BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's) Tariff to Revise Natural Gas Rate Schedule)

MAR 1 1 195 Service Comr Public hmission Case No. GR-99-315

<u>AFFIDAVI</u>T

STATE OF MISSOURI)) SS. CITY OF ST. LOUIS)

John E. Olson, of lawful age, being first duly sworn, deposes and states:

1. My name is John E. Olson. My business address is Suite 3100, Chase Tower, Houston, Texas 77010; and I am Senior Vice President – Securities Research of Sanders Morris Mundy.

2. Attached hereto and made part hereof for all purposes is my direct testimony, consisting of pages 1 to 20, inclusive; and Schedules 1 to 2, inclusive.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded and the information contained in the attached schedules are true and correct to the best of my knowledge and belief.

John E. Olson

Subscribed and sworn to before me this day of March, 1999.

CARACCERCE CONTRACTOR DENISE DEBORAH CARDOZO NOTARY PUBLIC, STATE OF TEXAS Y COMMISSION EXPIRES JAN. 24, 2000 CARLAN COMMANY

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Exhibit No.: Issue: Witness: Case No.:

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Return on Equity John E. Olson Type of Exhibit: Direct Testimony Sponsoring Party: Laclede Gas Company GR-99-315

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FILED MAR 1 1 1999 Service Commission

LACLEDE GAS COMPANY

GR-99-315

DIRECT TESTIMONY

OF

JOHN E. OLSON



DIRECT TESTIMONY OF JOHN E. OLSON

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	1	Q.	Please state your name and business address.
	2	Α.	My name is John E. Olson, My business address is:
	3		Sanders Morris Mundy, 3100 Chase Tower, Houston, Texas
	4		77002.
	5	Q.	By whom are you employed and in what capacity?
	6	Α.	I am a Senior Vice President-Securities Research, of
	7		Sanders Morris Mundy.
	8	Q.	Please describe Sanders Morris Mundy's business.
	9	Α.	Sanders Morris Mundy is a major private placement and
	10		regional securities firm in Houston, Texas.
)	11	Q.	Please describe your responsibilities at Sanders Morris
	12		Mundy, focusing particularly on your experience with
	13		the public utility industry.
	14	Α.	My primary responsibility at Sanders Morris Mundy is to
	15		analyze natural gas equities and to make
	16		recommendations as to their fundamental outlook and
	17		relative valuations. I am currently covering about 20
	18		natural gas stocks, and have spent my 30 year career
	19		involved with natural gas companies at all levels
	20		having previously been employed by Merrill Lynch as
	21		senior natural gas analyst.
	22	Q.	What is the purpose of your testimony in this
	23		proceeding?
	24	Α.	I have been asked by Laclede Gas Company to provide the
	25		Commission with the investment community's perspective

on what I believe is one of the most critical issues 1 facing both regulators and local distribution companies 2 (LDCs) such as Laclede. This is the compelling need to 3 reexamine and adjust how returns on equity are 4 established for LDCs in light of the capital attraction 5 demands imposed by today's unprecedented financial and 6 operational environment. I hope this perspective will 7 assist the Commission in recognizing why the return on 8 equity analysis presented by Laclede witness McShane in 9 this proceeding, including her use of the Comparable 10 Earnings Method and her straight-forward, 11 mathematically correct adjustment to the Discounted 12 Cash Flow (DCF) Method, represents a crucial, albeit 13 modest, first step in fashioning such returns. I also 14 hope it will engender serious consideration of other 15 alternative methods for meeting this goal, including 16 the indexing proposal which I will discuss later in my 17 testimony. 18

19 Q. Why, in your view, is this reevaluation of ROE20 methods necessary?

A. As any observer of both the stock market and the
regulatory process knows, Corporate America has
restored its profitability to much higher sustainable
levels than those traditionally awarded by regulators
to gas utilities. This has diminished the relative
attraction of utility equities generally, resulting in
chronic underperformance in recent years.

