bond discount is a form of interest and should not appear in the capitalization of a utility. The purpose of amortizing the discount is to put it on an annual basis like other forms of interest.

One more class of cases remains to be considered: where issuance of securities to cover bond discount, while regarded as undesirable as a general practice, was permitted in case of financial emergency. In the case of the *New York and Richmond Gas*

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Company, New York 1st District, P. U. R. 1918 F, 449, the commission said:

Upon the facts of the present case, I have no doubt that the provisions of the public service commission law permit the commission in its sound discretion to authorize an issue of bonds for purposes ordinarily chargeable to operating expenses or to income. The appellate division in the *Dry Dock* case (135 N. Y. S. 344) has so indicated. The commission has itself done this a number of times, as, for instance, where, owing to a sale of, say, four per cent bonds at eighty instead of six per cent bonds at par, the issue of a greater amount of bonds is necessary in order to finance the desired amount of proceeds. In such a case the additional amount of bonds issued to make up discount is charged to income, and is properly regarded to be amortized out of future income during the term of the bonds.

Generally, under normal conditions, it is, of course, preferable that no bonds be sanctioned for purposes chargeable to operating expense or to income, even with a provision for amortization during the period the bonds will be outstanding. War-time conditions may call for a relaxing of that rule and an earnest effort to find a way of meeting the company's situation.

In the case of the *Central Maine Power Company*, Maine, P. U. R. 1918 C, 792, securities were authorized to cover the discount on previous issues of securities, as a special provision where the abnormal condition of business justified the funding of temporary obligations. However, part of these obligations had been amortized, and the amortization requirement was continued, so that at the maturity of the bonds the utility would have funds to the amount of the securities issued to cover the discount.

In the case of the *Tyrone Electric Company*, Illinois P. U. R. 1916 E 700, the utility was allowed to issue bonds, for the purchase of property, to a par value greater than the value of the property purchased. The utility was ordered not to charge the amount of the discount to operating expense or capital account, but to profit and loss or net income. This case is at variance with the general policy of the Illinois commission, and the issue of the bonds was permitted in this case only in order to insure better service.

Turning to the merits of the question, I do not believe that any sound method of financing would permit the issue of bonds to fund discount, except in the most unusual circumstances. The fundamental objection to such an issuance is that a mortgage obligation would thereby be assumed in excess of the value of the property mortgaged. If the existing bonded indebtedness of the utility were already in excess of the value of its property, the issuance of bonds in excess of the property added would bring still nearer the in-

evitable collapse of the utility's credit and foreclosure of the mortgage, with loss to the bond-holders. If the value of the property bonded were substantially equal to or larger than the existing bonded indebtedness, the issuance of such bonds would reduce the margin of safety and finally imperil solvency.

A possible objection to this position is that only the realization has been borrowed and not the face value—in other words, that the face value of the bonds is not the true debt of the utility, for the sum representing discount represents only deferred interest payments on the realization.

If this is true, it may be asked what objection can be raised to the issuance of additional bonds to the amount of the discount. The answer is that the face value of the bonds indicates not only the amount of the debt but the amount to which the property is mortgaged. The amount of the mortgage should not exceed at the outside 85 per cent of the value of the property securing it. This means that the face value of the bonds issued on account of extensions and improvements should not exceed 85 per cent of their value, irrespective of our theory as to how much debt is assumed when bonds are issued at a discount.

The same reasoning applies with equal directness, although not with equal force, to the issue of stock for such purpose. It is true that by such issue no additional mortgage obligations are assumed and the solvency of the company is not endangered. But it is no less true, on the other hand, that securities are issued to a higher face value than the value of the property, and this is bound to result in over-capitalization and its attendant evils.

If securities of any sort to cover bond discount are sold upon the market, they pass into the hands of innocent third parties. If securities of any kind are issued in excess of the value of the property acquired with the proceeds, the result is to make the securities of the company of doubtful value. The fundamental object of security regulation, it seems to me, should be to prevent any further issuance of securities in excess of the value of the property purchased with the proceeds, and to reduce such disparity if possible where it is already in existence. If public utility securities are to be safe investments, and capital is thus to be attracted to the public utility field, there can be no compromise on this principle.

It is true that stocks or bonds could be temporarily issued to

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cover the item of bond discount and be retired at the maturity of the bonds. But unless there are adequate safeguards, the proceeds of such sale might be dissipated, and the objects of security regulation thus be defeated. If such stocks or bonds were authorized temporarily, sound financing would require the raising of a sinking fund to retire at maturity the securities issued to cover discount. If this were required, the issuance of securities to cover bond discount would be of no advantage to the utility, except that it would have the use for a time of money representing the discount, which it would immediately have to begin to pay back serially. It is perfectly clear that the permanent funding of an expense which is not properly a capital charge can not be permitted, and that, though temporary funding might be permitted, it would be of very small advantage, if any, to the utility. Moreover it is much easier to get securities issued than it is to get them retired. Any issue of securities whatever to cover this item is a rather desperate expedient to secure money and displays a dangerous disregard of the future day of reckoning.

