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Bruce M. Louiselle

Jean E. Heilman

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THE CASE FOR THE USE OF AN APPROPRIATE CAPITAL STRUCTURE IN UTILITY RATEMAKING: THE GENERAL RULE VERSUS MINNESOTA

Bruce M. Louiselle† & Jean E. Heilman‡

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I. Introduction

The Review of Minnesota Public Utilities Commission Decisions Regarding Capital Structure Matters, by James W. Brehl and James A. Gallagher, is devoted in large part to a recitation of the major capital structure decisions of the Minnesota Public Utilities Commission over the past ten years. It is not the purpose of this article to reexamine that review. It is assumed that it accurately presents the facts in those decisions. This article is intended as an extension of the Brehl-Gallagher consideration of the capital structure issue.

Inherent in the capital structure issue is the recognition that in a ratemaking proceeding the commission must select the appropri-

[†] Mr. Louiselle is a graduate of the National Law Center of George Washington University and a is member of the Virginia Bar. He has been a consultant in public utility cases for 17 years and is Vice President of Kosh Louiselle Lurito & Associates.

[‡] Ms. Heilman is a graduate of the University of Minnesota Law School and a member of the Minnesota Bar. She is an Assistant Attorney General in Minnesota and specializes in public utility law.

^{1.} Brehl & Gallagher, Review of Minnesota Public Utilities Commission Decisions Regarding Capital Structure Matters, 8 WM. MITCHELL L. REV. 379 (1982).

ate capital structure to use in determining the utility's overall cost of capital. To the extent that the Brehl-Gallagher article engages in any commentary, it typifies the position asserted by utilities in rate proceedings when a capital structure other than the one relied upon by the utility in its filing² is proposed. Simply put, the contention often heard is that the commission must defer to "management discretion" and not substitute its judgment for that of the utility.³ Yet, the Brehl-Gallagher article never suggests that the commission lacks the power or authority to inquire into this issue. The inherent inconsistency in the utilities' position is that while the commission's authority to adopt the "appropriate" capital structure is recognized, it is told it must not exercise that authority.

Before discussing the somewhat conflicting interests of the utilities' investors and the consuming public, it is necessary to articulate the capital structure issue more precisely. Like most other public utility issues, the capital structure issue is multi-faceted. Is the commission required to use only the appropriate capital structure or does it have discretion? Does the company have the burden of proving that its capital structure, actual or proposed, is appropriate or does a party objecting to the actual capital structure bear the burden of proving that the actual capital structure is inappropriate? If the capital structure is inappropriate, who has the burden of providing an appropriate one supported by probative evidence? While this list is not all inclusive, the primary issue discussed in this article is whether the commission has the authority to set rates based on a capital structure that differs from that resulting from and supported by "management discretion." If so, under what conditions may the commission exercise its authority?

This article examines the capital structure issue from five perspectives: (1) the statutory obligations of the commission;⁴ (2) case precedents for the use of hypothetical capital structures;⁵ (3) the burden of proof;⁶ (4) the Minnesota experience;⁷ and (5) the test of reasonableness.⁸ The starting point for analyzing any public util-

^{2.} In its filing, a utility may propose the use of its actual capital structure as reflected on its books and records or it may propose another capital structure that is not a reflection of its actual capitalization.

^{3.} See Brehl & Gallagher, supra note 1, at 410-13.

^{4.} See infra notes 12-20 and accompanying text.

^{5.} See infra notes 21-52 and accompanying text.

^{6.} See infra notes 53-58 and accompanying text.

^{7.} See infra notes 59-82 and accompanying text.

^{8.} See infra notes 83-98 and accompanying text.

ity ratemaking issue is the "just and reasonable" standard mandated not only by statute,⁹ but also by the United States Constitution.¹⁰ The commission is not only empowered to determine just and reasonable rates, it is proscribed from approving any rates that are not just and reasonable.¹¹ Commissions have a duty and an obligation to set rates based on an appropriate capital structure, even if that capital structure differs from the one selected by management.

II. STATUTORY OBLIGATIONS OF THE COMMISSION

The authority and the responsibility of the Minnesota Public Utilities Commission to scrutinize the capital structure of a utility and to adopt the capital structure that it deems the most appropriate stems from the charge to the commission to ensure that rates are "just and reasonable." The District of Columbia Court of Appeals made precisely this finding. "The authority of a public utility commission, like the FCC, to assume hypothetical debt for a company derives from its jurisdiction over rates charged by the company, that they be 'just and reasonable.' "13 To be "just and reasonable," rates must generate revenues sufficient to meet the company's cost of furnishing services and to provide its investors with a "fair and reasonable return" on their investments. 14

The determination of what constitutes "just and reasonable rates" in the context of a fair and reasonable return has been the subject matter of three landmark United States Supreme Court decisions: Permian Basin Area Rate Cases, 15 Federal Power Commission v. Hope Natural Gas Co., 16 and Bluefield Water Works and Improvement Co. v. Public Service Commission. 17 In Permian Basin, the Court stressed the Federal Power Commission's (FPC) duty to balance investor and consumer interests in determining the fair return 18

Accordingly, there can be no constitutional objection if the commission, in its calculation of rates, takes fully into account the various interests which Congress has required it to reconcile. . . . [W]e hold only that any such rates, determined

^{9.} See infra notes 11-12, 14 and accompanying text.

^{10.} See infra notes 15-20 and accompanying text.

^{11.} See MINN. STAT. §§ 216B.03, 237.06 (1982).

^{12.} Id.

^{13.} Communications Satellite Corp. (COMSAT) v. Federal Communications Comm'n, 611 F.2d 883, 903 (D.C. Cir. 1977).

^{14.} MINN. STAT. § 216B.16(6) (1982).

^{15. 390} U.S. 747 (1968).

^{16. 320} U.S. 591 (1944).

^{17. 262} U.S. 679 (1923).

^{18.} The Court stated:

and emphasized the FPC's mandate to protect the broad public interest.¹⁹ The Court's directive to balance investor and consumer interests applies with equal force to the Minnesota commission. Consumers are required to pay just and reasonable rates—no more and no less. Minnesota law specifically provides, "Any doubt as to reasonableness [of rates] should be resolved in favor of the consumer."²⁰ Just and reasonable rates clearly require the use of a just and reasonable capital structure.

III. PRECEDENTS FOR THE USE OF HYPOTHETICAL CAPITAL STRUCTURES

It is a fundamental principle of public utility regulation that regulatory commissions have the responsibility of assuring that the utilities provide reliable service at reasonable cost. Since the cost of capital forms a part of the total cost that a utility must be allowed to recover, and the cost of capital depends among other things on the capital structure, it is incumbent upon the commission to choose the capital structure that produces a reasonable cost of capital. This is not to say that the actual capital structure cannot produce reasonable results; it can. If it can be shown, however, that the actual capital structure (or the one proposed by the company) is imprudent and unreasonable, the commission must reject it and base the fair overall rate of return on a reasonable, albeit hypothetical, capital structure. Indeed, even where the actual capital structure has not been shown to be unreasonable, the courts have found that commissions have the right to use a hypothetical capital structure if it is a more economical one.21

Numerous commissions and reviewing courts have approved the use of hypothetical capital structures in the determination of the

in conformity with the Natural Gas Act, and intended to "balanc[e] . . . the investor and the consumer interests," are constitutionally permissible.

