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RATE OF RETURN REGULATORY POLICY -  
THE BANE OF ELECTRIC UTILITIES?

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Abstract

In the past, rate of return regulation served to the advantage of electric utility stockholders. Today this is no longer the case. Furthermore, owners cannot assume that utility management can or will work totally in their behalf. As a result, this paper presents as its main thesis that utility stockholders should band together into advocacy groups to support their right to a fair rate of return.

During the 1950's and much of the 1960's most, if not all, electric utilities, investors in electric utility stocks, and consumers of electricity enjoyed considerable economic and financial benefits. A significant number of electric utilities were considered as growth companies and their common stock was treated as an investment medium with the best of all possible worlds: a low level of risk (a suitable investment for widows and orphans), a competitive yield with a satisfactory return on investment and a substantial potential for capital appreciation. This came about for three reasons:

- (1) economies of scale<sup>1</sup>
- (2) low inflation
- (3) rate of return regulation

The decade of the 1960's was one of change and the electric utility industry did not escape from its impact. The late 1960's saw the first phase of financial problems for many utilities - a phase in which business

was no longer as usual. Change accelerated in 1973-74 with the oil embargo (and the subsequent quadrupling of oil prices), the precipitous increases in the cost of capital, and general uncertainties overall in the stability of the United States economy. Many more utilities were captured by this second phase of financial problems. The balance of the 1970's was a third phase in which capital costs remained high, inflation remained high, fuel costs continued to escalate, and utilities increasingly ran into construction problems for all of the reasons just listed as well as the impact of price elasticity. Loads and energy sales no longer grew at 5-8%, but now were growing, if at all, at only a few percent for most utilities.

Thus, from the mid-1960's to the mid-1970's a reversal took place. Investors began shying away from electric utility common stocks. No longer were they a safe haven with little risk. Indeed, quite the contrary was true.

When the Consolidated Edison company passed, rather than issued, its dividend in early 1974, its stock dropped rapidly from about \$21.50 per share to below \$10.00 per share. The rest of the industry was soon to follow.<sup>2</sup> Thus, electric utility common stock became an investment which could no longer be considered as low risk. Yields, corresponding to the lower prices for stock, increased significantly to be competitive with bond yields.<sup>3</sup> Finally, the prices for common stock have continued in a general decline since the late 1960's; they are currently at historical lows vis-a-vis the past fifteen years with the exception of the 1974-75 period. Today, there are few individuals that would expound on the possibility of electric utility common stocks as an area with a potential capital appreciation. All of this came about for three reasons:

- (1) diseconomies of scale<sup>4</sup>
- (2) high inflation
- (3) rate of return regulation

Regulation can do little, if anything, to alleviate the problems of economies/diseconomies of scale.<sup>5</sup> Regulation can do nothing to alleviate the problems of inflation. Whereas rate of return regulation served, in a sense, as a boon to utility common stock investors up until the late 1960's, it has now perhaps become the bane. A major problem brought forth by rate of return regulation is, most notably, regulatory lag. This, combined with the problems of high interest rates, escalating fuel prices, heavy construction expenditures, and diseconomies of scale has led to the problem of dilution of stockholders' equity. Today the average electric utility stock sells with an average market-to-book-ratio of approximately 75%.<sup>6</sup> Whose problem is this? Unfortunately, it is everyone's - at least it is a problem for those who matter; the utility's consumers and the utility's owners. When a regulatory commission does not allow an adequate rate of return, a utility stock tends to drop in price to correct for this. New stock issues tend to drive the price down further unless an adequate return is allowed. Inadequate return

on stock holders' equity causes stock to sell at below book value and brings about a confiscation of stockholders' equity. In essence, this is a transfer from the owners of the utility to the consumers of the utility. Since the return to the owners is considered a cost in regulatory matters, by holding down return the regulator is holding down the cost to the consumer. If the return is not fair there is a transfer from the owner to the consumer since the consumer is not paying all of the cost. This becomes a problem for the consumer over the long run. Diluted equity positions and inadequate rate of return cause utility financial risk to increase. As a result, financial instruments get downgraded by rating agencies and the cost of new financing goes up. So, sooner or later and one way or the other the consumers pay.