The net result of refusing to authorize securities for bond discount is to force the utility either temporarily to reinvest earnings applicable to dividends to such amount or to borrow money to anticipate such reinvestment for a short term. In the case above cited where the utility has sold \$15,000 of stock at par and \$85,000 of bonds at 90 per cent of par, it has realized from the sale of securities only \$91,500 with which to pay for \$100,000 of property. To reinvest immediately earnings of \$8,500 would not be a hardship, for any utility which makes extensions of \$100,000 in one year would have an amount of capital stock in comparison with which \$8,500 would be quite negligible. If, however, the utility desires to postpone part of the reinvestment to another year, it can do so by incurring temporary debt which it can retire from future net income, and the burden of reinvestment will be still easier. To require the re-investment of earnings to the amount of the discount deprives the stockholder of nothing to which he is entitled, for it increases his equity in the property proportionately; moreover at maturity there will be provisions for repaying the amount reinvested, either in the form of surplus or in the form of dividends.

If earnings are too low to permit reinvestment to the amount

of the discount, the condition of the utility is very precarious indeed. Any securities it might issue would be of very doubtful value, and to authorize such securities might reflect seriously upon the commission.

After all, no securities, either stock or bonds, should be issued except to fund capital charges—and bond discount is not a capital charge. Floating debt, however, can properly be increased to reimburse the treasury for operating expenses, operating deficit, discounts, capital charges or any expenses whatever. A temporary matter, such as bond discount, should be financed only by temporary means, not by the issuance of securities which will be a permanent part of the utility's capitalization.

There is a serious question whether under the Indiana law the issuance of securities for bond discount is permissible. Section 90 of the public service commission act, which states the purposes for which securities may be issued, does not include bond discount among them. Section 89 provides that securities may be issued only to an amount "reasonably necessary" for the purposes recognized in section 90. The issuance of securities to fund bond discount is not reasonably necessary for "the acquisition of the property," "the construction completion, extension or improvement of its facilities," or any of the other purposes for which bonds may properly be issued, because there is another easier, safer and more conservative method of securing the funds, viz., reinvestment of earnings or temporary loans not secured by mortgage, to be retired from future reinvested earnings.

From the point of view of the commission, there is an additional advantage in refusing to authorize the issuance of securities to cover bond discount. The commission has had occasion in many cases to question whether the discount at which bonds were being sold was not excessive. There has been tremendous pressure on the commission from time to time to permit an excessive discount. If the commission adopts the policy of requiring the reinvestment of earnings to the amount of the discount, utilities will tend to issue their securities under terms which will make it possible to sell them at or above par, thus removing the question of the treatment of bond discount altogether.

In conclusion, any practice that results in disparity or increases any existing disparity between capitalization and value is incorrect

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and is based upon wrong theories. To issue stock or bonds to fund bond discount would have this result. It is clear that bond discount is a form of interest rather than a capital charge, and differs from other interest only in that it is paid in one sum at maturity instead of annually. The practice of requiring its amortization causes this interest charge to be met annually and prevents the dispersion in dividends of the funds necessary to meet it at maturity. To require temporary reinvestment of earnings or the incurring of temporary floating debt to the amount of the discount is far better both from the standpoint of the utility and of the public than the issuance of securities in any circumstances or with any provisions for retirement.

A sound policy in regard to bond discount therefore contains four elements:

- (1) The issuance of bonds to a par value not greater than 85 per cent of the value of extensions and improvements.
- (2) The issuance of no securities, either stocks or bonds, to pay for such part of the cost of extensions and improvements as cannot be realized by the sale of stock and bonds to the par value of the cost of the property added.
- (3) The building up during the life of the bonds of an amortization fund which will equal the discount at maturity, the annual payments to be deducted from income.
- (4) The use of the amortization fund at maturity for the following purposes:
 - (a) To retire bonds to the amount of the discount, if earnings have not been reinvested in the property to such amount during the life of the bonds, bonds of the original issue only to the amount of the realization being refunded, or
 - (b) To repay to the stockholders either in the form of undistributed surplus or dividends the amount of reinvested earnings, if earnings have been reinvested to the amount of the discount during the life of the bonds, the full par value of the original issue being refunded.