390 U.S. at 770.

^{19.} The Court found that:

The Commission cannot confine its inquiries either to the computation of costs of service or to conjectures about the prospective responses of the capital market; it is instead obliged at each step of its regulatory process to assess the requirements of the broad public interests entrusted to its protection by Congress. Accordingly, the "end result" of the Commission's orders must be measured as much by the success with which they protect those interests as by the effectiveness with which they "maintain . . . credit and . . . attract capital."

Id. at 791 (emphasis added) (footnote omitted).

^{20.} MINN. STAT. § 216B.03 (1982).

^{21.} See infra notes 22-52 and accompanying text.

cost of capital and fair rate of return. Consider first the decisions of reviewing courts.

In Communications Satellite Corp. (COMSAT) v. Federal Communications Commission,²² the court laid out the foundation for the adoption of hypothetical capital structures:

Perhaps the ultimate authority for imputing debt when necessary to protect ratepayers from excessive capital charges is the Supreme Court's statement in *Hope Natural Gas*, that "The ratemaking process under the Act, i.e., the fixing of 'just and reasonable' rates, involves a balancing of the investor and consumer interests." 320 U.S. at 603, 64 S. Ct. at 288. The equity investor's stake is made less secure as the company's debt rises, but the consumer rate-payer's burden is alleviated. It is these conflicting interests that the Commission is to reconcile.²³

The court went on to place the issue of management discretion or prerogative in perspective:

However, it is well settled in public utility law that it is no interference with this management prerogative for a regulatory commission to impute a hypothetical capital structure, whether or not the regulated company increases its debt; for that is done merely in pursuance of the Commission's legitimate rate-making authority.²⁴

Even though COMSAT had not issued any debt securities, the court sustained a hypothetical capital structure of 45% debt and 55% equity to relieve some of the burden on ratepayers due to the "inordinately high cost of capital" resulting from COMSAT's allequity capital structure:²⁵

The FCC cannot be faulted for considering consumer inter-

^{22. 611} F.2d 883 (D.C. Cir. 1977).

^{23.} Id. at 904.

^{24.} Id. at 903. In reaching this conclusion, the court relied upon what it terms "[o]ne of the clearest statements of this principle" by the Supreme Court of New Hampshire. Id. In New England Tel. & Tel. Co. v. State, 98 N.H. 211, 97 A.2d 213 (1953), the court, in sustaining the commission's use of a 45% to 50% debt ratio in the face of an actual debt ratio of 38%, said:

Although the determination of whether bonds or stocks should be issued is for management, the matter of debt ratio is not exclusively within its province. Debt ratio substantially affects the manner and cost of obtaining new capital. It is therefore an important factor in the rate of return and must necessarily be considered by and come within the authority of the body charged by law with the duty of fixing a just and reasonable rate of return. . . . The commission could therefore legally determine a just and reasonable rate of return upon a capital structure different from the actual structure of the company at the time the case was adjudicated.

Id. at 220, 97 A.2d at 220 (citations omitted).

^{25. 611} F.2d at 902-03.

ests in the COMSAT proceeding, and deciding that COMSAT could reasonably have levered its capital structure without debt. In so doing, it not only was true to its statutory obligation, but was also following a practice quite commonplace among public commissions charged with reviewing and setting reasonable rates for service. The practice of imputing a hypothetical amount of debt has been explicitly approved by the public utility commissions or courts of at least twenty-two states and the District of Columbia.²⁶

After its extensive review of the use of hypothetical capital structures, the court concluded that the commission had acted well within its power when it utilized a hypothetical capital structure.²⁷ A close examination of some of the cases cited in *COMSAT* is warranted. Such an examination underscores the duty and authority of the commission to scrutinize capital structures and to adopt hypothetical capital structures when necessary to relieve consumers of excessive cost of capital burdens.

The Supreme Judicial Court of Massachusetts has most directly addressed the problem of when debt may be imputed, and has on some occasions refused to do so.²⁸ The distinction drawn by the Massachusetts court between cases in which hypothetical debt would or would not be imputed was one of degree. Where the company's debt structure was already close to what the regulatory commission was proposing for ratemaking purposes, or soon would be, the court held the commission ought not interfere.²⁹ The deci-

^{26.} Id. at 904. The court also addressed the minority position:

Minnesota and California have expressed some reservation to imputing a hypothetical amount of debt when the regulated company's outstanding debt was "not improper." But the term "improper" could have referred to the perspective of a rate-payer, in which case those courts would not be in disagreement with the others cited.

Id. at 905 (footnotes omitted).

^{27.} The court stated, "Hence, we hold that the Commission acted consistently with settled regulatory law and acted well within its own jurisdiction as the reviewer of rates proposed by COMSAT, when it hypothesized COMSAT's capital structure." *Id.* at 906.

^{28.} See, e.g., Boston Gas Co. v. Department of Pub. Util., 359 Mass. 292, 269 N.E.2d 248 (1971).

^{29.} In New England Tel. & Tel. Co. v. Massachusetts Dep't of Pub. Util., 360 Mass. 443, 275 N.E.2d 493 (1971), the Massachusetts court stated:

It is now clear that in certain circumstances the Department may disregard the actual capital structure of a regulated utility company and attribute to it a hypothetical capital structure for the purpose of rate making. The use of that authority was approved by this court in two earlier cases involving the company. In New England Tel. & Tel. Co. v. Department of Pub. Util., 327 Mass. 81, 89-91, 97 N.E.2d 509, the Department applied a hypothetical debt ratio of 45% instead of the debt ratio of 35% proposed by the Company. We approve the Department's action noting that, in a rate proceeding in which the Company is seeking addi-

sion in New England Telephone & Telegraph Co. v. Massachusetts Department of Public Utilities 30 stands for the simple principle that the propriety of the use of a reasonable fixed charge ratio rather than the actual fixed charge ratio depends on the facts in each case. Indeed, such a conclusion can readily be drawn from Mystic Valley Gas Co. v. Massachusetts Department of Public Utilities, 31 in which the court stated, "[Our decisions] do not permit the D.P.U. to disregard (in fixing rates) existing capital structures of regulated companies unless they so unreasonably and substantially vary from usual practice as to impose an unfair burden on the consumer."32 Here again the court held that the commission has the authority to disregard the actual capital structure if it finds that failure to do so would impose an unfair burden on the consumer.