Unfortunately, cost-of-capital models such as the DCF 1 method, as traditionally calculated and applied, have 2 recognized neither competitive investing realities, nor 3 4 the rapidly changing business and increasing financial risk exposures in the open-access world now engulfing 5 the natural gas industry. Their application has 6 7 resulted in a subsidization of ratepayers by 8 stockholders in many jurisdictions. In investing 9 terms, this has had three consequences. First, LDC 10 equities have generally under-performed other 11 equities. Second, LDCs have had to raise their payout 12 ratios in order to deliver enough yield to compensate 13 for the attrition in underlying growth rates, relative 14 profitability and investment quality. Third, both of 15 these factors has led to another unfortunate reality; 16 namely, the fact that investments in LDC equities have 17 become conceptually harder to justify. Why should 18 equity investors buy an 11% Return on Equity (ROE) 19 investment in an industry which is low growth, 20 increasingly risky, yet still regulated, when they can 21 buy an 18%-20% ROE today in Corporate America? This 22 makes no investing sense. Yet, regulatory staffs 23 continue to use the outdated and inappropriate 24 cost-of-capital models, without any effort to adjust or 25 modify them to account for these new realities.

- 1Q.Where would you suggest a public service commission2begin in setting ROEs at levels necessary to attract3capital to natural gas utilities?
- 4 Α. The investing rationale for owning regulated utility 5 equities has been made increasingly more tenuous by: 6 (1) the resurgence in Corporate America profitability; 7 (2) the continuous failure of the regulatory 8 cost-of-capital models, as traditionally applied and 9 calculated, to provide the necessary relief; (3) the 10 continuing under-performance of LDC equities; and, 11 perhaps most importantly, (4) the increasingly 12 competitive environment LDCs must face. There has been 13 little to no relief from declining regulatory ROEs for 14 ten years. Even without considering the changing 15 business environment, falling growth rates, higher 16 payout ratios and/or zero dividend growth are the 17 unfortunate mutations of this process. Something needs 18 to be done to reverse this downward spiral and to 19 provide investment incentives to LDC stockholders. 20 Indeed, the opportunity costs of being invested in a 21 portfolio of LDC stocks over the past five years have 22 been substantial. For example, an investor could have 23 realized the following average annual total returns 24 since year end 1992: (1) 22.3% in the Standard & Poor's 25 500 (Wall Street's proxy for Corporate America); (2) 26 8.2% in the Small LDC sector; (3) 9.1% for Laclede Gas 27 Company. The facts are that an investor would have

1 made about 224% cumulatively on his year end 1992 2 investment in the S&P 500, and only about 53% on his The S&P 500 gave 3 money in the Small LDC sector. 4 positive total returns every year. The LDCs had a down 5 1994 because they are also subjected to interest rate 6 cycles as a result of their higher yields and payout 7 ratios. They also had a poor 1998 owing to 8 noncompetitive profitability. Indeed, a large part of 9 this relative under-performance can be ultimately traced to ratemaking that regularly validates mediocre 10 11 profitability of 11%-12% ROEs or less, while the real 12 world caravan has moved on and settled in the 18%-20% 13 area.

14 But wouldn't utility ROEs more in line with Corporate Q. 15 America break new ground and be too controversial? 16 Α. From a Wall Street point of view, not at all; nor 17 should it be from a larger social context. If Missouri 18 companies (i.e., Corporate America) are making 18% 19 ROEs, Missouri utilities should not be too far behind. 20 While there is perhaps some residual economic argument 21 that utilities still enjoy some natural monopoly and should not earn monopoly returns, these arguments do 22 23 not justify LDC returns that are 600 or 700 basis 24 points lower than those earned by unregulated firms. 25 This is particularly true in light of the degree to 26 which operational, regulatory, and competitive risks 27 have increased for LDCs following wholesale

unbundling. Besides, ROEs more in line with the 1 returns earned by Corporate America, are hardly 2 monopoly returns. Investors do not distinguish much 3 any more between investing in a gas utility, GENERAL 4 ELECTRIC, or CITIGROUP; nor are investors usually too 5 concerned how a company makes its money - just as long 6 as it earns competitive profitability, grows 7 accordingly and keeps its books in order. In the case 8 of regulated LDCs, however, investor perceptions about 9 ROEs have become particularly polarized because of 10 their rigidity and the evident lack of offsetting 11 profit opportunities available, for instance, to 12 pipelines. After watching allowed gas ROEs drop in 13 tandem with interest rates for the past ten years, 14 while Corporate America ROEs have cycled up to the 15 20%-21% level since 1991, equity investors have simply 16 become tired of waiting. They have a wealth of choices 17 in the equity markets, with superior investing 18 credentials, and this is making LDC investing 19 increasingly irrelevant. Something will be needed to 20 counter this unfortunate momentum away from utility 21 22 investing.

