Idaho Public Utilities Commission
Office of the Secretary
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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF IDAHO POWER COMPANY FOR AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR ELECTRIC SERVICE TO ELECTRIC CUSTOMERS IN THE STATE OF IDAHO.	CASE NO. IPC-E-07-8

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

WILLIAM E. AVERA

DIRECT TESTIMONY OF WILLIAM E. AVERA

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I. INTRODUCTION

Q. Please state your name and business address.

A. William E. Avera, 3907 Red River, Austin, Texas, 78751.

Q. In what capacity are you employed?

A. I am the President of FINCAP, Inc., a firm providing financial, economic, and policy consulting services to business and government.

Q. Please describe your educational background and professional experience.

A. A description of my background and qualifications, including a resume containing the details of my experience, is attached as Exhibit 1.

A. Overview

Q. What is the purpose of your testimony in this case?

A. The purpose of my testimony is to present to the Idaho Public Utilities Commission (the "Commission" or "IPUC") my independent evaluation of the fair rate of return on equity ("ROE") for the jurisdictional utility operations of Idaho Power Company ("Idaho Power" or "the Company"). The overall rate of return applied to Idaho Power's 2007 test year rate base is developed in the testimony of Mr. Steve Keen.

Q. Please summarize the basis of your knowledge and conclusions concerning the issues to which you are testifying

in this case.

A. As is common and generally accepted in my field of expertise, I have accessed and used information from a variety of sources. I am familiar with the organization, operations, finances, and operation of Idaho Power from my participation in prior proceedings before the IPUC, the Oregon Public Utility Commission, and the Federal Energy Regulatory Commission ("FERC"). In connection with the present filing, I considered and relied upon corporate disclosures and management discussions, publicly available financial reports and filings, and other published information relating to the Company and its parent, IDACORP, Inc. ("IDACORP"). I also reviewed information relating generally to current capital market conditions and specifically to current investor perceptions, requirements, and expectations for Idaho Power's electric utility operations. These sources, coupled with my experience in the fields of finance and utility regulation, have given me a working knowledge of investors' ROE requirements for Idaho Power as it competes to attract capital, and form the basis of my analyses and conclusions

Q. What is the role of ROE in setting a utility's rates?

A. The rate of return on common equity serves to compensate investors for the use of their capital to finance the plant and equipment necessary to provide utility service.

1 Investors only commit money in anticipation of earning a
2 return on their investment commensurate with that available
3 from other investment alternatives having comparable risks.
4 Consistent with both sound regulatory economics and the
5 standards specified in the *Bluefield*[1] and *Hope*[2] cases, the
6 return on investment allowed a utility should be sufficient
7 to: 1) fairly compensate capital invested in the utility, 2)
8 enable the utility to offer a return adequate to attract new
9 capital on reasonable terms, and 3) maintain the utility's
10 financial integrity.

11 Q. How did you go about developing your conclusions
12 regarding a fair rate of return for Idaho Power?

13 A. I first reviewed the operations and finances of
14 Idaho Power and the general conditions in the utility industry
15 and the economy. With this as a background, I conducted
16 various well-accepted quantitative analyses to estimate the
17 current cost of equity, including alternative applications of
18 the discounted cash flow ("DCF") model and the Capital Asset
19 Pricing Model ("CAPM"), as well as reference to comparable
20 earned rates of return expected for utilities. Based on the
21 cost of equity estimates indicated by my analyses, the
22 Company's ROE was evaluated taking into account the specific

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[1] Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n, 262 U.S. 679 (1923).

[2] *Fed. Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

risks and economic requirements for Idaho Power consistent with preservation of its financial integrity.

B. Summary of Conclusions

Q. What are your findings regarding the fair rate of return on equity for Idaho Power?

A. Based on the results of my analyses and the economic requirements necessary to support continuous access to capital, I recommend that Idaho Power be authorized a fair rate of return on equity in the 11.2 percent to 12.2 percent range. The bases for my conclusion are summarized below:

- Considering investors' expectations for capital markets and the need to support financial integrity and fund crucial capital investment even under adverse circumstances, it is my opinion that an ROE in the 11.2 percent to 12.2 percent range is reasonable for Idaho Power. Specifically, I concluded that:
  - DCF estimates for alternative groups of proxy companies implied a cost of equity range of 10.4 percent to 12.4 percent;
  - A forward-looking application of the CAPM that best reflects the underlying assumptions of this approach resulted in a cost of equity for a proxy group of utilities of 12.8 percent, while applying the CAPM using historical data implied a required return of 11.5 percent;
  - Application of the comparable earnings approach based on expected returns on book equity for utilities implied a cost of equity of 11.0 percent;
  - Considering these results and my assessment of the relative strengths and weaknesses inherent in each method, I concluded that my quantitative analyses implied a cost of equity in the 11.0 percent to 12.0 percent range, or 11.2 percent to 12.2 percent after incorporating an allowance for equity flotation costs;
  - Based on my evaluation, I concluded that this 11.2

percent to 12.2 percent range bounds a reasonable rate of return on common equity for Idaho Power.

Q. What is your conclusion as to the reasonableness of the Company's capital structure?

A. I strongly endorse Idaho Power's requested capital structure, which is consistent with the range of capitalization maintained by the firms in my utility proxy group, especially when considering the impact of off-balance sheet commitments and trends towards lower debt leverage going forward. In addition, Idaho Power's requested capitalization is consistent with the Company's efforts to maintain its credit standing and financial flexibility as it seeks to raise additional capital to fund system investments.

Q. What other evidence did you consider in evaluating your recommendation in this case?

A. My recommendation was reinforced by the following findings:

- Sensitivity to regulatory uncertainties has increased dramatically and investors recognize that constructive regulation is a key ingredient in supporting utility credit standing and financial integrity;
- Because of Idaho Power's reliance on hydroelectric generation, the Company is exposed to relatively greater risks of power cost volatility;
- Investors recognize that Idaho Power's Power Cost Adjustment Mechanism ("PCA") provides some level of support for the Company's financial integrity, but they understand that the PCA does not apply to 100% of power costs; nor does it insulate Idaho Power from the need to finance accrued power production and supply costs or shield the Company from potential regulatory disallowances.

- Idaho Power must compete for investors' capital with other utilities and businesses of comparable risk. If Idaho Power is not provided an opportunity to earn a return that is sufficient to compensate for the underlying risks, investors will be unwilling to supply capital;
- Providing Idaho Power with the opportunity to earn a return that reflects these realities is an essential ingredient to support the Company's financial position, which ultimately benefits customers by ensuring reliable service at lower long-run costs;
- Past challenges confronting the utility industry illustrate the need to ensure that Idaho Power has the ability to respond effectively to unforeseen events.

Ultimately, it is customers and the service area economy that enjoy the rewards that come from ensuring that the utility has the financial wherewithal to take whatever actions are necessary to provide a reliable energy supply.

II. FUNDAMENTAL ANALYSES

Q. What is the purpose of this section?

A. As a predicate to my economic and capital market analyses, this section examines conditions in the utility industry generally, and for Idaho Power specifically, that investors consider in evaluating their required rate of return. An understanding of these fundamental factors, which drive the risks and prospects for Idaho Power, is essential to develop an informed opinion about investor expectations and requirements that form the basis of a fair rate of return on equity.

A. Idaho Power Company

Q. Briefly describe Idaho Power.

A. Idaho Power is a wholly-owned subsidiary of IDACORP, Inc. ("IDACORP") and is principally engaged in providing integrated retail electric utility service in a 24,000 square mile area in southern Idaho and eastern Oregon. During 2006, Idaho Power's energy deliveries totaled 19.8 million megawatt hours ("MWh"). Sales to residential customers comprised 36% of retail sales, with 27% to commercial, 25% to industrial end-users, and 12% attributable to irrigation pumping. Idaho Power also supplies firm wholesale power service to various utilities, municipalities, and large customers under sales contracts. At year-end 2006, Idaho Power had total assets of $3.4 billion, with total revenues amounting to approximately $926 million.

Idaho Power's existing generating units include 17 hydroelectric generating plants located in southern Idaho and eastern Oregon. The electrical output of its hydroelectric plants is dependent on stream flows, which have fallen significantly below normal levels in recent years. Although Idaho Power estimates that hydroelectric generation is capable of supplying 55% of total system requirements under normal conditions, the Company has experienced persistent below-normal water conditions in the past. Fluctuations in the output of the Company's hydroelectric generating facilities

1 due to variable water conditions force Idaho Power to rely
2 more heavily on more costly fossil fuels and wholesale power
3 markets to meet its customers' energy needs. In addition to
4 weather-related fluctuations in water flows, Idaho Power is
5 also exposed to uncertainties regarding water rights, as
6 evidenced by its April 2006 stipulation with the State of
7 Idaho to divert water for aquifer recharge. While water flows
8 exceeded normal levels during 2006, investors nevertheless
9 recognize these uncertainties are an ongoing operational risk
10 associated with Idaho Power.
11 Idaho Power's retail electric operations are subject
12 to the jurisdiction of the IPUC and the Oregon Public Utility
13 Commission, with the interstate jurisdiction regulated by
14 FERC. Additionally, Idaho Power's hydroelectric facilities
15 are subject to licensing under the Federal Power Act, which is
16 administered by FERC, as well as the Oregon Hydroelectric Act.
17 Relicensing is not automatic under federal law, and Idaho
18 Power must demonstrate that it has operated its facilities in
19 the public interest, which includes adequately addressing
20 environmental concerns. The most significant of Idaho Power's
21 relicensing efforts concerns its Hells Canyon Complex ("Hells
22 Canyon"), which represents 68% of the Company's hydro capacity
23 and 40% of its total generating capability.
24 In June 2003, after a prolonged period of planning
25 and consultation with interested parties, Idaho Power

1 submitted a license application for Hells Canyon that included
2 various protection, mitigation, and enhancement measures in
3 order to address environmental concerns while preserving the
4 peak and load following operations of the facilities. The
5 current license for Hells Canyon expired at the end of July
6 2005 and until the new multi-year license is issued, Idaho
7 Power will operate the project under an annual license issued
8 by FERC. Apart from significant ongoing expenditures
9 associated with proposed environmental measures, the
10 relicensing process is complex, protracted, and expensive. As
11 of December 31, 2006, Idaho Power had accumulated $86 million
12 of construction work in progress associated with its Hells
13 Canyon relicensing efforts.