In Pacific Northwest Bell Telephone Co. v. Washington Utilities and Transportation Commission,³³ the court addressed the question: "Under what circumstances may the commission utilize a hypothetical capital structure?" It responded in part as follows:

Bearing in mind the respective functions of the commission and management and affirming the proposition that management has the right to determine what the debt equity (ratio) should be but that it may not always make the ratepayer foot the bill resulting from its choice, it would appear to this court that the proper rule of law to be set forth in guiding the commission be that the commission may disregard the existing capital structure of a regulated company when it finds from the evidence that the existing capital structure is unreasonable so as to impose an unfair burden on the consumer.³⁴

In *Pacific*, there was only a four percentage point difference between the hypothetical debt ratio found proper by the commission

tional capital, the Department should be allowed to consider debt ratio, which "substantially affects the manner and cost of obtaining new capital" (p. 90). In the second case, New England Tel. & Tel. Co. v. Department of Pub. Util., 331 Mass. 604, the Department again applied a hypothetical debt ratio of 45% instead of the Company's then actual ratio of 36.1%. Again we approved the Department's action, pointing out as in the earlier case, that "debt structure and the percentage of debt and equity capital enter vitally into the determination of the amount which the consuming public should pay" (p. 618).

Id. at 465-66, 275 N.E.2d at 507-08. The actual debt ratio was 40%. The company had plans to move to a 45% debt ratio. The court found no difficulty in approving a 45% debt ratio that was 5% above the actual for the best year.

^{30. 360} Mass. 443, 275 N.E.2d 493 (1971).

^{31. 359} Mass. 420, 269 N.E.2d 233 (1971).

^{32.} Id. at 429, 269 N.E.2d at 239.

^{33. 98} P.U.R.3d 16 (Wash. Super. Ct. 1972).

^{34.} Id. at 26.

and the actual debt ratio proposed by Pacific Northwest Bell.³⁵ Yet, the court upheld the authority of the commission to disregard the actual capital structure.

Consider next the decision of the Louisiana Supreme Court in Southern Bell Telephone & Telegraph Co. v. Louisiana Public Service Commission. 36 The controversy was between use of a 45% debt ratio and the actual debt ratio of 24.7%, a difference of 20%. The language of the court is of considerable significance:

The Company argues that the Commission has invaded the reasonable range of the discretion of the Company's board of directors when it in effect attempts to determine the amount of debt which the utility must incur. This same argument was made when this case was before us in Southern Bell Telephone & Telegraph Co. v. Louisiana Public Service Commission . . . where we rejected the Company's contention. We pointed out that there is no prescribed formula set by the constitution or the legislature for the fixing of "just and reasonable" rates for public utilities and that the Commission therefore is given wide discretion in adopting any reasonable formula as long as that formula results in rates which will enable a utility to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed.³⁷

The court then turned to the hypothetical 45% debt rule with the following observations:

Since the decision of the United States Supreme Court in the case of Federal Power Commission v. Hope Natural Gas Co., supra, the hypothetical 45% debt ratio rule has been almost universally adopted in those states where there is no formula prescribed by constitutional provisions or statutes for the determination of a rate base. In addition to the approval of this formula by us it has been held valid by courts in the states of Massachusetts, New Hampshire, Vermont, Maryland, Mississippi, New Mexico, Idaho, and Pennsylvania. It has likewise been adopted by the commissions in the states of Tennessee, Connecticut, South Dakota, Utah, Texas, Nebraska, Illinois, Alabama, and in the District of Columbia. The philosophy of this formula is based on the proposition that there is a great savings in income taxes through the deduction of interest from earnings where there is a substantial debt ratio and that it is the duty of the utility to pass this savings on to the subscribers. As

^{35.} Id. at 25.

^{36. 239} La. 175, 118 So. 2d 372 (1960).

^{37.} Id. at 199, 118 So. 2d at 381.

pointed out in New England Telephone & Telegraph Co. v. Massachusetts Department of Public Utilities, 331 Mass. 604, 121 N.E.2d 896, 904, 6 P.U.R.3d 65 "* * debt structure and the percentages of debt and equity capital enter vitally into the determination of the amount which the consuming public should pay. A 35% debt ratio might be deemed in the nature of a company luxury not to be reflected in rates to be charged the public."

We see no reason at this time to depart from our decision in Southern Bell Telephone & Telegraph Co. v. Louisiana Public Service Commission, supra, in which we held that it was within the discretion of the Commission to adopt this formula. It is the end result, not the method employed, that is controlling.³⁸

Despite the considerable difference between hypothetical and actual capital structures, the court properly sustained the use of a 20% higher debt ratio.

To the same effect is the decision in Southern Bell Telephone & Telegraph Co. v. Mississippi Public Service Commission.³⁹ In Southern Bell, the actual debt ratio had ranged between about 22% and about 45% and the commission used a hypothetical debt ratio. In sustaining the commission, the court affirmed the right of the commission to adopt a hypothetical capital structure with a 45% to 50% debt ratio based upon the commission's finding that the company's low debt ratio was imprudent, uneconomical, and unfair to telephone subscribers.⁴⁰ The court further recognized the substantial effect that the debt ratio has on the rates paid by ratepayers for interest charges and dividends.⁴¹

^{38.} Id. at 199-203, 118 So. 2d at 381-82.

^{39. 237} Miss. 157, 113 So. 2d 622 (1959).

^{40.} Id. at 242, 113 So. 2d at 656.

^{41.} The court defined the parameters of the commission's review as follows: Although the determination of debt ratio is strictly a matter for management, its evaluation in fixing rates is an item for serious consideration by the rate-making body. Whether bonds or stocks are issued has a profound effect upon the amount of federal income taxes which the Company is required to pay. Debt ratio substantially affects the amount to be collected from the ratepayers for interest charges and dividends on the common stock. It is, therefore, an important factor in the determination of the rate of return and must necessarily be considered by and come within the authority of the body charged by law with the duty of fixing a just and reasonable rate of return.

Id. at 242, 113 So. 2d at 656 (citations omitted). The court concluded:

The Commission's action in disapproving the imprudent debt ratio of the Company, and in adopting a hypothetical debt ratio in the range of 45 per cent to 50 per cent for the purpose of computing the cost of capital and a proper rate of return, was in our opinion neither arbitrary nor unreasonable.

Id. In another case approving the use of a hypothetical debt ratio, the Maryland Court of

In recent decisions, two state supreme courts ruled unequivocally in favor of the use of a hypothetical capital structure. They made it clear that the commissions were not required to find the company's actual structure unreasonable before they could use a hypothetical structure.