23 Q. Please continue.

A. There will never be a satisfactory ROE "solution" to
completely please all parties. However, the status quo
of regulatory cost-of-capital models has become
outdated in the eyes of front-line Wall Street

analysts. Virtually nobody outside of regulatory 1 commissions uses these models to determine mainstream 2 stock market valuations for LDCs or pipelines. 3 The FERC is attempting to flank the issue with incentive 4 ratemaking, a process which no doubt will take years of 5 effort and hundreds of filings. In the interim, 6 open-access and head-to-head competition is emerging on 7 all fronts, providing little incentive for rational 8 investors to own a gas utility. Within this growing 9 vacuum, some fresh thinking and experimentation should 10be urged on all fronts. 11

12 Q. Do you have anything to propose?

Regulators should follow their own logic. Α. Yes. The 13 logic that created the newly competitive marketplace 14 requires reasonably competitive ROEs. Rate cases 15 should reflect this with the filing of Comparable 16 Earnings methodologies so as to see just how much 17 subsidies or economic rents are being given away to the 18 end users by the employment of the old models. Indeed, 19 I believe that ideally Comparable Earnings rate filings 20 should supplant DCF, Risk Premium, and Capital Asset 21 Pricing Model (CAPM) in order to properly reconfigure 22 gas ROEs within a competitive marketplace. 23

Q. How should this Comparable Earnings approach beimplemented?

A. At a minimum, I believe the Commission should adopt the
 recommendation of Laclede witness McShane. Not only

does her recommendation give significant weight to a 1 Comparable Earnings Analysis, but it also relies on a 2 DCF Analysis that has been corrected to eliminate one 3 of its major flaws -- namely, the mixing of apples and 4 oranges which occurs when returns derived from the use 5 of stock market values are applied to the book value of 6 the Company's rate base. Another alternative is to 7 adjust utility ROEs to the business cycle through use 8 of a broad-based ROE index such as The Standard & 9 Poor's 500 Index (S&P 500 Index). Under this approach, 10 returns could be set at 80%-90% of the S&P Index so as 11 to impute a value to any residual LDC natural 12 monopoly. This would allow equity investors to share 13 fairly in both the ups and downs of the economy, as 14 opposed to the slow ROE deflation evident since 1984. 15 It would also recognize that if ROE "ceilings" need to 16 be employed for political reasons, so should there be 17 "floors". 18

Q. What, in your view, are the benefits of such anapproach?

A. Such an approach has a number of particular virtues:
(1) it is easy to implement; (2) it should allow an
untold amount of savings of regulatory time, effort and
money for all parties, not to mention possible years of
litigation in which only the litigators make money;
and, equally important, (3) it can restore a sense of
objectivity to an analytical process that has become

1 largely captive to unverifiable judgments. Why is such 2 an approach easy to implement? A number of states (and ŝ Canada) already reset ROEs based on external indexes, 4 albeit with the wrong connection - namely interest 5 rates. Interest rate indexing, per se, is an 6 anachronism created by a zealous adherence to the Risk 7 Premium model, something which is likely to vanish as 8 investors continue to disinvest in bond-equivalent 9 kinds of regulatory returns. Every rate case, 10 regulators can take a known and measurable benchmark, 11 like the S&P 500 Index (either the latest twelve-month 12 figure, or even a five-year moving average), and then 13 index it and price it right into the overall return 14 calculation. This would solve a lot of controversies by 15 being objective, competitive and largely apolitical. 16 Q. Why is it appropriate to use the S&P 500 Index for this 17 purpose?