14 Q. How are fluctuations in Idaho Power's operating
15 expenses caused by varying hydro and power market conditions
16 accommodated in its rates?

17 A. Beginning in May 1993, Idaho Power implemented a
18 PCA, under which rates are adjusted annually to reflect
19 changes in variable power production and supply costs. When
20 hydroelectric generation is reduced and power supply costs
21 rise above those included in base rates, the PCA allows Idaho
22 Power to increase rates to recover a portion of its additional
23 costs. Conversely, when increased hydroelectric generation
24 leads to lower power supply costs, rates are reduced.
25 Although the PCA provides for rates to be adjusted annually,

it applies to 90% of the deviation between actual power supply costs and normalized rates.

Q. What credit ratings have been assigned to Idaho Power?

A. Citing concerns over the impacts of a sustained drought, the outcome of Idaho Power's last rate proceeding before the IPUC, and the pressures of ongoing capital requirements, Standard & Poor's Corporation ("S&P") lowered Idaho Power's corporate credit rating from "A-" to "BBB+" in November 2004.[3] Moody's Investors Service ("Moody's) also downgraded the Company's issuer rating from "A3" to "Baa1" based on similar concerns.[4] While Fitch Ratings Ltd. ("Fitch") does not publish a corporate credit rating for Idaho Power, it followed suit and downgraded the Company's senior debt ratings one notch in February 2005.[5] S&P has assigned a "negative" outlook to Idaho Power, warning investors of the potential for further deterioration in the Company's credit standing going forward.

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[3] Standard & Poor's Corporation, "IDACORP and Unit Ratings Lowered, Removed From CreditWatch Negative," *RatingsDirect* (Nov. 29, 2004).

[4] Moody's Investors Service, "Ratings Action: IDACORP, Inc.," *Global Credit Research* (Dec. 3, 2004).

[5] Fitch Ratings Ltd., "Idaho Power Company," *Global Power/North America Credit Analysis* (Feb. 18, 2005).

1 Q. Does Idaho Power anticipate the need to access the
2 capital markets going forward?
3 A. Most definitely. Idaho Power will require capital
4 investment to meet customer growth, provide for necessary
5 maintenance and replacements of its utility infrastructure, as
6 well as fund new investment in electric generation,
7 transmission and distribution facilities. Idaho Power's
8 service area has experienced strong population growth, and the
9 Company's most recent resource plan anticipates the addition
10 of 11,000 to 12,000 new customers annually.[6] In order to keep
11 pace with customer growth, enhance transmission
12 infrastructure, and balance generation resource uncertainty
13 Idaho Power anticipates construction expenditures of
14 approximately $299 million in 2007 and an additional $543
15 million over the period 2008-2009.[7]
16 Over the ten-year planning period, Idaho Power's
17 Integrated Resource Plan has identified the potential need for
18 the Company to obtain 1,063 MW of supply-side capacity, which
19 will entail additional purchased power commitments and
20 financing construction of additional baseload generation, in
21 addition to other system upgrades.[8] Moreover, as indicated
22 earlier, Idaho Power must also bear the costs of protection,

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[6] Idaho Power Company, *2006 Integrated Resource Plan* (Oct. 12, 2006) at 1.
[7] IDACORP, Inc., *2006 Form-10K Report* at 36.
[8] Idaho Power Company, *2006 Integrated Resource Plan* (Oct. 12, 2006) at 95.

1 mitigation, and enhancement measures associated with Hells
2 Canyon relicensing. Considering the unfavorable outlook for
3 the Company's credit standing, support for Idaho Power's
4 financial integrity and flexibility will be instrumental in
5 attracting the capital necessary to fund these projects in an
6 effective manner.

7 **B. Utility Industry**

8 Q. What general conditions have recently characterized
9 the utility industry?

10 A. Over the past decade, the industry has experienced
11 significant structural change resulting from market forces and
12 decontrol initiatives. At least initially, this process was
13 largely driven by regulatory reforms at the federal level.
14 The National Energy Policy Act of 1992 greatly increased
15 prospective competition for the production and sale of power
16 at the wholesale level, with FERC being an aggressive
17 proponent for actions designed to foster greater competition
18 in markets for wholesale power supply.

19 Most market observers agree that, while "open
20 access" to FERC-jurisdictional transmission facilities has
21 resulted in more competition in wholesale energy markets, it
22 has also introduced substantial risks - particularly for
23 utilities (like Idaho Power) that depend on wholesale markets
24 for a portion of their resource requirements.

25 Q. What impact did the Western power crisis have on

1 investors' risk perceptions for firms involved in the electric
2 power industry?
3 A. These events caused investors to rethink their
4 assessment of the relative risks associated with the electric
5 power industry. A well-publicized energy crisis throughout
6 the West wreaked havoc on the customers, utilities, and
7 policymakers. It also had dramatic repercussions for
8 wholesale power markets and investors and utilities
9 nationwide. In many states, restructuring initiatives for the
10 retail sector of the electric industry were cancelled or
11 placed on hold as the financial implications of the Western
12 energy crisis brought the uncertainties associated with
13 today's power markets into sharp focus for the investment
14 community and other stakeholders. While the case of
15 California represents an extreme example, there is ample
16 evidence that investors' risk perceptions for all electric
17 utilities shifted sharply upward in response to these events.
18 Q. Was there a corresponding impact on the industry's
19 credit standing?
20 A. Yes. The years following the Western power crisis
21 witnessed steady erosion in credit quality throughout the
22 utility industry, both as a result of revised perceptions of
23 the risks in the industry and the weakened finances of the
24 utilities themselves. For example, during 2002, S&P recorded
25 182 downgrades in the utility industry, versus only fifteen

1 upgrades,[9] while Moody's downgraded 109 utility issuers and
2 upgraded three.[10] Credit quality continued to decline during
3 2003, with S&P reporting that downgrades outpaced upgrades by
4 more than fifteen to one in the fourth quarter of 2003.[11] S&P
5 reported that the majority of the companies in the utility
6 sector now fall in the triple-B rating category and noted a
7 continued negative bias in the credit outlook.[12]

8 Q. Is the potential for energy market volatility an
9 ongoing concern for investors?

10 A. Most definitely. Investors recognize that the
11 prospect of further turmoil in energy markets cannot be
12 discounted, with S&P reporting continued spikes in wholesale
13 market prices since the Western power crisis.[13] Similarly,
14 Fitch recently noted that "elevated energy commodity prices"
15 contribute to a "challenging environment" for electric
16 utilities.[14] Meanwhile, the FERC Staff has continued to
17 recognize the ongoing potential for market disruption in the
18 West, as a 2005 market assessment report concluded:

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[9] *Id.*

[10] Moody's Investors Service, *Credit Perspectives* (Jul. 14, 2003) at 33.

[11] Standard & Poor's Corporation, "U.S. Utilities' Ratings Decline Continued in 2003, But Pace Slows," *RatingsDirect* (Feb. 2, 2004).

[12] Standard & Poor's Corporation, "Few Rating Actions For U.S. Electric, Gas, And Water Utilities In Third Quarter," *RatingsDirect* (Oct. 25, 2006).

[13] Standard & Poor's Corporation, "Fuel and Purchased Power Cost Recovery In The Wake Of Volatile Gas And Power Markets - U.S. Electric Utilities To Watch," (Mar. 22, 2006).

[14] Fitch Ratings, Ltd., "U.S. Power and Gas 2007 Outlook," *Global Power North American Special Report* (Dec. 15, 2006) at 1.

> Our review of supply and demand conditions in the west this summer indicates that there may be periods of market tightness most likely expressed as price spikes and possible interruptions.[15]

FERC continues to warn of load pockets vulnerable to periods of high peak demand and unplanned outages of generation or transmission capacity,[16] and ongoing reliability concerns led FERC to establish mandatory standards for the bulk power system.[17]

Additionally, in recent years utilities and their customers have also had to contend with dramatic fluctuations in natural gas costs due to ongoing price volatility in the spot markets.[18] S&P concluded that "natural gas prices have proven to be very volatile" and warned of a "turbulent journey" due to the uncertainty associated with future fluctuations in energy costs.[19] Fitch also highlighted the challenges that fluctuations in commodity prices can have for utilities and their investors, observing that:

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[15] Federal Energy Regulatory Commission, Office of Market Oversight and Investigations, "Summer Energy Market Assessment 2005," (May 4, 2005) at 9.

[16] See *Open Commission Meeting Statement of Chairman Joseph T. Kelliher,* Items E-13: Mandatory Reliability Standards for the Bulk-Power System (Docket No. RM06-16-000) (March 15, 2007).

[17] Federal Energy Regulatory Commission, Office of Market Oversight and Investigations, "Summer Energy Market Assessment 2006," (May 18, 2006) at 5.

[18] For example, the Energy Information Administration reported that the average price of gas used by electricity generators (regulated utilities and non-regulated power producers) spiked from an average price of $7.18 per Mcf for the first eight months of 2005 to over $11.00 per Mcf in September and October (http://tonto.eia.doe.gov/dnav/ng/ng_pri_sum_dcu_nus_m.htm).

[19] Standard & Poor's Corporation, "Top Ten Credit Issues Facing U.S. Utilities," *RatingsDirect* (Jan. 29, 2007).