In its decision involving the Central Maine Power Company, the Maine Supreme Judicial Court upheld the commission's use of a hypothetical capital structure containing less equity than the company's actual capital structure. 42 The company had indicated that its pro forma capital structure would contain 36.6% equity. The commission decision stated this was "unreasonable and inefficient because it provides an excessive and unnecessary margin of safety which is being financed by ratepayers" and concluded that a 35% equity ratio was appropriate.43 The court upheld this determination, stating in part, "A higher 'debt ratio' means lower rate of return and lower rates to the utility's customers."44 The commission pointed out that the company did not contend that the 35% equity ratio was not safe; nor did it contend that the 36.6% equity ratio was more economical. Rather, the company contended that the capital structure is a "function of management" and that the evidence did not support a finding that 36.6% was an unreasonable equity ratio. In response, the court stated:

The Commission was not required to show that Central Maine Power's pro forma capital structure was unreasonable in any absolute sense, but only in comparison to available alternatives. Where substantial evidence supports the Commission's findings that a lower equity ratio offers greater economy to ratepayers and sufficient safety to investors, it is clearly more reasonable.

It is not a proper "function of management" to choose excessive safety at the cost of higher rates.⁴⁵

Similarly, the Supreme Court of Louisiana, in a decision upholding the commission's use of a hypothetical capital structure

Appeals stated, "The owner and managers of the Company have the right to determine what its debt-equity ratio should be, but they may not always make the rate payers foot the bill resulting from the choice." Chesapeake & Potomac Tel. Co. v. Public Serv. Comm'n, 187 A.2d 475, 484 (Md. 1963).

^{42.} Central Maine Power Co. v. Maine Pub. Util. Comm'n, 405 A.2d 153 (Me.), cert. denied, 447 U.S. 911 (1979).

^{43.} Id. at 179.

^{44.} Id.

^{45.} Id. at 183.

containing less equity capital than either the actual Bell System capital structure or the "objective" capital structure proposed by the company, stated:

If the company's request for the [rate] increase is due, in part, to its capital structure, the company should also bear the burden of justifying the portion of the increase attributable to its management's choice of capital structure.

As this court has also noted, the Commission has a duty to insure that ratepayers are not penalized by management's decision to maintain a low debt ratio.⁴⁶

In addition to the reviewing courts, numerous state regulatory commissions have adopted hypothetical capital structures in determining utilities' cost of capital.⁴⁷ Of particular interest is American Telephone & Telegraph Co., 48 a 1967 decision of the Federal Communications Commission (FCC). This case embraced a general investigation of the rates and revenue requirements of American Telephone & Telegraph Company (AT&T) and the other Bell System operating companies for interstate operations. In the course of the investigation, the Bell System contended that unless the FCC found the Bell System's debt policy imprudent or an abuse of discretion, that policy should not be disturbed.⁴⁹ In response, the FCC stated that the commission was not limited to acting only if it first found abuse, imprudence, or indiscretion by management in the past. Instead, the FCC emphasized that to properly discharge its statutory responsibility to establish and maintain just and reasonable rates, it had to be free to examine fully all matters affecting the future level of rates.⁵⁰ Regulatory commissions in numerous other jurisdictions have also used capital structures different from those actually reported on the companies' books.⁵¹

^{46.} South Cent. Bell Tel. Co. v. Louisiana Pub. Serv. Comm'n, 373 So. 2d 478, 483-84 (La. 1979).

^{47.} See, e.g., Chesapeake & Potomac Tel. Co., 4 P.U.R.4th 1 (D.C. P.S.C. 1974). The District of Columbia Public Utilities Commission correctly found:

Management can be single-minded in the pursuit of safety, particularly if any increased overall capital cost is passed on to the ratepayer. Our responsibility is different. We must balance the greater safety to the company inherent in a higher percentage of common stock against the greater cost to the ratepayers produced by higher returns on equity.

Id. at 35.

^{48. 70} P.U.R.3d 129 (1967).

^{49.} Id. at 163.

^{50.} Id. at 163-64.

^{51.} See Mountain States Tel. & Tel. Co., 13 P.U.R.4th 117, 139-40 (Colo. P.U.C.

In sum, federal and state appellate courts, as well as numerous commissions, have concluded that while management is free to select whatever capital structure it desires, commissions, in seeking just and reasonable rates, cannot and *must not* assess ratepayers the cost of an uneconomical decision. The conclusion reached by these reviewing panels is consistent with their decisions on other issues. For example, management can exercise its discretion to make whatever charitable contributions it desires, yet, commissions routinely assess these costs to stockholders. Similar results are found in the case of advertising and public relations expenditures.

To deny the right of a commission to inquire into the reasonableness of a company's capital structure would be to deny the essence of regulation. Once the assets of the firm have been dedicated to a public utility service, that property "is affected with a public interest and ceases to be *juris privati* only." Given the right to inquire, it is obvious that to require deference to managerial discretion would render the inquiry meaningless.

IV. Burden of Proof of an Appropriate Capital Structure

It has been shown that the commission has a duty to determine and set rates that are just and reasonable. To fulfill this duty, it is an established principle of regulation that the commission must ensure that each element of the costs passed through rates to customers is at a prudent level. Included in those costs is the cost of capital as affected by the capital structure. Just and reasonable rates require the use of an appropriate and prudent capital structure even if it is not the actual one.

^{1975);} Southern New England Tel. Co., 20 P.U.R.3d 34, 42-44 (Conn. P.U.C. 1957); Diamond State Tel. Co., 21 P.U.R.3d 417, 435-36 (Del. P.S.C. 1958); Southern Bell Tel. & Tel. Co., 94 P.U.R.3d 134, 140-41 (Fla. P.S.C. 1972); Southern Bell Tel. & Tel. Co., 96 P.U.R.3d 167, 170-71 (Ga. P.S.C. 1972); Northwestern Bell Tel. Co., 9 P.U.R.4th 281, 284-85 (Iowa C.C. 1975); South Cent. Bell Tel. Co., 96 P.U.R.3d 493, 502 (Ky. P.S.C. 1972); Ex parte South Cent. Bell Tel. Co., 15 P.U.R.4th 87, 122-23 (La. P.S.C. 1976); Chesapeake & Potomac Tel. Co. of Maryland, 10 P.U.R.4th 211, 218 (Md. P.S.C. 1975); Bell Tel. Co. of Nevada, 75 P.U.R.3d 92, 100-01 (Nev. P.S.C. 1968); New York Tel. Co., 12 P.U.R.4th 1, 23-24 (N.Y. P.S.C. 1975); Continental Tel. Co. of the Northwest, Inc., 12 P.U.R.4th 535, 541 (Or. P.U.C. 1976); South Cent. Bell Tel. Co., 95 P.U.R.3d 32, 60-61 (Tenn. P.S.C. 1972); Mountain States Tel. & Tel. Co., 14 P.U.R.3d 230, 236-37 (Wyo. P.S.C. 1956); see also Southern Bell Tel. & Tel. Co. v. Mississippi Pub. Serv. Comm'n, 237 Miss. 157, 242-43, 113 So. 2d 622, 656-57 (1959).