18 Wall Street uses the S&P 500 Index and its related Α. 19 database as the basic proxy for Corporate America for 20 The first reason is because the database two reasons. 21 is vast and objective. There is no "cooking of the 22 books". It provides a panorama of American business 23 conditions; and, secondly, because Wall Street 24 portfolio management salaries are almost always tied 25 directly to their success or failure relative to the 26 S&P 500 Index. Thus, there is a very vested interest 27 in finding superior investing credentials (i.e., growth

rates, ROEs and related capital structures, yields and 1 related payout ratios) to compare against the S&P 500 2 Index. Please note that there is no performance tie on 3 the part of equity portfolio managers to any bond 4 market index. Why should there be? It may be a 5 truism, but equity investors invest in stocks and not 6 This fact of life ultimately drives a wooden bonds. 7 stake through the hearts of the Risk Premium and 8 Capital Asset Pricing methods of deriving utility ROEs. 9 Why do you believe these latter methods for determining Q. 10 utility ROEs are so inadequate? 11 The proof is most evident in the substantial and Α. 12 growing disparity between the returns earned in 13 Corporate America and those authorized for utilities. 14

As I stated earlier, Corporate America has restored its 15 profitability, reaching new peaks. All of this is 16 shown in a full blown description of the relevant S&P 17 500 Index data in Schedule 1. The reader should 18 concentrate on several line items: (1) Return on 19 Average Equity (Reported); (2) Leverage; (3) EPS Growth 20 Rates; and (4) Payout Ratios. The Reported ROE data 21 show a 1989-1992 plateau of about 13.2%, before cycling 22 up to 20%-21% levels in 1997-1998. Indeed, even with 23 Wall Street's "top down" expectation that corporate 24 profits may decline 1.7% in 1998, the S&P 500 ROE 25 should still be 19.4% last year and 18.0% this year. 26

1 Balance sheet leverage data is not as current as we 2 would like, but the S&P 500 debt/equity capital 3 structure looks like about 45%-55%. Looking at the S&P 4 400 Industrials capital structures, however, makes more 5 data available. These capital structures have run 6 40%-60% debt/equity consistently throughout the 1990s. 7 In contrast, the gas utility ROE experience in recent 8 years has been far from encouraging. According to 9 Regulatory Research Associates (RRA) data, the American 10 Gas Association and individual commission reports, 11 allowed ROEs have edged sideways to down, staying 12 mostly in the 11%-12% area. In fact, Laclede's current 13 ROE is at the low end of this range. This is evidenced 14 in Schedule 2. In the opinion of most independent Wall 15 Street observers, inadequacies in the models typically 16 employed (DCF, Risk Premium and CAPM) by state 17 commissions to set these returns, such as those 18 identified by Ms. McShane, are responsible for this 19 growing and unsustainable disparity. Indeed, they 20 believe such models are: (1) outdated at best; (2) no 21 longer employed in mainstream investment decision 22 making; and (3) are often abused in both spirit and 23 practice.

Q. Why are these methods unreliable in establishing the
 cost-of-common-equity capital?

A. These methods are deficient on numerous grounds. They
rely largely on academic premises and idealized test

1 tube conditions that all but ignore the everyday 2 valuation efforts of real world practitioners and 3 investors on Wall Street. They almost invariably track 4 interest rates instead of competitive returns on equity 5 in Corporate America. The models give 6 counter-intuitive results in tight money recessions. 7 Worse yet, they have had contrary and offsetting 8 results in business cycle expansions. Each of these 9 models is premised on the "self-imprisonment fallacy," 10 namely that utility investors have no alternatives. 11 They employ risk measures that are not only dim 12 abstractions of financial variance, but some of which 13 have been declared moot even by some of their 14 creators. As one result, investors have begun to see 15 how shortchanged they are by these models. 16 Furthermore, public policies toward natural gas at both 17 state and federal levels have been intended to 18 encourage natural gas usage for both environmental and 19 trade deficit reasons. Beyond the rhetoric, however, 20 there have been no financial incentives to put these 21 policies into practice. Thus, it has become very hard 22 for equity investors to see any satisfactory 23 risk/reward relationship emanating from the use of 24 these models by state PUCs. They simply do not care 25 about methodology. It is the result upon which they 26 make their investment decision. In short, the issue 27 will always come down to this - why (again) should

investors buy a regulated equity with a presumed 11%-12% allowed ROE when they can currently buy 18%-20% ROEs in Corporate America, along with better growth rates, balance sheets and competitive markets? Q. Please elaborate on the deficiencies of the individual models.