> [H]igher gas prices tend to generate increased bad debt expense, which may not be fully recoverable in rates, and depress consumer demand, particularly industrial and low-margin electric usage. Although residential demand tends to be relatively price-inelastic, high customer bills are politically unpopular and can encourage prudency reviews by regulators. Moreover, lags in gas recovery can drive up working capital borrowings, particularly during peak winter usage.[20]

More recently, Fitch concluded, "Historically high and volatile commodity prices will continue to affect nearly the entire power and gas sector."[21]

In addition, while coal has historically been a relatively stable source of fuel, the potential for price volatility has raised investors' concerns. In an article entitled "Rising Coal Prices May Threaten U.S. Utility Credit Profiles," S&P noted that:

> More recently, several current and structural developments for the coal mining industry have resulted in a dramatic increase in spot coal prices.[22]

At the same time, heightened environmental awareness, particularly over carbon and other emissions, has increased exposure to mandated remediation and other compliance costs and further complicates resource planning for utilities that

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[20] Fitch Ratings, Ltd., "Outlook 2005: U.S. Power & Gas," *Global Power North American Special Report* (Jan. 6, 2005) at 16.

[21] Fitch Ratings, Ltd., "U.S. Power and Gas 2007 Outlook," *Global Power North American Special Report* (Dec. 15, 2006) at 1.

[22] Standard & Poor's Corporation, "Rising Coal Prices May Threaten U.S. Utility Credit Profiles," *RatingsDirect* (Aug. 12, 2004).

must add generating capacity, such as Idaho Power.

Q. Does the PCA remove the risk associated with fluctuations in power supply costs?

A. No. While the PCA provides some level of support for the Company's financial integrity, it does not apply to 100% of power costs. Moreover, even for utilities with permanent energy cost adjustment mechanisms in place, there can be a significant lag between the time the utility actually incurs the expenditure and when it is recovered from ratepayers. This lag can impinge on the utility's financial strength through reduced liquidity and higher borrowings.

Even with an energy cost adjustment mechanism, investors continue to recognize the ongoing potential for regulatory disallowances. As S&P observed:

> [Fuel and purchased power adjustment mechanisms (FPPA)] vary substantially in their ability to protect utilities daily and under catastrophic market movements. Moreover, it is critical to note that FPPAs are not a substitute for supportive regulation; the regulator's ability to disallow costs through ex-post prudency review, regardless of the existence of a FPPA, is a fact of life for utilities.[23]

Similarly, Fitch noted that "because of the lag between when the excess costs are incurred and when they are recovered and the potential disallowances of such costs," substantial

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[23] Standard & Poor's Corporation, *Utilities & Perspectives* (Oct. 18, 2004).

1 uncertainties remain even for utilities with fuel and
2 purchased power cost adjustment mechanisms.[24] Significantly,
3 Fitch specifically highlighted Idaho Power as one of 29
4 utilities having "relatively greater fuel or purchased power
5 exposure within the sector"[25] and cited the "earnings
6 volatility inherent in the utility's hydro generation system"
7 as a primary factor in its decision to downgrade Idaho Power's
8 senior debt ratings.[26]

9 Q. Are there other mechanisms that affect Idaho Power's
10 rates for utility service?

11 A. Yes. Included in the provisions of Idaho Power's
12 PCA is a Load Growth Adjustment Rate ("LGAR"). The LGAR
13 subtracts the cost of serving new Idaho retail customers from
14 the power supply costs that the Company is allowed to include
15 in its PCA. In April 2006, Idaho Power petitioned the IPUC to
16 revise the basis of the LGAR to reflect the embedded cost of
17 serving new load, rather than the marginal cost methodology
18 that had been previously approved. On January 9, 2007, the
19 IPUC issued a final order revising the LGAR, while retaining
20 the marginal cost methodology.

21 In support of its decision to retain the existing

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[24] Fitch Ratings Ltd., "Outlook 2005: U.S. Power & Gas," *Global Power/North America Special Report* (Jan. 6, 2005) at 26.

[25] *Id.* at 27.

[26] Fitch Ratings Ltd., "Idaho Power Company," *Global Power/North America Credit Analysis* (Feb. 18, 2005) at 1.

1 load growth component of the PCA, the IPUC recognized that
2 Idaho Power would continue to be exposed to the risks of
3 shortfalls associated with load growth. The IPUC specifically
4 noted that these uncertainties are properly considered in
5 establishing a fair ROE for Idaho Power:

6 Because this process puts the Company at some
7 business and financial risk, it is awarded a
8 commensurate equity return. Idaho Power's current
9 equity return was set in a process that recognized
10 it would not recover the power supply costs of load
11 growth in the PCA mechanism.[27]

12 Q. What other developments have contributed to
13 investors' reassessment of the risks associated with the
14 electric power industry?
15 A. Policy evolution in the transmission area has been
16 wide reaching and investors' focus on regulatory change in
17 their assessment of risks and prospects was exemplified by
18 S&P's conclusion that:

19 The FERC is in the process of changing every aspect
20 of the electric utility landscape, with industry
21 sages anticipating further transmission and
22 wholesale market development guidance, which could
23 affect the segment's credit prospects and quality. …
24 Uncertainty will exist until operating rules are in
25 place and have stabilized.[28]

26 Transmission operations have become increasingly complex and

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[27] Order No. 30215 at 10.

[28] Standard & Poor's Corporation, "Electric Transmission at the Starting Gate," *RatingsDirect* (May 10, 2002).

1 investors have recognized that difficulties in obtaining
2 permits and uncertainty over the adequacy of allowed rates of
3 return have contributed to heightened risk and fueled concerns
4 regarding the need for additional investment in the
5 transmission sector of the electric power industry.
6 At the same time, the development of competitive
7 wholesale power markets has resulted in increased demand for
8 transmission resources. Concerns regarding the need to
9 encourage further investment in the transmission sector were
10 exemplified by FERC's rulings in Docket No. RM06-4,[29] which
11 established incentive-based rate treatments to promote
12 investment in electric utility infrastructure. While there is
13 little debate that increased investment in the transmission
14 system will be required to fully realize the benefits of
15 effective wholesale power markets, the challenges posed by an
16 increasingly complex marketplace heighten the uncertainties
17 associated with transmission operations while requiring the
18 commitment of significant new capital investment to maintain
19 and enhance service capabilities.

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[29] Promoting Transmission Investment through Pricing Reform, Order No. 679, 116 FERC ¶ 61,057 (July 20, 2006); Order No. 679-A, 117 FERC ¶ 61,327 (Dec. 22, 2006).

1 Q. Are investors likely to consider the impact of
2 market restructuring in assessing their required rate of
3 return for Idaho Power?
4 A. Absolutely. While retail restructuring has not been
5 actively pursued in Idaho, the Company continues to face the
6 prospect of FERC driven changes in the electric transmission
7 function of their business, as well as other fundamental
8 industry reforms. Virtually all industry stakeholders have
9 recognized that regulatory uncertainties increase the risks
10 associated with the utility industry. For example, the DOE
11 identified "reducing regulatory uncertainty" as critical in
12 stimulating increased investment in the power industry and has
13 noted that lack of clarity in the regulatory structure was
14 inhibiting planning and investment.[30]
15 Lack of restructuring legislation in Idaho does not
16 leave industry stakeholders immune from adversity, with market
17 trends and federal policies continuing to impact Idaho Power
18 and its investors. Already, Idaho Power has confronted the
19 uncertainties associated with the establishment of regional
20 transmission management through the numerous regulatory and
21 legal proceedings associated with the formation of Grid West.
22 Moreover, because of potential exposure to wholesale markets,
23 reliance on purchased power to fill potential shortfalls in

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[30] U.S. Department of Energy, *National Transmission Grid Study* (May 2002), at 24 and 31.

generation or meet resource needs magnifies the importance of maintaining the financial flexibility necessary to fund an adequate and reliable utility system. Thus, while restructuring has not been implemented for Idaho Power's service territory, investors undoubtedly consider these factors in assessing the required rate of return on long-term capital, such as common equity.

Q. What other factors would investors likely consider in evaluating the relative investment risks of Idaho Power?

A. Because roughly one-half of Idaho Power's total energy requirements are provided by hydroelectric facilities, the Company is exposed to a level of uncertainty not faced by most utilities. While hydropower confers advantages in terms of fuel cost savings and diversity, reduced hydroelectric generation due to below-average water conditions forces Idaho Power to rely more heavily on purchased power or more costly thermal generating capacity to meet its resource needs.

The prolonged drought conditions experienced in the recent past have only deepened concerns over power prices and fluctuations in gas costs. Investors recognize the significant financial burden associated with constrained hydro generation, as Fitch summarized:

> [T]he duration and severity of the current drought, which stretches back through the energy crisis of 2000-2001, has resulted in meaningful cash flow

1 volatility, balance-sheet erosion and diminished
2 financial flexibility...[31]

3 Investors recognize that volatile energy markets,
4 unpredictable stream flows, and Idaho Power's reliance on
5 wholesale purchases to meet a portion of its resource needs
6 expose the Company to the risk of reduced cash flows and
7 unrecovered power supply costs. The IPUC has recognized "the
8 unique circumstances of Idaho Power's highly variable power
9 supply costs,"[32] and the Company's reliance on purchased power
10 to meet shortfalls in hydroelectric generation magnifies the
11 importance of strengthening financial flexibility. A strong
12 credit profile is essential to guarantee access to the cash
13 resources and interim financing required to meet any shortfall
14 in operating cash flows, as well as fund required investments
15 in the utility system. From the standpoint of the capital
16 markets, the West is risky - and Idaho Power's continued
17 exposure to wholesale electric and natural gas markets in
18 meeting shortfalls in hydroelectric generation and other
19 variations in resources and loads compound these
20 uncertainties.