^{52.} Hale, *De Portibus Maris*, in A COLLECTION OF TRACTS RELATIVE TO THE LAW OF ENGLAND 45, 78 (F. Hargrave 1787), quoted with approval in, Munn v. Illinois, 94 U.S. 113, 126-27 (1876).

Those who oppose the use of an appropriate hypothetical capital structure allege, almost without exception, that the use of such a capital structure violates the apparently sacred conclave of the boardroom. The records of rate proceedings where capital structure is an issue disclose that "management discretion" is offered much like an event is offered rebus sic stantibus in a tort case. This reliance on managerial prerogative or discretion, however, is ill-founded and misplaced. Managerial discretion is, at best, evidence of the prudence of the company's actual capital structure, based on the assumption that management acted prudently and wisely. It is neither a presumption of prudence nor a bar to further inquiry or action by the commission. If managerial discretion has a role to play, it is limited to meeting the utility's evidentiary burden and is, at most, evidence of prudence.

Whether the commission should defer to managerial discretion can perhaps be answered with a question: Should the commission defer to management's judgment as to the cost of equity, the level of charitable contributions, the cost of advertising, and other expenses? The answer is obviously no; it should not, indeed it cannot. As the United States Supreme Court stated, the commission "is . . . obliged at each step of its regulatory process to assess the requirements of the broad public interests." Acceptance of assertions supported by nothing more than assumptions cannot constitute an assessment of the broad public interests. Indeed, managerial discretion rises to the level of evidence only because of an assumption that management acts wisely.

It has been shown that management discretion alone cannot meet the burden of proof. What does meet that burden is well established in statute and case law. Any party proposing the use of any capital structure has the burden of proving that it is reasonable and prudent. As the Louisiana Supreme Court noted, "If the Company's request for the (rate) increase is due, in part, to its capital structure, the company should also bear the burden of justifying . . . management's choice of capital structure." It is not the duty of the commission to find that the company's capital structure is unreasonable. 55

Minnesota statutory law also places the burden of proof

^{53.} Permian Basin, 390 U.S. at 791 (emphasis added).

^{54.} South Cent. Bell Tel. Co., 373 So. 2d at 483.

^{55.} See Central Maine Power Co., 405 A.2d at 183.

squarely on the utility.⁵⁶ The proper application of the burden of proof standard was addressed in a review of the Minnesota commission's decision in a recent Northwestern Bell Telephone Company (NWB) case⁵⁷ in which the Ramsey County District Court rejected the company's argument that its only burden was to show good faith, that is, that its operating expenses were prima facie reasonable. Instead, the court found that in applying the burden of proof standard to expense claims:

[I]t appears logical that the burden of proof as to the reasonableness of such expense rests on NWB.

The Company's proposed test however would leave little of the legislatively described burden of proof. This by no means relieves the burden of PUC to proceed only with substantial evidence, but the party seeking a rate change, or the approval of its expenses, has the burden to prove the reasonableness of the claimed expenses.⁵⁸

This finding applies with equal force to the capital structure issue.

It is an established principle of law that the party asserting or denying the existence of facts has the burden of proof as to those facts. Thus, reliance on a conclusion to support a case necessitates carrying the burden of proof on the underlying facts. The utility proposing the use of a particular capital structure in determining its overall rate of return has the burden of proving the reasonableness of that capital structure.

V. THE MINNESOTA EXPERIENCE WITH CAPITAL STRUCTURES

Thus far, this article has been directed at summarizing the well-reasoned authority and sound principles of public utility ratemaking as applied to the capital structure issue. Yet to be discussed is the law as it exists in Minnesota and has been applied by the Minnesota commission. Over the past ten years, the Minnesota commission has considered the capital structure issue in many cases. At best, the decisions in these cases evidence a search for an appropriate standard. At worst, they evidence an inconsistent and vari-

^{56.} See MINN. STAT. § 216B.16(4) (1982). The statute provides, "The burden of proof to show that the rate change is just and reasonable shall be upon the public utility seeking the change." See also MINN. STAT. § 237.075(4) (1982) (burden shall be on the telephone company).

^{57.} Northwestern Bell Tel. Co. v. Minnesota Pub. Util. Comm'n, File Nos. 446272, 445940 (Minn. 2d Dist. Ct. Sept. 8, 1981).

^{58.} Id. at 7.

able approach to this problem. The commission has vacillated on what is the actual capital structure for a wholly-owned subsidiary: consolidated versus double-leveraged.⁵⁹ The commission has also vacillated on the conditions under which a hypothetical capital structure can be used⁶⁰ and on the issue of who bears the burden of proof.⁶¹

In a 1972 proceeding,⁶² the commission relied on the company's actual capital structure. In an appeal by the state, the Minnesota Supreme Court eschewed the use of a capital structure other than the actual one. The Minnesota Supreme Court, in its only review of a capital structure, adopted the minority position that the commission cannot "collaterally attack the judgment of the company in maintaining its embedded debt at a low figure. . . . This is a discretionary matter of management." Of particular note was the impact of the capital structure on the fair value of the property and not its impact on the cost of capital. In the next NWB proceeding, no specific capital structure was adopted by the commission. Following the 1974 NWB case, the commission began using a double-leverage capital structure for wholly-owned subsidiaries.

^{59.} It should be noted that the issue of whether a double leverage capital structure should be used is beyond the scope of this article. A double leverage capital structure is not a hypothetical capital structure. Rather, it is a more accurate reflection of the capital structure—debt, preferred, and equity—actually used to finance the assets of a whollyowned subsidiary than is the nominal capital structure that happens to appear on a subsidiary's books. The issue of whether to double leverage is therefore a question of what is the actual capital structure under such circumstances. In 1978, the commission discontinued using a double leveraged capital structure for NWB and adopted one based on consolidated actual data. See Northwestern Bell Tel. Co., Docket No. P-421/GR-77-1509 (Minn. P.S.C. Nov. 22, 1978). The use of the Bell System actual capital structure by the commission has continued to the present unabated. See Northwestern Bell Tel. Co., Docket No. P-421/GR-79-388 (Minn. P.U.C. Apr. 4, 1980); Northwestern Bell Tel. Co., Docket No. P-421/GR-80-911 (Minn. P.U.C. Dec. 29, 1981).

^{60.} See infra notes 62-82 and accompanying text.

^{61.} Id.

^{62.} Northwestern Bell Tel. Co., Docket No. 0238-TE (Minn. P.S.C. July 25, 1972).

^{63.} Northwestern Bell Tel. Co. v. State, 299 Minn. 1, 14, 216 N.W.2d 841, 850 (1974).

^{64.} See Northwestern Bell Tel. Co., Docket No. M-5405 (Minn. P.S.C. Nov. 22, 1974). In that NWB case, the commission found a fair overall rate of return without findings on the appropriate capital structure. It did, however, use an equity ratio for determining the fair value of the rate base. At that time NWB was regulated on the basis of a fair value rate base. That was changed subsequently by statute. See MINN. STAT. § 237.075 (1982).