Though there are those who would debate the point, it is this author's belief that regulatory commissions have been lax in their challenge to allow electric utilities to earn a "fair rate of return". Many problems have caused this. Prominent among them are the economic problems previously cited. But there are two additional closely-related aspects. First is the growing influence of consumer groups who allegedly speak for and represent residential customers. An additional problem is the role of the public utility commissioner. Many are elected. As such they hold a political position. But, even where appointed, rather than elected, their position is still very political in nature. This is very simply explained for two reasons. First, and foremost, the majority of the customers of a utility are residential. Thus, a great deal of weight, in terms of numbers, probably tends to influence regulators to lower rates of return. The second problem comes about because of a dichotomy. While utility investments are for the long term utility commissioners usually hold positions for a short term.<sup>7</sup> A decision which could hold costs down in the short run at the expense of the long run could be made to placate the desires of residential customers.

A final problem needs to be briefly addressed. When a public service commission issues a revenue related order it will make a glowing statement that XYZ utility is authorized, based upon its finding of fact and opinion, to an allowed return of A%. However, few utilities will earn A%. Recently, many utilities have been authorized returns to stockholders of 13-15%. However, actual return has only been about 11-12%. In this type of game there's no playing catchup.<sup>8</sup>

What then can be done to alleviate these problems? The balance of this paper will address a recommendation. In order for utility shareholders to insure that their property is not confiscated, that is in order for them to get adequate compensation for their investment through a "fair rate of return", this group needs to get organized. Shareholders should form advocacy groups and become an active party in regulatory matters.<sup>9</sup> In the past, the utility's owners have not been active participants in the regulatory process. Rather, they have left such matters in the hands of utility managers. As will be seen in the balance of this paper it is, in my opinion, time for this to change.

Shareholders Advocacy Group for Regulatory Expediency: SHARE

Until the late 1960's to early 1970's many utilities faced rate decreases as opposed to rate increases. Regulation was simpler then. Stockholders were pleased with their investment and its return. Management of utilities were happy since as they sold more energy, the price to everyone tended to decrease.<sup>10</sup> As a result, there was little interest, in general, in regulatory matters. Rate cases were less sophisticated than today with regulatory commission induced rate decreases (occasionally requested by utilities). Today is a different story indeed. Current rate cases involve many parties and bring about a great deal of interest. From the utility's view point it may look like this:

TABLE 1

<u>Us</u>	<u>Them</u>
o XYZ Utility	o Regulatory Commission
	o Regulatory Commission Staff
	o Attorney General
	o Public Advocate
	o Public Interest Research Group

On many occasions industrial intervenors are parties to a rate proceeding. Generally, their position tends to be sympathetic to the utility's in terms of the utility's requested return on common equity. Their main concern is with cost allocations and rate structures.

Because of the pragmatic push-pull of regulation, a utility may sometimes compromise its desires just to get a rate increase into effect. One of the major areas of compromise is the issue of the allowable return on common equity. Since, in most cases, the actual owners of the utility are not participants in a rate case they have no voice.<sup>11</sup> SHARE would help to alleviate this problem and more evenly distribute the input to a rate proceeding by adding another player to the "US" side of the regulatory game.<sup>12</sup> Shareholder advocacy groups have been formed in several areas of the United States; Table 2 presents a summary of some of these groups. How effective are these organizations? Since they are such a new phenomenon it is hard to judge their overall impact. However, a few examples are known. The original group (to this author's knowledge) was the Stockholders Committee of Utah Power and Light Company. This group was instrumental in a 1976 Utah Power and Light rate case in which the Utah Public Service Commission granted the utility a 16% return on common equity - a decision which was unprecedented for Utah Power and Light and the electric utility industry in general at the time.<sup>13</sup> This group subsequently disbanded and a state-wide utility stockholder group which includes owners of shares of Utah Power and Light, Intermountain Fuel and Rocky Mountain Bell has since been formed. This present group was instrumental in Utah Power and