21 Q. Are these uncertainties the only risks being faced
22 by utilities?

23 A. No. As noted earlier, utilities are confronting

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[31] *Id.*

[32] Order No. 30215 at 9.

increased environmental pressures that could impose significant uncertainties and costs. S&P cited environmental mandates, including emissions, conservation, and renewable resources, as one of the top ten credit issues facing U.S. utilities.[33] Similarly, Moody's noted that "considerable uncertainty" accompanied any assessment of the future requirements associated with environmental compliance.[34] Apart from these factors, the industry continues to face the normal risks inherent in operating electric utility systems, including the potential adverse effects of inflation, interest rate changes, growth, the general economy, and regulatory uncertainty and lag. As a senior analyst for Fitch noted:

> Capital expenditures are on the rise for network reliability, mandated environmental compliance, and resource adequacy. Utilities face rising non-fuel operating and maintenance expenses, particularly for pensions, employee medical expenses, and post-retirement benefits. A trend of declining interest expenses that benefited the sector over the past four years is likely to reverse in the next several years. … In Fitch's view, the sector's credit recovery is now fading, and investors should exercise greater caution regarding the power and gas sector.[35]

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[33] Standard & Poor's Corporation, "Top Ten Credit Issues Facing U.S. Utilities," *RatingsDirect* (Jan. 29, 2007).

[34] Moody's Investors Service, "Regulatory Pressures Increase For U.S. Utilities," *Special Comment* (March 2007).

[35] Lapson, Ellen, "Rising Unit Costs & Credit Quality: Warning Signals," Public Utilities Fortnightly (Feb. 1, 2006).

III. CAPITAL MARKET ESTIMATES

Q. What is the purpose of this section?

A. This section presents capital market estimates of the cost of equity. First, I examine the concept of the cost of equity, along with the risk-return tradeoff principle fundamental to capital markets. Next, I describe DCF, CAPM, and comparable earnings analyses conducted to estimate the cost of equity for reference groups of comparable risk firms.

A. Overview

Q. What role does the rate of return on common equity play in a utility's rates?

A. The return on common equity is the cost of inducing and retaining investment in the utility's physical plant and assets. This investment is necessary to finance the asset base needed to provide utility service. Investors will commit money to a particular investment only if they expect it to produce a return commensurate with those from other investments with comparable risks. Moreover, the return on common equity is integral in achieving the sound regulatory objectives of rates that are sufficient to: 1) fairly compensate capital investment in the utility, 2) enable the utility to offer a return adequate to attract new capital on reasonable terms, and 3) maintain the utility's financial integrity. Meeting these objectives allows the utility to fulfill its obligation to provide reliable service while

meeting the needs of customers through necessary system expansion.

Q. What fundamental economic principle underlies any evaluation of investors' required return on equity?

A. Underlying the concept of the cost of equity is the fundamental notion that investors are risk averse, and will willingly bear additional risk only if they expect compensation for doing so. The required rate of return for a particular asset at any point in time is a function of: 1) the yield on risk-free assets, and 2) its relative risk, with investors demanding correspondingly larger risk premiums for assets bearing greater risk. Given this risk-return tradeoff, the required rate of return (k) from an asset (i) can be generally expressed as:

$$k_i = R_f + RP_i$$

where: R_f = Risk-free rate of return; and
RP_i = Risk premium required to hold risky asset i.

Thus, the required rate of return for a particular asset at any point in time is a function of: 1) the yield on risk-free assets, and 2) its relative risk, with investors demanding correspondingly larger risk premiums for assets bearing greater risk.

Because common shareholders have the lowest priority claim on a firm's cash flows, they receive only the residual

1 that remains after all other claimants - employees, suppliers,
2 governments, lenders, have been paid. As a result, the rate
3 of return that investors require from a utility's common
4 stock, the most junior and riskiest of its securities, is
5 considerably higher than the yield on the utility's long-term
6 debt.

7 Q. Is the cost of equity observable in the capital
8 markets?

9 A. No. Unlike debt capital, there is no contractually
10 guaranteed return on common equity capital because
11 shareholders are the residual owners of the utility. Since it
12 is unobservable, the cost of equity for a particular utility
13 must be estimated by analyzing information about capital
14 market conditions generally, assessing the relative risks of
15 the company specifically, and employing various quantitative
16 methods that focus on investors' current required rates of
17 return. These various quantitative methods typically attempt
18 to infer investors' required rates of return from stock
19 prices, interest rates, or other capital market data.

20 Q. Did you rely on a single method to estimate the cost
21 of equity for Idaho Power?

22 A. No. In my opinion, no single method or model should
23 be relied upon to determine a utility's cost of equity because
24 no single approach can be regarded as wholly reliable. As the
25 Federal Communications Commission recognized:

> Equity prices are established in highly volatile and uncertain capital markets... Different forecasting methodologies compete with each other for eminence, only to be superceded by other methodologies as conditions change... In these circumstances, we should not restrict ourselves to one methodology, or even a series of methodologies, that would be applied mechanically. Instead, we conclude that we should adopt a more accommodating and flexible position.[36]

Therefore, I used both the DCF and CAPM methods to estimate the cost of equity. In addition, I also evaluated a fair ROE return using the comparable earnings approach. In my opinion, comparing estimates produced by one method with those produced by other approaches ensures that the estimates of the cost of equity pass fundamental tests of reasonableness and economic logic.

Q. Do you believe the constant growth DCF model should be relied on exclusively to evaluate a reasonable ROE for Idaho Power?

A. No. Because the cost of equity is unobservable, no single method should be viewed in isolation. While the DCF model has been routinely relied on in regulatory proceedings as one guide to investors' required return, it is a blunt tool that should never be used exclusively. Regulators have customarily considered the results of alternative approaches

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[36] Federal Communications Commission, Report and Order 42-43, CC Docket No. 92-133 (1995).

in determining allowed returns.[37] It is widely recognized that no single method can be regarded as a panacea; all approaches having their own advantages and shortcomings. For example, a publication of the Society of Utility and Financial Analysts (formerly the National Society of Rate of Return Analysts), concluded that:

> Each model requires the exercise of judgment as to the reasonableness of the underlying assumptions of the methodology and on the reasonableness of the proxies used to validate the theory. Each model has its own way of examining investor behavior, its own premises, and its own set of simplifications of reality. Each method proceeds from different fundamental premises, most of which cannot be validated empirically. Investors clearly do not subscribe to any singular method, nor does the stock price reflect the application of any one single method by investors.[38]

Moreover, evidence suggests that reliance on the DCF model as a tool for estimating investors' required rate of return has declined outside the regulatory sphere, with the CAPM being "the dominant model for estimating the cost of equity."[39] *Regulatory Finance: Utilities Cost of Capital* noted the inherent difficulties of the DCF approach:

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[37] For example, a NARUC survey reported that 26 regulatory jurisdictions ascribe to no specific method for setting allowed ROEs, with the results of all approaches being considered. "Utility Regulatory Policy in the U.S. and Canada, 1995-1996," National Association of Regulatory Utility Commissioners (December 1996).

[38] Parcell, David C., "The Cost of Capital - A Practitioner's Guide," *Society of Utility and Regulatory Financial Analysts* (1997) at Part 2, p. 4.

[39] See, *e.g.*, Bruner, R.F., Eades, K.M., Harris, R.S., and Higgins, R.C., "Best Practices in Estimating Cost of Capital: Survey and Synthesis," Financial Practice and Education (1998).

> [C]aution and judgment are required in interpreting the results of DCF models because of (1) the questionable applicability of the DCF model to utility stocks in certain market environments, (2) the effect of declining earnings and dividends on financial inputs to the DCF model and biases caused by the effect of changes in risk and growth, and (3) the conceptual and practical difficulties associated with the growth component of the DCF model.[40]

The publication concluded, "If the cost of equity estimation process is limited to one methodology, such as DCF, it may severely bias the results."[41]

Q. Are you aware that the IPUC has traditionally relied primarily on the DCF and comparable earnings methods?

A. Yes, although the Commission has also evidenced a willingness to weigh alternatives in evaluating an allowed ROE. For example, while noting that it had not focused on the CAPM for determining the cost of equity, the IPUC recognized in Order No. 29505 that "methods to evaluate a common equity rate of return are imperfect predictors" and emphasized "that by evaluating <u>all</u> the methods presented in this case and using each as a check on the other," the Commission had avoided the pitfalls associated with reliance on a single method.[42]

B. <u>Discounted Cash Flow Analyses</u>

Q. How are DCF models used to estimate the cost of

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[40] Morin, Roger A., "Regulatory Finance: Utilities' Cost of Capital," *Public Utilities Reports, Inc.* (1994) at 238.

[41] *Id.*

[42] Order No. 29505 at 38 (emphasis added).

1 equity?

2 A. DCF models attempt to replicate the market valuation
3 process that sets the price investors are willing to pay for a
4 share of a company's stock. The model rests on the assumption
5 that investors evaluate the risks and expected rates of return
6 from all securities in the capital markets. Given these
7 expectations, the price of each stock is adjusted by the
8 market until investors are adequately compensated for the
9 risks they bear. Therefore, we can look to the market to
10 determine what investors believe a share of common stock is
11 worth. By estimating the cash flows investors expect to
12 receive from the stock in the way of future dividends and
13 capital gains, we can calculate their required rate of return.
14 In other words, the cash flows that investors expect from a
15 stock are estimated, and given its current market price, we
16 can "back-into" the discount rate, or cost of equity, that
17 investors implicitly used in bidding the stock to that price.

18 Q. What market valuation process underlies DCF models?

19 A. DCF models assume that the price of a share of
20 common stock is equal to the present value of the expected
21 cash flows (i.e., future dividends and stock price) that will
22 be received while holding the stock, discounted at investors'
23 required rate of return. In other words, the cost of equity
24 is the discount rate that equates the current price of a share
25 of stock with the present value of all expected cash flows

from the stock.

Q. What form of the DCF model is customarily used to estimate the cost of equity in rate cases?

A. Rather than developing annual estimates of cash flows into perpetuity, the DCF model can be simplified to a "constant growth" form:

$$P_0 = \frac{D_1}{k_e - g}$$

where: P_0 = Current price per share;

D_1 = Expected dividend per share in the coming year;

k_e = Cost of equity;

g = Investors' long-term growth expectations.