^{65.} See Northwestern Bell Tel. Co., Docket No. P-421/GR-75-496 (Minn. P.S.C. Oct. 15, 1976); Continental Tel. Co., Docket No. PR-121-1 (Minn. P.S.C. Apr. 16, 1976).

In the 1981 NWB case,66 the commission rejected the use of a hypothetical capital structure, stating in part, "The DPS did not show, however, that the Bell System actual capital structure was unsafe nor that the actual capital structure would result in higher costs of capital to the Bell System than the DPS hypothetical capital structure."67 The obvious must be noted: If a capital structure that contains more debt is safe, a capital structure containing less debt cannot be unsafe. Logic, not evidence, leads to that conclusion. In other words, the issue in the 1981 case and in most capital structure cases is whether the existing capital structure is overly safe and whether there is another capital structure that is not only safe but also more economical. No other commission or court decision could be found that places the burden on a moving party to show that the existing capital structure is unsafe unless that party is proposing a lower debt ratio. The commission's second concern, whether the hypothetical capital structure would result in a higher cost of capital, is a factual matter. While the issue of safety and economy will be discussed subsequently, what is most noteworthy about the commission's 1981 decision is that it placed the burden of proving the appropriateness of a capital structure on the parties opposing the use of the actual one. The commission apparently found that management's de facto actions were sufficient evidence to support the use of the actual capital structure.68

The Minnesota commission has generally adopted the use of actual test year average capital structures for electric and gas utilities. In the 1977 Northern States Power Company (NSP) case, the commission indicated that the issue is one of reasonableness; that the capital structure used cannot be unreasonable.⁶⁹ Two years later, the commission adopted the use of a hypothetical capital structure for NSP.⁷⁰ In the 1979 case, the commission refused to use the actual equity ratio of 41.61% and used 40% in lieu thereof. It must be stressed that in prior cases the commission had noted

Northwestern Bell Tel. Co., Docket No. P-421/GR-80-911 (Minn. P.U.C. Dec. 29, 1981).

^{67.} Id. at 45.

^{68.} With regard to the other telephone companies regulated by the commission, the use of double leverage remains in vogue. See United Tel. Co. of Minnesota, Docket No. P-430/GR-79-644 (Minn. P.U.C. July 28, 1980); Continental Tel. Co., Docket No. P-407/GR-79-500 (Minn. P.U.C. May 9, 1980).

^{69.} Northern States Power Co., Docket No. G-002/GR-76-3627 (Minn. P.S.C. Sept. 19, 1977).

^{70.} Northern States Power Co., Docket No. G-002/GR-78-0152 (Minn. P.S.C. Sept. 21, 1979).

NSP's constantly increasing equity ratio and had warned NSP that 40% was the maximum it would use for ratemaking purposes. The Even more noteworthy is the statement by the commission that an actual debt ratio above 40% would not be used "until it is clearly and convincingly shown that any higher ratio would be reasonable." It would appear that the commission had placed the burden of proof on the proponent. Yet, this requirement turned out not to have universal application.

In North Central Public Service Co., 73 the commission was confronted with a proposal by the Participating Department Staff (PDS) to use a hypothetical capital structure. North Central was a division of Donovan Companies, Inc., a company engaged in both regulated and unregulated operations. North Central proposed that one of two "actual" capital structures be used. 74 One was the Donovan unconsolidated capital structure. The other was an adjusted Donovan capital structure in which the effects of subsidiaries and divisions outside of Minnesota had been removed from the equity component. Both methods produced a 51% debt ratio. The PDS proposed a 40% equity ratio based on an analysis of other retail gas distribution companies. 75

In response to those proposals, the commission faulted the PDS witness: "[H]e has shown no reason why it should be assumed that the average capital structure of this group of companies should be assumed to be a desirable capital structure." The commission stated that, absent a "viable alternative," it believed it must defer to management's discretion even though it had a "strong suspicion that the equity components of the capital structure are unreasonably high." What is interesting about this conclusion is that, when discussing the PDS proposal, the commission was unwilling to defer to the managements of the twelve companies used by the PDS in its analysis and, in fact, required that the witness prove that these capital alternatives were "desirable." Yet, when considering the company's proposal, the only conclusion it offers is that it

^{71.} Id. at 31-32.

^{72.} Id. at 32.

^{73.} Docket No. G-101/GR-77-221 (Minn. P.S.C. Dec. 30, 1977).

^{74.} Id. at 13-14.

^{75.} Id. at 14.

^{76.} Id. at 15-16. The commission noted, "[I]t has grave doubts that either of the two capital structures proposed by the Company are within a range of reasonableness. However, it must accept one of them in this proceeding because [the PDS] has not offered a viable alternative." Id. at 16.

^{77.} Id.

was unreasonable. It made no attempt and did not explain how the use of an unreasonable capital structure would produce rates that are just and reasonable. The commission removed any doubt concerning where it believed the burden of proof lies on the capital structure issue by stating, "Should the Company file a future rate case and propose a similar capital structure, the Commission will expect the PDS to carefully scrutinize this structure and offer an acceptable alternative." 78

North Central is in stark contrast to the NSP cases discussed above in which the commission cautioned the company about moving above a targeted equity rate. A similar factual situation was presented in Peoples Natural Gas Co. 79 Again, the regulated operations were a subsidiary of another corporation, InterNorth, Inc. Peoples proposed using the InterNorth test year average capital structure containing 53% equity.80 The Department of Public Service (DPS) proposed a 45% equity ratio alleging that InterNorth was riskier than a typical gas distribution company and therefore had a higher equity ratio.81 In rejecting the DPS proposal, the commission noted that the DPS had not met its burden since, even if InterNorth were more risky, the DPS "would still have had to show that this excess risk had manifested itself in a common equity ratio which was too high."82

In sum, if there is a consistently applied principle that has emanated from the commission's decisions, it is that the actual capital structure will be used, even if unreasonable, unless some other party provides acceptable evidence to support an alternative. What evidence the commission would find acceptable has not been specified. The only guidance provided is in terms of what evidence is insufficient. For example, the management decisions of a sample of companies are not presumed "desirable." The decisions of the management of the subject company, however, will be given that presumption. Given the lack of guidance from the Minnesota commission, it would be useful to briefly consider the tests that should be applied by a commission in determining whether a capital structure is reasonable.

^{78.} Id.

^{79.} Docket No. G-011/GR-80-850 (Minn. P.U.C. Nov. 25, 1981).

^{80.} Id. at 13.

^{81.} Id. at 13-14.

^{82.} Id. at 14.