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Each model has its own set of shortcomings which, 7 Α. unless addressed through adjustments such as those 8 proposed by Laclede witness McShane, will lead to 9 unrealistic and unreliable ROE results. Their uniform 10 11 and cardinal fallacy is that they are only models. 12 This has caused unending theoretical debates to arise about their practical applicability. It has also meant 13 14 a considerable waste of time and money for ratepayers and investors alike. While no one has any particular 15 difficulty with the academic theory behind these 16 models, the theory does not fit either the changing 17 facts of natural gas company life, nor the everyday 18 19 needs of the investing marketplace. The use of these 20 models generally precludes any hard look at the actual 21 growth and realized profitability of the utility assets in question. Worse, the remarkably close correlation 22 23 between ROE rewards and long-term interest rates also 24 strongly infers that, whatever the model, PUC 25 commissioners tend to treat equity investors like debt 26 investors. The presumption is that if interest rates 27 decline, so should allowed ROEs. Nothing could be

farther from the truth in Corporate America. Please note in Schedule 2 the widening spread between S&P 500 ROEs and the 30-year Treasury Bond yield. As for the models per se, their more egregious shortcomings can be briefly itemized:

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The Discounted Cash Flow Model: wherein the 6 theoretical ROE is equated to the sum of the current 7 dividend yield ("d"), plus the expected long-term 8 earnings growth rate ("G"). This is simply another way 9 of saying that an investor's total return (dividend 10 yield + expected growth) should equal the ROE. If only 11 this were true in practice! A major problem here, as 12 described by Ms. McShane, is the application of an ROE, 13 which is calculated based on market prices, to an 14 original cost, or book value, rate base. This approach 15 is simply mixing apples and oranges and is 16 17 fundamentally flawed. This is especially critical now that utility stocks, like the rest of the market, are 18 trading significantly above book value. 19 The controversy over DCF also arises in the presumed growth 20 rates - whether long-term (i.e., 50 years or more), or 21 two stage (short-term and long-term). There is nothing 22 scientific, known or measurable, about the choice of 23 utility or corporate samples, about the phases of 24 growth or the sources thereof, and there is no 25 distinction between rate base growth and growth from 26 diversification. And the use of "consensus" five-year 27

earnings growth forecasts made by Wall Street analysts 1 (including this one) is particularly objectionable 2 because they typically reflect third party hopes rather 3 than any hard-and-fast corporate action plan. Finally, 4 the DCF model ignores comparable earnings and dividend 5 trends, ROEs and capital structures, yields and payout 6 ratios, or even growth rates available in Corporate 7 America, a classic example of the self-imprisonment 8 fallacy. It is a methodology that simply cannot be 9 solely relied upon to determine a reasonable ROE in 10 today's markets. 11

The Risk Premium Method: wherein utility ROEs 12 are awarded based solely on some perceived equity risk 13 premium over long-term interest rates. The selection 14 of the base interest rate is not the real issue. 15 Whether the 30-year government bond, Moody's "AA" 16 industrials, or "Libor plus" is more representative 17 does not matter to equity investors. The original sin 18 is to make a linkage between interest rates and utility 19 ROEs in the first place. Academics have long contended 20 that there is a "risk-free" interest rate to which an 21 equity Risk Premium should be added to compensate 22 equity investors. The application of this "cost plus" 23 formula to gas utility ROEs has led to warped results 24 in both investing and public policy arenas. The 25 experience of the 1980's was especially germane. 26 Government fiscal and monetary policies in the late 27