The cost of equity (K_e) can be isolated by rearranging terms:

$$k_e = \frac{D_1}{P_0} + g$$

This constant growth form of the DCF model recognizes that the rate of return to stockholders consists of two parts: 1) dividend yield (D_1/P_0), and 2) growth (g). In other words, investors expect to receive a portion of their total return in the form of current dividends and the remainder through price appreciation.

Q. Are the assumptions underlying the constant growth form of the DCF model met in the real world?

A. The constant growth DCF model is dependent on a

1 number of strict assumptions,[43] which in practice are never
2 strictly met. Nevertheless, where earnings are derived from
3 stable activities, and earnings, dividends, and book value
4 track fairly closely, the constant growth form of the DCF
5 model offers a reasonable working approximation of stock
6 valuation that provides useful insight as to investors'
7 required rate of return.

8 Q. How did you define the utility proxy group you used
9 to implement the DCF model?

10 A. In estimating the cost of equity, the DCF model is
11 typically applied to publicly traded firms engaged in similar
12 business activities. In order to reflect the risks and
13 prospects associated with Idaho Power's electric utility
14 operations, my utility proxy group was composed of those
15 dividend-paying companies included by The Value Line
16 Investment Survey ("Value Line") in its Electric Utilities
17 Industry groups with: (1) S&P corporate credit ratings between
18 "BBB" and "A-", (2) a Value Line Safety Rank of "3" or better,
19 (3) a Value Line Financial Strength Rating of "B" to "B++",
20 and (4) published growth estimates from Value Line, I/B/E/S

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[43] These include a constant growth rate for both dividends and earnings; a stable dividend payout ratio; the discount rate exceeds the growth rate; a constant growth rate for book value and price; a constant earned rate of return on book value; no sales of stock at a price above or below book value; a constant price-earnings ratio; a constant discount rate (i.e., no changes in risk or interest rate levels and a flat yield curve); and all of the above extend to infinity.

1 International, Inc. ("IBES"), and Reuters, Inc. ("Reuters").

2 Q. Do these criteria provide objective evidence that
3 investors would view the firms in your utility proxy group as
4 risk-comparable?

5 A. Yes. Credit ratings are assigned by independent
6 rating agencies for the purpose of providing investors with a
7 broad assessment of the creditworthiness of a firm. Because
8 the rating agencies' evaluation includes virtually all of the
9 factors normally considered important in assessing a firm's
10 relative credit standing, corporate credit ratings provide a
11 broad measure of overall investment risk that is readily
12 available to investors. Widely cited in the investment
13 community and referenced by investors as an objective measure
14 of risk, credit ratings are also frequently used as a primary
15 risk indicator in establishing proxy groups to estimate the
16 cost of equity.

17 While credit ratings provide the most widely
18 referenced benchmark for investment risks, other quality
19 rankings published by investment advisory services also
20 provide relative assessments of risk that are considered by
21 investors in forming their expectations. Value Line's primary
22 risk indicator is its Safety Rank, which ranges from "1"
23 (Safest) to "5" (Riskiest). This overall risk measure is
24 intended to capture the total risk of a stock, and
25 incorporates elements of stock price stability and financial

1 strength. Given that Value Line is perhaps the most widely
2 available source of investment advisory information, its
3 Safety Rank provides a useful guide to the likely risk
4 perceptions of investors.
5 The Financial Strength Rating is designed as a guide
6 to overall financial strength and creditworthiness, with the
7 key inputs including financial leverage, business volatility
8 measures, and company size. Value Line's Financial Strength
9 Ratings range from "A++" (strongest) down to "C" (weakest) in
10 nine steps. Based on these criteria, which reflect objective,
11 published indicators that incorporate consideration of a broad
12 spectrum of risks, including financial and business position,
13 relative size, and exposure to company specific factors,
14 investors are likely to regard this group as having comparable
15 risks and prospects.
16 Q. Why did you exclude firms that do not pay common
17 dividends from your utility proxy group?
18 A. As discussed earlier, under the DCF approach,
19 observable stock prices are a function of the cash flows that
20 investors expect to receive, discounted at their required rate
21 of return. Because dividend payments are a key parameter
22 required to apply the DCF method, this hinders application of
23 the DCF model to firms that do not pay common dividends.
24 Q. What steps are required to apply the DCF model?
25 A. The first step in implementing the constant growth

1 DCF model is to determine the expected dividend yield (D_1/P_0)
2 for the firm in question. This is usually calculated based on
3 an estimate of dividends to be paid in the coming year divided
4 by the current price of the stock. The second, and more
5 controversial, step is to estimate investors' long-term growth
6 expectations (*g*) for the firm. The final step is to sum the
7 firm's dividend yield and estimated growth rate to arrive at
8 an estimate of its cost of equity.

9 Q. How was the dividend yield for the utility proxy
10 group determined?

11 A. Estimates of dividends to be paid by each of these
12 utilities over the next twelve months, obtained from Value
13 Line, served as D_1. This annual dividend was then divided by
14 the corresponding stock price for each utility to arrive at
15 the expected dividend yield. The expected dividends, stock
16 prices, and resulting dividend yields for the firms in the
17 utility proxy group are presented on Exhibit 2. As shown
18 there, dividend yields for the nineteen firms in the utility
19 proxy group ranged from 2.1 percent to 4.9 percent.

20 Q. What are investors most likely to consider in
21 developing their long-term growth expectations?

22 A. The only "g" that matters in applying the DCF model
23 is the value that investors expect and have embodied in
24 current market prices. In constant growth DCF theory,
25 earnings, dividends, book value, and market price are all

1 assumed to grow in lockstep, and the growth horizon of the DCF
2 model is infinite. But implementation of the DCF model is
3 more than just a theoretical exercise; it is an attempt to
4 replicate the mechanism investors used to arrive at observable
5 stock prices.

6 Q. How is the growth component of the constant DCF
7 model measured?

8 A. A wide variety of techniques can be used to derive
9 growth rates, but the only "g" that matters in applying the
10 DCF model is the value that investors expect and have embodied
11 in current stock prices. While the DCF model is technically
12 concerned with growth in dividend cash flows, implementation
13 of this DCF model is solely concerned with replicating the
14 forward-looking evaluation of real-world investors. In the
15 case of utilities, dividend growth rates are not likely to
16 provide a meaningful guide to investors' current growth
17 expectations. This is because utilities have significantly
18 altered their dividend policies in response to more
19 accentuated business risks in the industry.[44] As a result of
20 this trend towards a more conservative payout ratio, dividend
21 growth in the utility industry has remained largely stagnant
22 as utilities conserve financial resources to provide a hedge

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[44] For example, the payout ratio for electric utilities fell from approximately 80% historically to on the order of 60%. [The Value Line Investment Survey (Sep. 15, 1995 at 161, Feb. 9, 2007 at 1774)]

1 against heightened uncertainties.

2 Q. What are investors most likely to consider in
3 developing their long-term growth expectations?

4 A. As payout ratios for firms in the utility industry
5 trended downward, investors' focus has increasingly shifted
6 from dividends to earnings as a measure of long-term growth.
7 Future trends in earnings, which provide the source for future
8 dividends and ultimately support share prices, play a pivotal
9 role in determining investors' long-term growth expectations.

10 The importance of earnings in evaluating investors'
11 expectations and requirements is well accepted in the
12 investment community. As noted in *Finding Reality in Reported*
13 *Earnings* published by the Association for Investment
14 Management and Research:

15 [E]arnings, presumably, are the basis for the
16 investment benefits that we all seek. "Healthy
17 earnings equal healthy investment benefits" seems a
18 logical equation, but earnings are also a scorecard
19 by which we compare companies, a filter through
20 which we assess management, and a crystal ball in
21 which we try to foretell future performance.[45]

22 Value Line's near-term projections and its Timeliness Rank,[46]
23 which is the principal investment rating assigned to each
24 individual stock, are also based primarily on various

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[45] Association for Investment Management and Research, "Finding Reality in Reported Earnings: An Overview", p. 1 (Dec. 4, 1996).

[46] The Timeliness Rank presents Value Line's assessment of relative price performance during the next six to twelve months based on a five point scale.

quantitative analyses of earnings. As Value Line explained:

> The future earnings rank accounts for 65% in the determination of relative price change in the future; the other two variables (current earnings rank and current price rank) explain 35%.[47]

The fact that investment advisory services, such as Value Line, IBES, and Reuters, focus on growth in earnings indicates that the investment community regards this as a superior indicator of future long-term growth. Indeed, "A Study of Financial Analysts: Practice and Theory," published in the *Financial Analysts Journal*, reported the results of a survey conducted to determine what analytical techniques investment analysts actually use.[48] Respondents were asked to rank the relative importance of earnings, dividends, cash flow, and book value in analyzing securities. Of the 297 analysts that responded, only 3 ranked dividends first while 276 ranked it last. The article concluded:

> Earnings and cash flow are considered far more important than book value and dividends.[49]

Q. What are security analysts currently projecting in the way of growth for the firms in the utility proxy group?

A. The earnings growth projections for each of the

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[47] The Value Line Investment Survey, *Subscriber's Guide*, p. 53.

[48] Block, Stanley B., "A Study of Financial Analysts: Practice and Theory", *Financial Analysts Journal* (July/August 1999).

[49] *Id.* at 88.

firms in the utility proxy group reported by IBES and published in S&P's *Earnings Guide* are displayed on Exhibit 2. Also presented are the earnings per share ("EPS") growth projections reported by Value Line and Reuters.

Q. How else are investors' expectations of future long-term growth prospects often estimated for use in the constant growth DCF model?

A. Based on the assumptions underlying constant growth theory, conventional applications of the constant growth DCF model often examine the relationship between retained earnings and earned rates of return as an indication of the sustainable growth investors might expect from the reinvestment of earnings within a firm. The sustainable growth rate is calculated by the following formula:

$$g = br + sv$$

where:

g = investors' expected long-term growth rate;

b = expected retention ratio;

r = expected earned return on equity;

s = percent of common equity expected to be issued annually as new common stock; and,

v = expected equity accretion rate.