TABLE 2  
Utility Shareholder Advocacy Groups

<u>Name or Affiliation</u>	<u>Organization: Statewide (S) or Utility Specific (U)</u>	<u>Current Status</u>	<u>Activity Level</u>
Association Concerned for Utility Stockholders Equity (Illinois Power)	U	Disbanded	Active 1 case
Association of Detroit Edison Shareholders (Detroit Edison)	U	Inactive	Unknown
Association of South Carolina E & G Company Investors (South Carolina E & G Company)	U	Active	Unknown
Association of Utility Investors (Ohio)	S	Active	Unknown
California Association of Utility Shareholders (California)	S	Active	Very Active
Louisiana Utility Shareholders (Louisiana)	S	Inactive	Unknown
Madison G & E Company	U	Unknown	Unknown
New York	Unknown	Unknown	Unknown
Oklahoma Natural Gas Company (Oklahoma)	U	Concept Under Study	
Southern Company	U	Being Considered	-
Stockholders Committee of Utah P & L Company (Utah and Idaho)	U	Disbanded	Active 1 case
Utility Shareholders Association of Utah	S	Active	Very Active

Light being authorized a 16.8% return on common equity in a recent case.<sup>14</sup>

In general, the management of a corporation seeks to maximize stockholders' equity, among other corporate goals. In the regulatory climate this converts to a goal of attaining the authorized rate of return allowable by a public service commission. However, a public utility is also charged with a responsibility, usually referred to as a public service commitment or obligation, to provide service at the lowest possible cost given a certain level of reliability. Because of this bifurcated responsibility and in view of the problems portrayed at the beginning of this paper, utility shareholders have simply not been treated fairly. Lucien Smartt, Editor of Public Utilities Fortnightly, in an editorial entitled, "A Problem in Equity and a Proposed Solution" stated that:<sup>15</sup>

"Of the sixty-six electric utility stock offerings nationwide in 1979...all but six were sold below book value and all sales to date in 1980 have involved dilution. None of the one hundred largest investor-owned electric utility companies can presently sell shares without diluting existing shareholders' investment. This situation has not caused utilities to suspend sales of new common stock, however."

Mr. Smartt's statement discusses in detail certain activities of the California Association of Utility Shareholders. Regarding dilution he goes on to state that:<sup>16</sup>

"While this phenomenon is national, the shareholders of the major utilities operating in California have been particularly hard hit. Since 1972, the five largest public utilities in that state have sold over 115 million shares of new common stock. Every single share has been sold below book value. At no time in the last seven years has a California utility sold stock above book value. The 115 million shares were sold at an aggregate of \$850 million below their book value. This means that existing shareholders were forced to give up that amount of their investment in the utilities to entice new

buyers to invest in the companies, which were not earning returns equal to the going market rate."

Have utilities shrugged off their responsibilities to their owners? Recent activity would seem to indicate that this is not the case.

A recent Wall Street Journal article stated that in "this year's first six months, 86 utilities filed for 108 rate hikes totaling \$5.75 billion... By contrast, in all of last year, 61 utilities asked for \$5.74 billion of increases."<sup>17</sup> During April of this year the prime rate hit 20%. Currently the prime is at 13.5%, corporate AAA bonds are 12.34%, and corporate BAA bonds are 14.11%.<sup>18</sup> Yet at the end of the second quarter return on common equity stands as follows for electric utilities:<sup>19</sup>

	ROCE - %		
	High	Low	Composite
Utilities that Normalize	16.2	2.8	10.9
Utilities that Flow Thru	14.5	6.0	11.2

Yet, rate increase requests aside, this data reflects the fact that utility stockholders are not earning an adequate return vis-a-vis the rates on long term debt instruments - especially in view of the fact that utility common stock is the most risky of all financial instruments included in a utility's capital structure.

Thus in this author's view there is only one resort for utility stockholders - form advocacy groups; intervene in rate cases and be an active participant; and if a public service commission does not allow an adequate return, take it to court.<sup>20</sup> The corporation serving in a regulated environment must wear two hats simultaneously - serving its owners and its customers. Because of this and the other economic, financial, and regulatory problems impacting electric utilities, its owner cannot sit idly - they must take action to ensure fair treatment and a fair rate of return.

REFERENCES

1. Here the term economies of scale is used in the dynamic sense; that is, as utilities added to plant in service, increased load, and sold more energy (kWh) total average cost declined - both in real and nominal dollars. This is to be distinguished from economies of scale in the static sense; that is, even today a utility will enjoy static economies in that as the cost of plant is spread over more customers through their increasing consumption, the average cost for that plant decreases over a large range. This is simply due to spreading the capital costs (overhead) to a greater amount of consumption.