VI. THE TEST OF REASONABLENESS OF A CAPITAL STRUCTURE

Before discussing how the commission should test the reasonableness of a capital structure, the issue must be placed in context. In the 1981 Northwestern Bell case,⁸³ the commission adopted many proposed adjustments to operating income. Among these were the following (the impact on needed revenues is shown in parentheses):

- In-Kind Charitable Contributions (\$65,000)84
- Lobbying Expenses (\$41,000)⁸⁵
- Antitrust Legal Fees (\$514,000)86
- Insurance Refunds (\$110,000)87

The appropriate capital structure was also at issue in that case. The DPS proposed an appropriate (hypothetical) capital structure. The company proposed, and the commission accepted, the average test year *actual* Bell System capital structure.⁸⁸ The rate of return approved by the commission was computed as follows:

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Debt 48.0% at 8.91\% = 4.28\%

Preferred 2.6% at 7.83\% = .20\%

Equity 49.4% at 14.70\% = \frac{7.26\%}{11.74\%^{89}}
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Had the commission used a capital structure that contained two percentage points more of debt and less of equity, a capital structure midway between the DPS and company proposals, the cost of capital would have been:

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Debt 50.0% at 8.91% = 4.46%
Preferred 2.6% at 7.83% = .20%
Equity 47.4% at 14.7% = 6.97%
Total 11.63%
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This seemingly small change in the cost of capital of .11% translates into a change in added revenues of slightly more than \$5

^{83.} Northwestern Bell Tel. Co., Docket No. P-421/GR-80-911 (Minn. P.U.C. Dec. 29, 1981).

^{84.} Id. at 30. It should be noted that this amount reflects the full revenue requirement impact and includes the effect of the adjustment on related taxes and other expenses.

^{85.} Id. at 32. It should be noted that this amount reflects the full revenue requirement impact and includes the effect of the adjustment on related taxes and other expenses.

^{86.} Id. at 32-33. It should be noted that this amount reflects the full revenue requirement impact and includes the effect of the adjustment on related taxes and other expenses.

^{87.} Id. at 38. It should be noted that this amount reflects the full revenue requirement impact and includes the effect of the adjustment on related taxes and other expenses.

^{88.} Id. at 45.

^{89.} Id. at 56.

million.⁹⁰ This illustrates that even seemingly minor differences of opinion as to the appropriate capital structure necessitate careful scrutiny in the determination of just and reasonable rates. Indeed, in the NWB proceeding, the impact of the capital structure issue on rates was more than ten times larger than any of the expense issues listed above.⁹¹ A comparison of the commission's application of the burden of proof standard to capital structure and to such items as charitable contributions and advertising is most revealing. Clearly, the capital structure issue is very significant in terms of its impact on rates.

In considering how one assesses the reasonableness of a capital structure, one of the more important determinants is risk. It is axiomatic that the capital structure found appropriate must be consistent with the risks inherent in the operations subject to the commission's jurisdiction. The reason for this can be most easily seen with a simple example. Assume a company has two divisions: Division A provides a public utility service in Minnesota and Division B is a wildcat oil well drilling operation elsewhere. It is quite apparent that the prudent capital structure for Division A alone would differ significantly from the prudent separate capital structure of Division B. Prudent management, in exercising its discretion, would select that capital structure for ratemaking purposes which would be the most beneficial to it given the totality of risks it faces as an entity. It is obvious that to base utility rates on the capital structure of the total company would result in the ratepayers being assessed a portion of the costs of Division B's wildcat oil drilling operations. This example presents a rather obvious case for the use of a hypothetical capital structure.

An actual capital structure for a company with only regulated operations, inconsistent with the risk faced by that company, is either uneconomical or unsafe. In either event, it is unreasonable. Just as it is beyond dispute that the allowed cost of equity should reflect the risks of the regulated operations, so too should the capital structure.

Courts and commissions alike have recognized that it is

^{90.} It is recognized that the cost rate of debt was held fixed. Evidence in that proceeding showed that had the Bell System maintained a 52% debt ratio its cost of debt would have been .11% higher. Using such an increment would cause the rate of return to be 11.68% and the revenue differential to be \$4.4 million.

^{91.} See supra notes 84-87 and accompanying text.

appropriate to exclude the effects of unregulated businesses from the revenue requirement determination upon which just and reasonable rates are based. For instance, in *El Paso Natural Gas Co. v. Federal Power Commission*, 92 the court approved the Federal Power Commission's exclusion of the common stock assignable to a nonregulated business from the El Paso Natural Gas capital structure in establishing a fair rate of return on clearly distinct utility operations. It stated:

When the Commission establishes a fair rate of return on the clearly distinct utility operations as a whole, it has acted justly and reasonably both toward the investor who should expect to receive a return based on that known utility investment, and toward the ratepayer whose payments must generate such return. We say no more than that the intent of the Natural Gas Act is to require that the rate of return developed by the Commission be based upon only the capitalization which a regulated company devotes to public service, where non-public segments of such capital can be distinctly identified and surely isolated.⁹³

Similarly, the Virginia Supreme Court of Appeals, in Commonwealth v. Virginia Electric & Power Co., 94 found that:

If rates for jurisdictional customers are fixed upon estimates of total revenues from jurisdictional and nonjurisdictional customers, without regard to jurisdictional rate base, jurisdictional customers may be charged rates disproportionate to the company's cost of serving them. The Commission carries out its function by looking to just and reasonable rates for jurisdictional customers in relation to the cost of serving them, leaving it to the Company to secure a fair return from nonjurisdictional customers.⁹⁵

As these cases clearly demonstrate, the principle that the elements of the cost of providing service, including the capital structure, must be consistent with risk has broad applicability.

In determining whether a capital structure is reasonable and appropriate, the tests of the landmark *Federal Power Commission v. Hope Natural Gas Co.* 96 must be met. In *Hope*, the Court set forth the three tests by which the rate of return was to be measured:

^{92. 449} F.2d 1245 (5th Cir. 1971).

^{93.} Id. at 1250-51 (citations omitted).

^{94. 211} Va. 758, 180 S.E.2d 675 (1971).

^{95.} Id. at 766, 180 S.E.2d at 681-82.

^{96. 320} U.S. 591 (1944).

- 1. The return to the equity owner is to be commensurate with the returns earned on investments in companies of corresponding risks;
- 2. The return should be sufficient to assure confidence in the financial integrity of the company; and
- 3. The return should be sufficient to maintain the company's credit and allow it to attract capital.⁹⁷

These three tests provide three alternative ways to view the rate of return issue, but are essentially one test—if one is met all are met. If the company's stockholders are able to earn a return comparable to the returns available on other investments having corresponding risks, the company will be able to attract additional equity capital. Or, looking at it from the opposite point of view, if a company's stock is attractive to investors, it is because the return available to investors would be commensurate with returns available to them on alternative investments considered to be of corresponding risk. Finally, if the company were able to obtain additional capital and maintain its credit, the return earned would be sufficient to meet the other tests.

Conceptually, the problem in selecting the appropriate capital structure is to identify the balance between debt and equity that is in the best interests of the firm and its customers. The objective is to use a capital structure that is safe from the investors' viewpoint and at the same time economical to the ratepayers. A capital structure containing no debt is certainly the most "safe" for the equity investor. Such a capital structure, however, is clearly more costly to the ratepayers than one containing debt, since debt costs less than equity.