Q. What is the purpose of the "sv" term?

A. Under DCF theory, the "sv" factor is a component of the growth rate designed to capture the impact of issuing new common stock at a price above, or below, book value. When a

company's stock price is greater than its book value per share, the per-share contribution in excess of book value associated with new stock issues will accrue to the current shareholders. This increase to the book value of existing shareholders leads to higher expected earnings and dividends, with the "sv" factor incorporating this additional growth component.

Q. How did you apply the earnings retention method for the proxy group of utilities?

A. The sustainable, "br+sv" growth rates for each firm in the proxy group are summarized on Exhibit 2, with the underlying details being presented on Exhibit 3. For each firm, the expected retention ratio (b) was calculated based on Value Line's projected dividends and earnings per share. Likewise, each firm's expected earned rate of return (r) was computed by dividing projected earnings per share by projected net book value. Because Value Line reports end-of-year book values, an adjustment was incorporated to compute an average rate of return over the year, consistent with the theory underlying this approach to estimating investors' growth expectations. Meanwhile, the percent of common equity expected to be issued annually as new common stock (s) was equal to the product of the projected market-to-book ratio and growth in common shares outstanding, while the equity accretion rate (v) was computed as 1 minus the inverse of the

1 projected market-to-book ratio.

2 Q. What cost of equity estimates were implied for the
3 utility proxy group using the DCF model?

4 A. As shown on Exhibit 2, combining the dividend yields
5 and respective growth projections for each utility resulted in
6 current cost of equity estimates ranging from 4.8 percent to
7 18.3 percent.

8 Q. In evaluating the results of the constant growth DCF
9 model, is it appropriate to eliminate cost of equity estimates
10 that fail to meet threshold tests of economic logic?

11 A. Yes. It is a basic economic principle that
12 investors can be induced to hold more risky assets only if
13 they expect to earn a return to compensate them for their risk
14 bearing. As a result, the rate of return that investors
15 require from a utility's common stock, the most junior and
16 highest risk of its securities, must be considerably higher
17 than the yield offered by senior, long-term debt. Consistent
18 with this principle, the DCF range for the proxy group of
19 electric utilities must be adjusted to eliminate cost of
20 equity estimates that fail fundamental tests of economic
21 logic.

22 The average bond rating associated with the firms in
23 the proxy group is triple-B, with Moody's monthly yields on

triple-B bonds averaging approximately 6.1 percent over the six-month period ending March 2007.[50] In the present instance, eight of the individual cost of equity estimates exceeded this threshold by 100 basis points or less.[51] In light of the risk-return tradeoff principle, it is inconceivable that investors are not requiring a substantially higher rate of return for holding common stock, which is the riskiest of a utility's securities. As a result, these values provide little guidance as to the returns investors require from the common stock of an electric utility.

Q. Have similar tests been applied by regulators?

A. Yes. For example, FERC has noted that adjustments are justified where applications of the DCF approach produce illogical results:

> An adjustment to this data is appropriate in the case of PG&E's low-end return of 8.42 percent, which is comparable to the average Moody's "A" grade public utility bond yield of 8.06 percent, for October 1999. Because investors cannot be expected to purchase stock if debt, which has less risk than stock, yields essentially the same return, this low-end return cannot be considered reliable in this case.[52]

More recently, in its October 2006 decision in *Kern River Gas*

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[50] Based on data from Moody's *Credit Perspectives* (Dec. 4, 2006, Feb 5 & April 16, 2007).

[51] As highlighted on Exhibit 2, eight DCF estimates ranged from 4.8 percent to 7.1 percent.

[52] *Southern California Edison Company*, 92 FERC ¶ 61,070 (2000) at 22.

Transmission Company, FERC noted that:

> [T]he 7.31 and 7.32 percent costs of equity for El Paso and Williams found by the ALJ are only 110 and 122 basis points above that average yield for public utility debt.[53]

FERC upheld the opinion of Staff and the Administrative Law Judge that cost of equity estimates for these two proxy group companies "were too low to be credible."[54]

Q. What other objective evidence demonstrates that cost of equity estimates of 7.1 percent or less are not logical?

A. Expectations for a continued upward trend in long-term capital costs further supports a finding that these estimates are illogical and should be disregarded. Widely referenced projections continue to anticipate that long-term interest rates will increase. The most recent forecast of GlobalInsight, a widely referenced forecasting service, calls for double-A public utility bond yields to reach 6.98 percent in 2008 and average 7.22 percent over the five years ended 2012.[55] Meanwhile, the Energy Information Administration ("EIA"), a statistical agency of the U.S. Department of Energy, anticipates that the double-A public utility bond yield will reach 6.85 percent in 2008, or an average of 7.30

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[53] *Kern River Gas Transmission Company*, Opinion No. 486, 117 FERC ¶ 61,077 (2006) at P. 140 & fn. 227.

[54] *Id.*

[55] GlobalInsight, "The U.S. Economy: The 30-Year Focus" (Third-Quarter 2006) at Table 34. This is the only series of projections for public utility bond yields reported by GlobalInsight.

1 percent for the period 2008-2012.[56] As shown in Table 1 below,
2 with the average yield spread between double-A and triple-B
3 utility bonds over the six months ended March 2007 being 43
4 basis points, these forecasts imply an average triple-B bond
5 yield of 7.34 percent for 2008, or 7.68 percent over the
6 5-year period 2008-2012:

7 **TABLE 1**
8 **IMPLIED BBB BOND YIELD**

Line No.		2008	2008-12
1	Projected AA Utility Yield		
2	GlobalInsight (a)	6.98%	7.22%
3	EIA (b)	6.85%	7.30%
4	Average	6.92%	7.26%
5	BBB - AA Yield Spread (c)	0.42%	0.42%
6	Implied BBB Utility Yield	7.34%	7.68%

(a) GlobalInsight, "The U.S. Economy: The 30-Year Focus" (Third-Quarter 2006) at Table 34.

(b) Energy Information Administration, "Annual Energy Outlook 2007," (Feb. 2007) at Table 19.

(c) Based on monthly average bond yields for the six months Oct. 2006 - Mar. 2007 reported in Moody's *Credit Perspectives*.

9 Expectations for an increase in long-term debt yields is also
10 supported by the widely-referenced Blue Chip forecast, which
11 projects that yields on corporate bonds will climb on the

[56] Energy Information Administration, "Annual Energy Outlook 2007," (Feb. 2007) at Table 19. This is the only series of projections for public utility bond yields reported by EIA.

order of 50 basis points through the second quarter of 2008.[57] Given that low-end cost of equity estimates of 7.1 percent or less are below investors' expectations for comparable utility bond yields, these cannot be considered credible estimates of investors' required return on common stocks.

Q. Is there any basis to exclude cost of equity estimates at the high end of the range of DCF results?

A. Yes. The upper end of the cost of equity range produced by the DCF analysis presented in Exhibit 2 was set by a cost of equity estimate of 18.3 percent for Dominion Resources. Compared with the balance of the remaining estimates, this 18.3 percent estimate is an extreme outlier and should also be excluded in evaluating the results of the DCF model for the utility proxy group.

Q. What cost of equity is implied by your DCF results for the utility proxy group?

A. As shown on Exhibit 2 and summarized in Table 2, below, after eliminating illogical low- and high-end values, application of the constant growth DCF model resulted in the following cost of equity estimates:

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[57] Blue Chip Financial Forecasts (Jan. 1, 2007) at 2.

TABLE 2
DCF RESULTS - UTILITY PROXY GROUP

Growth Rate	Average Cost of Equity
IBES	11.1%
Value Line	10.1%
Reuters	10.7%
br+sv	10.0%

Q. What considerations are relevant in evaluating these DCF results for utilities?

A. The short-term projected growth rates used to apply the DCF model may be colored by lingering economic uncertainties and the numerous challenges faced in the utility industry. The impact of this short-term focus is exemplified by Value Line, which has assigned its Utilities sector the lowest ranking of all 10 sectors it covers for year-ahead stock price performance,[58] while noting that "we don't totally discount the possibility that the industry will be accorded higher sustainable valuations going forward."[59] While a cautious short-term outlook may be indicative of relatively low near-term growth projections, it does not necessarily reflect investors' long-term expectations for the industry. As a result, DCF growth rates do not necessarily capture investors' long-term expectations for the industry, and the resulting cost of equity estimates will be downward-biased.

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[58] The Value Line Investment Survey, *Selection & Opinion* (Apr. 6, 2007) at 4790.

[59] The Value Line Investment Survey (Mar. 2, 2007) at 153.

1 Q. How else can the DCF model be applied to estimate
2 the ROE for Idaho Power?
3 A. Under the regulatory standards established by *Hope*
4 and *Bluefield*, the salient criteria in establishing a
5 meaningful benchmark to evaluate a fair rate of return is
6 relative risk, not the particular business activity or degree
7 of regulation. Utilities must compete for capital, not just
8 against firms in their own industry, but with other investment
9 opportunities of comparable risk. With regulation taking the
10 place of competitive market forces, required returns for
11 utilities should be in line with those of non-utility firms of
12 comparable risk operating under the constraints of free
13 competition. Consistent with this accepted regulatory
14 standard, I also applied the DCF model to a reference group of
15 comparable risk companies in the non-utility sectors of the
16 economy.
17 Q. What criteria did you apply to evaluate investors'
18 risk perceptions?
19 A. My assessment of comparable risk relied on three
20 objective benchmarks for the risks associated with common
21 stocks -- Value Line's Safety Rank, Financial Strength rating,
22 and beta. My comparable risk proxy group was composed of
23 those U.S. companies followed by Value Line that 1) pay common
24 dividends, 2) have a Safety Rank of "1", 2) have a Financial
25 Strength Rating of "A" or above, and 3) have beta values of

0.95 or less.[60] Consistent with the development of my utility proxy group, I also eliminated firms with below-investment grade credit ratings.