1 Carter/early Reagan administrations resulted in 15% 2 "long bonds," not to mention 20% prime rates. This stratospheric rate structure led to utility ROE awards 3 4 in the 14%-16% area by 1984. The higher ROEs raised 5 utility costs-of-service at a time when gas prices were 6 already cyclically high, all of which led to another 7 sharp downturn in gas consumption that did not end 8 until 1987. Interest rates then entered a 10-year 9 decline (August 1983-October 1993) which led to another 10 misapplication of the Risk Premium method. With normal rate case rollover, allowed ROEs were ratcheted down as 11 12 interest rates fell; and, in many instances, the ROE 13 erosion wiped out any rate base growth. Gas investors 14 stared at numerous instances of stagnant earnings and 15 uncomfortably rising payout ratios throughout the LDC 16 industry. But these mediocre results were hatched from 17 premises founded on principles (a risk-free interest 18 rate, for instance), which remain very elusive after 19 all these years. Risk Premium theory retains an 20 academic currency, but it becomes logically dangerous 21 when diluted into making stand-alone, real-world judgments about ROEs. Risk definitions are theoretical 22 23 and etherial. Further to the point, the strong 24 academic presumption that equity investors are really 25 bond investors looking for a premium really doesn't 26 wash in the cold experience of the trading markets. 27 Falling interest rates typically boost corporate

profits and ROEs, and the converse works just as well. Equity investors do not normally buy equities for their bond-like characteristics. They buy them for growth, profitability and yield. Otherwise, they would simply buy a bond outright. The global trading market has given investors a wealth of opportunities; their choice is not merely to buy either a gas utility stock or an electric utility stock.

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The Capital Asset Pricing Model: is another 9 version of the Risk Premium model, dressed up with 10 stock price trading variances in order to give it 11 something more of a market currency. The difficulties 12 here arise from the same slender foundations of the 13 Risk Premium methodology, to which should be added the 14 very debatable applicability of stock price betas as a 15 measure of business or investing risk. Its disuse 16 seems to be growing and I will not over-argue its 17 deficiencies. 18

Q. What adverse results have occurred as a result of thetraditional application of these models?

I mentioned earlier how allowed utility ROEs have been Α. 21 trending down in contrast to rising ROEs in Corporate 22 Schedules 1 and 2 taken together demonstrate America. 23 this situation. Gas utilities have to compete for 24 capital in the open capital markets, but their ROE 25 erosion has offset much of their rate base growth. 26 This has meant that LDCs have had to either raise their 27

1 payout ratios, or else maintain unusually high existing levels. Clearly, there is a limit as to how long this 2 3 can be sustained. The current LDC payout ratio now stands at about 75%. The payout ratio for the Standard 4 5 & Poor's 500 Index is now 40%. The sharply different 6 payout ratios mean much lower retention rates for LDCs, 7 and relatively worse internal growth rates accordingly. 8

9 Q. Shouldn't gas utilities earn lower returns than non-regulated companies because of their lower risk? 10 Α. Equity investors have traditionally recognized some 11 normal tradeoff between lower regulated ROEs and 12 presumed lower utility risks. The arrival of FERC 13 Order No. 636, however, substantially increased 14 commodity price volatility; and straight fixed variable 15 pipeline rates appear to have leveraged LDC operating 16 17 risks higher by a good degree. The continuing 18 deregulation of LDC services is rapidly making the gas 19 utility business very competitive. This increasingly competitive element has not been accounted for by any 20 of the LDC models for ROEs. Indeed, there is no proxy 21 for real business risk in these generic models. 22 23 Attempted quantifications of stock market (or equity) risks ultimately are synthetic assumptions about 24 25 investor returns. This is tantamount to putting the 26 cart before the horse. Equity investors look at 27 fundamental risk (operating and financial) before

anything else. They develop a set of investing 2 credentials that must pass muster, and then they look 3 at some of the market risks partially quantified in the 4 generic utility ROE models. To come full circle, the 5 large body of independent investors looking at lower risk/reward tradeoffs in gas utilities have different 6 risk definitions and different return standards than 7 8 those relatively few people employed in the closed 9 system of ROE "determination" created by use of these 10 models. Corporate America defines the return If regulated companies cannot deliver some 11 standard. reasonably competitive ROEs, they will steadily fall by 12 13 the wayside. It is just that simple.