2. Consolidated Edison's not issuing its dividend, and its subsequent stock price decline, did not cause the price of the stock of other utilities to plummet. The situation can be viewed as similar to the 1929 stock market crash/depression correspondance; the Con Ed situation was very visible.

3. Based on Value Line data the following are illustrative:

	Average Annual Dividend Yield (%)		
	1973	1974	1979
American Electric Power	7.1	10.3	10.6
Boston Edison	7.7	12.9	11.4
Duke Power	7.0	10.1	9.9
Southern Company	7.5	10.9	11.9
Consumers Power	7.6	13.1	10.7
Kansas Gas & Electric	7.5	10.5	10.8
Arizona Public Service	5.9	9.0	10.0
Southern California Edison	6.8	9.3	10.1

4. For an excellent study regarding economies/diseconomies of scale see: Bruce A. Smith, Technological Innovation in Electric Power Generation 1950-1970, (East Lansing, Michigan: Division of Research, Graduate School of Business Administration, Michigan State University, 1977).

5. In the past few years, there has been a great deal written about the potential benefits of deregulating certain phases or functions of the electric utility industry and opening the door for competition of one sort or another. See: Edward Berlin, Charles J. Cicchetti and William J. Gillen, Perspective on Power, (Cambridge, Massachusetts: Ballinger Publishing Company, 1974) especially Chapters 5 and 6.

Also see: William H. Shaker and Wilbert Steffy, Electric Power Reform: The Alternatives for Michigan (Ann Arbor, Michigan: Industrial Development Division, Institute of Science and Technology, The University of Michigan, 1976) especially Parts 2,3,4 and 6. For similar views, see the recent article by a well respected individual in the financial field: Leonard S. Hyman, "Should Electric Utilities Be Deregulated?", Public Utilities Fortnightly, August 14, 1980, pp. 43-44.

6. For two different views of how to alleviate this problem see: Irwin M. Stelzer, "An Adaptive Strategy for the 1980's" and Leonard S. Hyman, "What's Happening to Electric Utilities" both of which were published in "The Electric Utility Observer's Forum", Public Utilities Fortnightly, June 19, 1980, pp. 101-106 (Stelzer) and pp. 117-118 (Hyman).

7. Larry J. Wallace, Chairman of the Indiana Public Service Commission, recently stated that he finds himself "chairman of a hoary commission..., the members of which have remained in office together for longer than all but a very, very few other states. And how long have we "old timers" served together? Only five years!" See: Larry J. Wallace, "Regulation Then and Now", Public Utilities Fortnightly, June 19, 1980, pp. 88-90. (Included in the Observer's Forum cited in Note 6 above.)

8. For the reader unfamiliar with cost of capital determination or for those needing to brush-up their skills, the following sources may be reviewed. See: Robert Rachlin, Return on Investment (Englewood