Q. How do the overall risks of this non-utility comparable group compare with those of the utility proxy group?

A. As shown below, Table 3 compares the comparable risk reference group with the utility proxy group and Idaho Power[61] across four key indicators of investment risk:

TABLE 3
COMPARISON OF RISK INDICATORS

	S&P	Value Line		
	Credit Rating	Safety Rank	Financial Strength	Beta
Non-Utility Group	A+	1	A+	0.80
Utility Proxy Group	BBB	3	B+	0.95
Idaho Power (a)	BBB+	3	B+	1.05

Considered along with S&P's corporate credit ratings, a comparison of these Value Line indicators, which encompass a broad spectrum of risk measures, demonstrates that the average investment risks associated with the non-utility group fall below those of the utility proxy group and Idaho Power. Considering the fundamental tradeoff between risk and return discussed earlier, this comparison suggests that cost of equity estimates for the non-utility group should provide a

[60] This threshold is equal to the average beta value for my utility proxy group discussed earlier.

[61] Value Line risk indicators are those published for Idaho Power's parent, IDACORP, Inc.

conservative estimate of investors' required rate of return for Idaho Power's utility operations.

Q. What were the results of your DCF analysis for the non-utility reference group?

A. As shown on Exhibit 4, I applied the DCF model to the non-utility companies in exactly the same manner described earlier for the utility proxy group.[62] As summarized in Table 4, below, after eliminating illogical low- and high-end values, application of the constant growth DCF model resulted in the following cost of equity estimates:

TABLE 4
DCF RESULTS - NON-UTILITY GROUP

Growth Rate	Average Cost of Equity
IBES	12.6%
Value Line	11.9%
Reuters	12.5%
br+sv	12.8%

Q. What did you conclude with respect to the cost of equity implied for Idaho Power using the constant growth DCF model?

A. Taken together, I concluded that these DCF results for the two alternative proxy groups implied a cost of equity range of 10.4 percent to 12.4 percent.

[62] Exhibit 5 contains the details underlying the calculation of the br+sv growth rates for the non-utility group.

C. Capital Asset Pricing Model

Q. Please describe the CAPM.

A. The CAPM is generally considered to be the most widely referenced method for estimating the cost of equity among academicians and professional practitioners, with the pioneering researchers of this method receiving the Nobel Prize in 1990. The CAPM is a theory of market equilibrium that measures risk using the beta coefficient. Under the CAPM, investors are assumed to be fully diversified, so the relevant risk of an individual asset (*e.g.*, common stock) is its volatility relative to the market as a whole. Beta reflects the tendency of a stock's price to follow changes in the market. A stock that tends to respond relatively less to market movements has a beta less than 1.00, while stocks that tend to move more than the market have betas greater than 1.00. The CAPM is mathematically expressed as:

$$R_j = R_f + \beta_j (R_m - R_f)$$

where: R_j = required rate of return for stock j;
R_f = risk-free rate;
R_m = expected return on the market portfolio; and,
β_j = beta, or systematic risk, for stock j.

Like the DCF model, the CAPM is an *ex-ante,* or forward-looking model based on expectations of the future. As a result, in order to produce a meaningful estimate of investors' required rate of return, the CAPM must be applied using estimates that reflect the expectations of actual

1 investors in the market, not with backward-looking, historical
2 data.

3 Q. How did you apply the CAPM to estimate the cost of
4 equity?

5 A. Application of the CAPM to the utility proxy group
6 based on a forward-looking estimate for investors' required
7 rate of return from common stocks is presented on Exhibit 6.
8 In order to capture the expectations of today's investors in
9 current capital markets, the expected market rate of return
10 was estimated by conducting a DCF analysis on the dividend
11 paying firms in the S&P 500.

12 The dividend yield for each firm was obtained from
13 Value Line, with the growth rate being equal to the average of
14 the earnings growth projections for each firm published by
15 IBES and Value Line, with each firm's dividend yield and
16 growth rate being weighted by its proportionate share of total
17 market value. Based on the weighted average of the
18 projections for the 361 individual firms, current estimates
19 imply an average growth rate over the next five years of 11.2
20 percent. Combining this average growth rate with a dividend
21 yield of 2.1 percent results in a current cost of equity
22 estimate for the market as a whole of approximately 13.3
23 percent. Subtracting a 4.8 percent risk-free rate based on
24 the average yield on 20-year Treasury bonds for March 2007
25 produced a market equity risk premium of 8.5 percent.

1 Multiplying this risk premium by the average Value Line beta
2 of 0.95 for the utilities in the proxy group, and then adding
3 the resulting 8.0 percent risk premium to the average long-
4 term Treasury bond yield, indicated an ROE of approximately
5 12.8 percent.

6 Q. What other CAPM analyses did you conduct to estimate
7 the cost of equity?

8 A. I also applied the CAPM using risk premiums based on
9 historical realized rates of return. This approach to
10 estimating investors' equity risk premiums is premised on the
11 assumption that, given a sufficiently large number of
12 observations over long, historical periods, the average
13 realized market rate of return will converge to investors'
14 required rate of return. Put another way, because future
15 expectations are unobservable, historical returns are often
16 extrapolated into the future on the presumption that past
17 experience heavily conditions future expectations.

18 While reference to historical data represents one
19 way to apply the CAPM, these realized rates of return reflect,
20 at best, an indirect estimate of investors' current
21 requirements. The cost of capital is a forward-looking, or
22 expectational concept that is focused on the perceptions of
23 today's capital market investors. While past investment
24 returns are frequently referenced and may provide a useful
25 benchmark, the only factors that actually determine the

1 current required rate of return are investors' expectations
2 for the future. As a result, forward-looking applications of
3 the CAPM that look directly at investors' expectations in the
4 capital markets are apt to provide a more meaningful guide to
5 investors' required rate of return.

6 Q. What CAPM cost of equity is produced based on
7 historical realized rates of return for stocks and long-term
8 government bonds?

9 A. I applied the CAPM using data published by Ibbotson
10 Associates, which is perhaps the most exhaustive and widely
11 referenced annual study of realized rates of return.
12 Application of the CAPM based on historical realized rates of
13 return is presented in Exhibit 7. In their *2006 Yearbook,*
14 *Valuation Edition*, Ibbotson Associates reported that, over the
15 period from 1926 through 2005, the arithmetic mean realized
16 rate of return on the S&P 500 exceeded that on long-term
17 government bonds by 7.1 percent.[63] Multiplying this historical
18 market risk premium by the average Value Line beta of 0.95

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[63] Ibbotson Associates computes the equity risk premium by subtracting the income return (not the total return) on long-term Treasury bonds from the return on common stocks. As Ibbotson Associates noted [*2006 Yearbook, Valuation Edition* at 77]:

> Price changes in bonds due to unanticipated changes in yields introduce price risk into the total return. Therefore, the total return on the bond series does not represent the riskless rate of return. The income return better represents the unbiased estimate of the purely riskless rate of return, since an investor can hold a bond to maturity and be entitled to the income return with no capital loss.

1 produced an equity risk premium of 6.7 percent for the utility
2 proxy group. As shown on Exhibit 7, adding this equity risk
3 premium to the average yield on 20-year Treasury bonds for
4 March 2007 of 4.8 percent resulted in an implied cost of
5 equity of 11.5 percent.

6 **D. Comparable Earnings Method**

7 Q. What other analyses did you conduct to estimate the
8 cost of equity?
9 A. As I noted earlier, I also evaluated the cost of
10 equity using the comparable earnings method. Reference to
11 rates of return available from alternative investments of
12 comparable risk can provide an important benchmark in
13 assessing the return necessary to assure confidence in the
14 financial integrity of a firm and its ability to attract
15 capital. This comparable earnings approach is consistent with
16 the economic underpinnings for a fair rate of return
17 established by the United States Supreme Court and has been
18 traditionally relied on by the IPUC. Moreover, it avoids the
19 complexities and limitations of capital market methods and
20 instead focuses on the returns earned on book equity, which
21 are readily available to investors.

22 Q. What rates of return on equity are indicated for
23 utilities based on this approach?
24 A. With respect to expectations for electric utilities
25 generally, Value Line reports that its analysts anticipate an

average rate of return on common equity for the electric utility industry of 11.0 percent in 2007 and 11.5 percent over its three-to-five year forecast horizon.[64] Meanwhile, Value Line expects that natural gas distribution utilities will earn an average rate of return on common equity of 11.5 percent in 2007, and 12.0 percent over the years 2010 through 2012.[65]

For the firms in the utility proxy group specifically, the returns on common equity projected by Value Line over its three-to-five year forecast horizon are shown on Exhibit 8. Consistent with the rational underlying the development of the br+sv growth rates discussed earlier, these year-end values were converted to average returns using the same adjustment factor developed in Exhibit 3. As shown on Exhibit 8, after eliminating high-end outliers, Value Line's projections suggested an average ROE of 10.6 percent.

Q. What return on equity is indicated by the results of the comparable earnings approach?

A. Based on the results discussed above, I concluded that the comparable earnings approach implies a fair rate of return on equity of 11.0 percent.

E. <u>Flotation Costs</u>

Q. What other considerations are relevant in setting

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[64] The Value Line Investment Survey (Mar. 2, 2007) at 153.
[65] The Value Line Investment Survey (Mar. 16, 2007) at 460.

1 the return on equity for a utility?

2 A. The common equity used to finance the investment in
3 utility assets is provided from either the sale of stock in
4 the capital markets or from retained earnings not paid out as
5 dividends. When equity is raised through the sale of common
6 stock, there are costs associated with "floating" the new
7 equity securities. These flotation costs include services
8 such as legal, accounting, and printing, as well as the fees
9 and discounts paid to compensate brokers for selling the stock
10 to the public. Also, some argue that the "market pressure"
11 from the additional supply of common stock and other market
12 factors may further reduce the amount of funds a utility nets
13 when it issues common equity.