14 Q. Please summarize your testimony.

15 At a minimum, I recommend that the Commission establish Α. 16 an ROE for Laclede in this proceeding on the basis of 17 the analysis performed by Ms. McShane in her While the 12.75% ROE that results from her 18 testimony. approach is below the level that I believe is required 19 to fully meet the increased capital attraction demands 20 21 imposed by today's financial and operational 22 environment, it clearly moves in the right direction. 23 I believe that this Commission and other state regulatory bodies should also experiment with other 24 methods for determining ROE which, like the S&P 500 25 26 Index approach discussed in my testimony, place an even 27 greater emphasis on the equity returns earned by

comparable, non-regulated entities rather than on interest rates.

 $_{\rm 3}$ $\,$ Q. Does this conclude your testimony?

4 A. Yes.

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Standard & Poor's 500 Earnings Model Investing Credentials March, 1999

S&P 500 Index											Average	Return On
				Reported	%		%	%	%	Book	Book	Average
	<u>High</u>	Low	<u>Average</u>	<u>EPS</u>	<u>Change</u>	DPS	<u>Change</u>	<u>Yield</u>	<u>Payout</u>	<u>Value</u>	<u>Value</u>	<u>Equity</u>
1989	359.80	275.31	317,56	22.87	-3.7%	11.05	13.6%	3.5%	48%	147.26	144.29	15.9%
1990	368.95	295.46	332.21	21.73	-5.0%	12.32	11.5%	3.7%	57%	153.01	150.14	14.5%
1991	417.09	311.49	364.29	16.29	-25.0%	12.20	-1.0%	3.3%	75%	158.85	155.93	10.4%
1992	441.28	394,50	417.89	18.86	15.8%	12,38	1.5%	3.0%	6 6%	149.74	154.30	12.2%
1993	470.94	429.05	450.00	21.85	15.9%	12.70	2.6%	2.8%	58%	149.96	149.85	14.6%
1994	482.23	435.86	459.05	29.92	36.9%	13.18	3.8%	2.9%	44%	158.29	154.13	19.4%
1995	621,69	459.11	540.40	33.60	12.3%	13.79	4.6%	2.6%	41%	174.32	166.31	20.2%
1996	757.03	598.48	677.76	38.73	15.3%	14.90	8.0%	2.2%	38%	181.84	178.08	21.7%
1997	983.12	737.01	860.07	39.72	2.6%	15.50	4.0%	1.8%	39%	190.12	185.98	21.4%
1998E	1049.34	927.69	988.52	39.05	-1.7%	16.20	4.5%	1.6%	41%	212.97	201.55	19.4%
1999E	1279.64	1212.19	1245.92	40.55	3.8%	16.38	1.1%	1.3%	40%	237.14	225.06	18.0%
2000E			1236.00	42.05	3.7%	17.50	6.8%	1.4%	42%	261.69	249.42	16.9%

Schedule 1

S & P 500 and Gas Utility ROEs

	S & P 500 % Average <u>ROE</u>	Gas Utilities <u>Avg. ROE</u>	30 Year <u>Gas Yields</u>	Utilit Basis P Spread	oint vs.
				<u>S&P</u>	<u>Bonds</u>
1989	15.9%	12.9%	8.5%	(302)	443
1990	14.5%	12.7%	8.6%	(183)	406
1991	10.4%	12.5%	8.1%	206	432
1992	12.2%	12.0%	7.7%	(19)	434
1993	14.6%	11.4%	6.6%	(325)	476
1994	19.4%	11.4%	7.4%	(805)	398
1995	20.2%	11.4%	6.9%	(877)	455
1996	21.7%	11.2%	6.7%	(1,051)	449
1997	21.4%	11.3%	6.6%	(1,000)	479
1998E	19.4%	11.3%	5.6%	(810)	570
1999E	18.0%	11.3%	5.3%	(670)	600
2000E	16.9%	11.3%	5.3%	(560)	600

Source: Sanders Morris Mundy Forecasts; S&P Analyst Handbook; FRB Bulletin; Regulatory Research Associates, Inc.

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Schedule 2