In considering the question of what is an appropriate capital structure for regulatory purposes, the advantage of debt in the capital structure must be recognized. Debt costs less than equity. Not only is debt less costly to obtain, but the interest charges are deductible for income tax purposes and act to reduce federal income taxes. Therefore, the more of this lower cost capital a company has, the less the overall cost of capital should be. This may or may not be the case, however, depending on whether the increase in the debt ratios so increases the cost rates of both debt and equity as to over-balance the benefits of the larger proportion of debt. This is the question of economy.

In addition, there is the overriding question of safety. A com-

^{97.} See id.

pany must be sure that it does not take on so much debt that it cannot cover interest charges during a period of depressed earnings. Of course, ultimate safety is to have no debt at all, but that is unrealistic and uneconomical for a utility. Not only would 100% equity be overly and unnecessarily conservative, but it would preclude the utility from tapping the large source of capital obtainable from the institutions and pension trusts that by law or predisposition put all or a large part of their funds into debt securities.

A balance must be struck between safety on the one hand and economy on the other. Ultimately, however, in determining whether the actual or an appropriate capital structure is reasonable, the key issue is safety because within rather wide limits of capital structure the overall cost of capital goes down as the debt ratio goes up. It is the tests of safety and economy that have been discussed by the courts in analyzing this issue. The *Hope* tests, specifically its second and third tests, are directed at the issue of safety. A capital structure must not contain so much debt that investors lose confidence in the company's financial integrity or prohibit it from maintaining its credit and obtaining the necessary capital.

It is often alleged that the use of a capital structure containing more debt than actually exists could cause a derating in the company's bonds and result in its credit not being maintained. In response, it must be noted that it is generally recognized that there are various grades of bonds, all of which are considered investment grade. For example, Moody's rates bonds in four categories ranging from "AAA" to "Baa," all of which are characterized as investment grade. Very few utilities enjoy the luxury of a "AAA" bond rating. The bonds of most utilities are rated "Baa" or "A." One of two conclusions follows: Either there is a constitutionally guaranteed right to possess a bond rating above "A" or the rates of most utilities' bonds are set in violation of the mandates of Hope. Utilities obviously do not have a constitutionally guaranteed right to a "AA" or "AAA" bond rating. Consequently, whether a capital structure could cause a decline in a company's bond rating is not determinative so long as the bonds remain of investment grade.

As stated previously, the question to resolve is how to balance safety with economy and how to measure each. While it is beyond the scope of this article to discuss in detail the types of analyses that address these tests, it would be worthwhile to set forth certain parameters. A safe capital structure is one that allows the com-

pany to meet its fixed charge obligations, interest and preferred dividends, even under adverse circumstances. What capital structure will appropriately balance safety and economy depends on various factors, including the embedded costs of debt and preferred stock, the size of financing requirements relative to existing total capital, the indenture-defined limitations on additional borrowing, the nature of the company's business, and the likely fluctuations in the company's earnings. Each of these factors is susceptible of quantitative analysis. While such analyses cannot produce the optimum capital structure, they can answer the question of whether a particular capital structure is safe. Clearly, if a capital structure containing X% debt were determined to be safe, one containing more than X% would be even safer.

The question of economy is less difficult to address. As indicated, within rather broad limits, the cost of capital declines as the debt ratio increases. Some have suggested that a "AA" bond rating will produce a cost of debt which is on average some 33 basis points (.33%) lower than a "A" bond rating. It has also been suggested that a "AA" bond rating would require a pre-tax interest coverage of 3.25 to 5 times for a typical electric company and that an "A" bond rating would require a pre-tax coverage of 2.75 to 3.5 times. The issue of economy could be stated as follows: Is the saving in interest costs worth the additional revenue necessary to generate the higher required coverage?

Assume a hypothetical electric utility that had the following cost of capital:

Debt	50% at 8%	=	4.0%
Preferred	10% at 8%	=	.8%
Equity	40% at 15%	=	6.0%
Total			10.8%

Assume further that this company is a full tax normalizer and therefore incurs federal income taxes at a 46% rate. In that case, its pre-tax earnings rate would be 16.59% [(.8% + 6.0%)/.54 + 4.0%]. Its pre-tax coverage would be 4.15 times (16.59%/4.0%) and would be eligible for a "AA" rating since its coverage was near the midpoint of the required range. This means that for each \$100 of capital (rate base) the company would require \$16.59 to cover return and income taxes.

Now consider such a company were its cost of debt and preferred to increase by .33% and were it to target its capital

structure to achieve an "A" rating. In that case it would be capitalized as follows:

Debt 57% at 8.33% = 4.75% Preferred 10% at 8.33% = .83% Equity 33% at 15.00% = 4.95% Total 10.53%

Its pre-tax earnings rate would be 15.45% [(.83% + 4.9%)/.54 + 4.75]. Its pre-tax coverage would be 3.25 times (15.45%/4.75%) or near the midpoint of that which is required to maintain an "A" bond rating. For each \$100 of capital (rate base) the company would require \$15.45 in revenues.

Now compare the results for the "AA" company to those of the "A" company. First consider interest. The "AA" rated company would save \$.75 for each \$100 of capital. To "save" this \$.75, however, the company's ratepayers would have to provide \$1.14 in additional revenues. In other words, the apparent savings of \$.75 is in fact an additional cost of \$1.14. In this example, it is seen that an "A" bond rating is less expensive, that is, more economical. The question commissions must answer is whether there is some basis on which the additional revenue of \$1.14 per \$100 of capital can be justified. Management discretion is insufficient. Management does not have the right to incur costs above that level which is reasonable and prudent. If it chooses to do so, it is the duty of regulation to ensure that ratepayers are not called upon to bear that increment of costs. As the Court noted in Permian Basin, the commission "is obliged at each step of its regulatory process to assess the requirements of the broad public interests."98 Advertising is such a step in the process, lobbying is such a step in the process, and capital structure is such a step in the process. Leaving the assessment of the broad public interest to management discretion is an abdication of that responsibility.

VII. CONCLUSION

A crucial, but often overlooked, issue in the establishment of just and reasonable rates is the determination of the appropriate capital structure. This issue must not be resolved by simply deferring to the judgment of utility management on what it considers to be an appropriate capital structure. The commission has an obligation and duty to balance the interests of the utility and its consum-

^{98.} Permian Basin, 390 U.S. at 791.

ers by considering the relative safety and economy of the proposed capital structure. If an actual capital structure would burden rate-payers with an excessively high cost of capital, it must be rejected in favor of a hypothetical capital structure. It is time the Minnesota Public Utilities Commission recognize that the burden of proof on the appropriate capital structure rests with the utility, not with proponents of alternative capital structures.