- Cliffs, N.J.: Prentice-Hall, Inc., 1976) for a very concise and readable treatise. For a work specifically directed to the regulatory field, see: Russell C. Cherry, "A Survey of the Estimation and Use of Capital Cost in Rate of Return Regulation" in Studies in Electric Utility Regulation, ed. Charles J. Cicchetti and John Jurewitz (Cambridge, Massachusetts: Ballinger Publishing Company, 1975) pp. 217-267. A superb text useful to the theoretician and/or practitioner is: Myron J. Gordon, The Cost of Capital to a Public Utility (East Lansing, Michigan: Division of Research, Graduate School of Business Administration, Michigan State University, 1974.)
9. The idea of stockholder advocacy groups for regulated utilities is not new; however, it is in its infancy. For background information see: "Stockholders Win as Utah Power and Light Gets 16% Equity Return: Move May Spread", Electrical Week, March 8, 1976, p. 3; "Shareholders of California Utilities Trying to Organize Pressure Group", Electrical Week, May 10, 1976, p. 3; "Shareholders Intervention Helped Illinois Power Get Rate-of-Return Hike", Electrical Week, December 3, 1979, p. 2; "What Utility Shareholders are Looking For", Electrical Week, April 15, 1980, p. 2; "Utility Investors Battle Dilution", Business Week, April 21, 1980, p. 136; "A Problem in Equity and a Proposed Solution", Public Utilities Fortnightly, July 17, 1980, pp. 4-5 (Editorial by Lucien E. Smartt in Pages With the Editor).
  10. In general, the price of electricity declined for forty years prior to 1970. The national average price per kWh of electricity for a residential customer declined from approximately 7¢/kWh in 1927 until it reached a price of about 2.1¢/kWh in 1970. In 1979 the average value was about 4.3¢/kWh. Data source - various issues of: Edison Electric Institute: Statistical Year Book of the Electric Utility Industry (New York: Edison Electric Institute).
  11. Much has been said of the difference of the "owners" and the "managers" of a firm. Thus, in a sense, when the utility management compromises on rate of return issues for expediency purposes, they are compromising the position of the owners.
  12. See: Charles J. Cicchetti, "Electricity Price Regulation: Critical Crossroads or New Group Participation Sport", Public Utilities Fortnightly, August 29, 1974, pp. 13-17. Dr. Cicchetti, while a faculty member at the University of Wisconsin, served as expert economic counsel in many rate cases in which he avidly advocated the use of marginal cost pricing by electric utilities. He subsequently served as Chairman of the Wisconsin Public Service Commission and has recently rejoined the academic community at the University of Wisconsin.
  13. See: "Stockholders Win as Utah Power and Light Gets 16% Equity: Move May Spread", Electrical Week, March 8, 1976, p. 3.
  14. See: "Utility Shareholders Association of Utah is Fastest Growing and May Be the Largest", Electrical Week, June 30, 1980, p. 8. In the state of Illinois, the Illinois shareholder group, Association Concerned for Utility Stockholders Equity (ACUSE) was instrumental in that utility's gaining a 13.5% return on common equity, up from the previously allowed 13.0%, in a recent rate case. See: Shareholder Intervention Helped Illinois Power Get Rate-of-Return Hike", Electrical World, December 3, 1979, p. 2.
  15. Lucien Smartt, "A Problem in Equity and a Proposed Solution", Public Utilities Fortnightly, July 17, 1980, p. 4.
  16. Ibid.
  17. John Curley, "Utilities Try to Fend Off Inflation With Repeated Pleas for Rate Boosts", The Wall Street Journal, Thursday, August 29, 1980, p. 21.
  18. U.S. Financial Data, Federal Reserve Bank of St. Louis, Week Ending: October 1, 1980, p. 6.

19. See: "Financing - Special Report - 2nd Quarter Per-Share Earnings Hit by Recession; Flow Throughs Down 7%", Electrical Week, September 8, 1980, pp. 10-14. Data based on an analysis of 111 utilities by Standard and Poor's Compustat Services.
20. For similar points of view see: "Light and Heat - Utilities, Urges an Industry Leader, Should Fight Back", (an interview with Richard Rosenthal, Chief Executive Officer of Citizens Utilities) Baron's, August 18, 1980, p. 4.

#### BIOGRAPHY

Charles David Laderoute is a Senior Consultant and Project Manager in the Rate and Financial Services Department of Chas. T. Main, Inc. - Boston, Massachusetts where he is responsible for all client assignments associated with the Public Utility Regulatory Policies Act of 1978. Previously he was Senior Rate Analyst in the Rate Department of Consumers Power Company - Jackson, Michigan where he was responsible for all Wholesale and FERC related rate activities. While residing in Jackson, he was an adjunct instructor and member of the supplemental faculty of Jackson Community College where he taught a variety of courses in economics and mathematics.

His experience has embraced all areas of regulatory economics for gas, electric, and steam utilities. This includes load research, cost of service, rate design, revenue requirements, financial analysis, rate of return, and preparation of rate filings, exhibits, and testimony presented to state and federal regulatory agencies.

He graduated from the University of Missouri-Rolla in 1971 with a B.S. in Engineering Management, minoring in Mechanical Engineering. From the same institution he received a B.S. in Economics in 1972. He will be granted an M.A. in Economics from Eastern Michigan University in December 1980 where he also completed courses toward an M.B.A. Further, he is currently working toward an M.L.A. at Harvard University.

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