14 Q. Is there an established mechanism for a utility to
15 recognize equity issuance costs?

16 A. No. While debt flotation costs are recorded on the
17 books of the utility, amortized over the life of the issue,
18 and thus increase the effective cost of debt capital, there is
19 no similar accounting treatment to ensure that equity
20 flotation costs are recorded and ultimately recognized.
21 Alternatively, no rate of return is authorized on flotation
22 costs necessarily incurred to obtain a portion of the equity
23 capital used to finance plant. In other words, equity
24 flotation costs are not included in a utility's rate base
25 because neither that portion of the gross proceeds from the

sale of common stock used to pay flotation costs is available to invest in plant and equipment, nor are flotation costs capitalized as an intangible asset. Unless some provision is made to recognize these issuance costs, a utility's revenue requirements will not fully reflect all of the costs incurred for the use of investors' funds. Because there is no accounting convention to accumulate the flotation costs associated with equity issues, they must be accounted for indirectly, with an upward adjustment to the cost of equity being the most logical mechanism.

Q. What is the magnitude of the adjustment to the "bare bones" cost of equity to account for issuance costs?

A. There are any number of ways in which a flotation cost adjustment can be calculated, and the adjustment can range from just a few basis points to more than a full percent. One of the most common methods used to account for flotation costs in regulatory proceedings is to apply an average flotation-cost percentage to a utility's dividend yield. Based on a review of the finance literature, *Regulatory Finance: Utilities' Cost of Capital* concluded:

> The flotation cost allowance requires an estimated adjustment to the return on equity of approximately 5% to 10%, depending on the size and risk of the issue.[66]

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[66] Roger A. Morin, *Regulatory Finance: Utilities' Cost of Capital*, 1994, at 166.

Alternatively, a study of data from Morgan Stanley regarding issuance costs associated with utility common stock issuances suggests an average flotation cost percentage of 3.6%.[67] Applying these expense percentages to a representative dividend yield for a utility of 3.6 percent implies a flotation cost adjustment on the order of 13 to 36 basis points.

F. Proxy Group Cost of Equity

Q. What did you conclude with respect to the cost of equity for the proxy group of utilities?

A. The cost of equity estimates implied by my quantitative analyses are summarized in Table 5, below:

TABLE 5
SUMMARY OF QUANTITATIVE RESULTS

Method	Cost of Equity Estimate
DCF	10.4% - 12.4%
CAPM	
Forward-looking	12.8%
Historical	11.5%
Comparable Earnings	11.0%

Based on the results of my quantitative analyses, and my assessment of the relative strengths and weaknesses inherent in each method, I concluded that the cost of equity for the

[67] *Application of Yankee Gas Services Company for a Rate Increase*, DPUC Docket No. 04-06-01, Direct Testimony of George J. Eckenroth (Jul. 2, 2004) at Exhibit GJE-11.1. Updating the results presented by Mr. Eckenroth through April 2005 also resulted in an average flotation cost percentage of 3.6%.

1 utility proxy group is in the 11.0 percent to 12.0 percent
2 range, with a midpoint of 11.5 percent.
3 In order to account for the impact of past issuance
4 costs, I recommend a flotation cost adjustment of 20 basis
5 points, which roughly corresponds with the midpoint of the
6 range discussed earlier. Incorporating an adjustment for
7 flotation costs of 20 basis points to my "bare bones" cost of
8 equity range results in a fair rate of return on equity range
9 for the proxy group of utilities of 11.2 percent to 12.2
10 percent.

11 **IV. RETURN ON EQUITY FOR IDAHO POWER COMPANY**

12 Q. What is the purpose of this section?
13 A. In addition to presenting the conclusions of my
14 evaluation of a fair rate of return on equity for Idaho Power,
15 this section also discusses the relationship between ROE and
16 preservation of a utility's financial integrity and the
17 ability to attract capital under reasonable terms on a
18 sustainable basis.

19 **A. Implications for Financial Integrity**

20 Q. Why is it important to allow Idaho Power an adequate
21 ROE?
22 A. Given the social and economic importance of the
23 utility industry, it is essential to maintain reliable and
24 economical service to all consumers. While Idaho Power

1 remains committed to deliver reliable service, a utility's
2 ability to fulfill its mandate can be compromised if it lacks
3 the necessary financial wherewithal. Coupled with the ongoing
4 potential for energy market volatility, Idaho Power's exposure
5 to variations in hydroelectric generation and plans for
6 significant infrastructure investment pose a number of
7 potential challenges that might require the relatively swift
8 commitment of significant capital resources in order to
9 maintain the high level of service that customers have come to
10 expect.
11 Events in the Western U.S. provide a dramatic
12 illustration of just how swiftly unforeseen circumstances can
13 lead to deterioration in a utility's financial condition, and
14 stakeholders have discovered first hand how difficult and
15 complex it can be to remedy the situation after the fact. For
16 a utility with an obligation to provide reliable service,
17 investors' increased reticence to supply additional capital
18 during times of crisis highlights the necessity of preserving
19 the flexibility necessary to overcome periods of adverse
20 capital market conditions.
21 Q. What role does regulation play in ensuring Idaho
22 Power's access to capital?
23 A. Considering investors' heightened awareness of the
24 risks associated with the utility industry and the damage that
25 results when a utility's financial flexibility is compromised,

1 supportive regulation remains crucial to Idaho Power's access
2 to capital. Investors recognize that constructive regulation
3 is a key ingredient in supporting utility credit ratings and
4 financial integrity, particularly during times of adverse
5 conditions. S&P noted that "[r]egulatory rulings have
6 returned to center stage as a dominant factor in assessing
7 companies' credit quality."[68] Investors recognize that
8 regulation has its own risks, with Moody's specifically noting
9 the need for ongoing support from regulators as Idaho Power
10 adds new generation and transmission infrastructure to meet
11 growth and ensure reliability.[69]

12 Q. What danger does an inadequate rate of return pose
13 to Idaho Power?

14 A. Given the pressure on Idaho Power's corporate credit
15 rating, which is exemplified by S&P's negative outlook, the
16 perception of a lack of regulatory support would almost
17 certainly lead to further downgrades. At the same time, Idaho
18 Power's plans include significant plant investment to ensure
19 that the energy needs of its service territory are met in a
20 reliable and cost-effective manner. While providing the
21 infrastructure necessary to meet the energy needs of customers
22 is certainly desirable, it imposes additional financial

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[68] Standard & Poor's Corporation, "Industry Report Card: U.S. Electric/Gas/Water," *RatingsDirect* (May 3, 2005) at 1.
[69] Moody's Investors Service, "Summary Opinion: Idaho Power Company," *Global Credit Research* (Oct. 6, 2006).

1 responsibilities on Idaho Power. To continue to meet these
2 challenges successfully and economically, it is crucial that
3 Idaho Power receive adequate support to maintain its credit
4 standing.

5 Q. Do customers benefit by enhancing the utility's
6 financial flexibility?

7 A. Yes. While providing an ROE that is sufficient to
8 maintain Idaho Power's ability to attract capital, even in
9 times of financial and market stress, is consistent with the
10 economic requirements embodied in the Supreme Court's *Hope* and
11 *Bluefield* decisions, it is also in customers' best interests.
12 Ultimately, it is customers and the service area economy that
13 enjoy the benefits that come from ensuring that the utility
14 has the financial wherewithal to take whatever actions are
15 required to ensure reliable service. By the same token,
16 customers also bear a significant burden when the ability of
17 the utility to attract necessary capital is impaired and
18 service quality is compromised. To continue to meet potential
19 challenges successfully and economically, it is crucial that
20 Idaho Power receive adequate support for its credit standing.

21 Q. Are these concerns germane to Idaho Power and its
22 investors?

23 A. Yes. Investors have many alternatives and
24 competition for capital is intense. Lingering uncertainties
25 from a prior era, as well as new challenges in the utility

industry, breed reluctance to make the long-term commitment of capital that is required to ensure the reliable and economic supply of electricity and gas that customers both demand and deserve. Thus, while customers might realize short-term "savings" through a downward-biased ROE, these will prove illusory when the utility is precluded from making investments that are consistent with providing sustained, high quality service at the lowest possible price in the long run.

B. Capital Structure

Q. Is an evaluation of the capital structure maintained by a utility relevant in assessing its return on equity?

A. Yes. Other things equal, a higher debt ratio, or lower common equity ratio, translates into increased financial risk for all investors. A greater amount of debt means more investors have a senior claim on available cash flow, thereby reducing the certainty that each will receive his contractual payments. This increases the risks to which lenders are exposed, and they require correspondingly higher rates of interest. From common shareholders' standpoint, a higher debt ratio means that there are proportionately more investors ahead of them, thereby increasing the uncertainty as to the amount of cash flow, if any, that will remain.

Q. What common equity ratio is implicit in Idaho Power's requested capital structure?

A. Idaho Power's capital structure is presented in the

1 testimony of Mr. Steve Keen. As summarized in his testimony,
2 the common equity ratio used to compute Idaho Power's overall
3 rate of return was approximately 50.3 percent in this filing.

4 Q. What was the average capitalization maintained by
5 the utility proxy group?

6 A. As shown on Exhibit 9, for the firms in the utility
7 proxy group, common equity ratios at December 31, 2006 ranged
8 from 39.2 percent to 64.2 percent and averaged 48.7 percent.

9 Q. What implication does the increasing risk of the
10 utility industry have for the capital structures maintained by
11 utilities?

12 A. The decline in credit quality experienced in the
13 electric industry is indicative of the need for utilities to
14 strengthen their balance sheets to deal with an increasingly
15 uncertain market. A more conservative financial profile is
16 appropriate given greater uncertainties in the utility
17 industry and the need to maintain the continuous access to
18 capital that is required to fund operations and necessary
19 system investment, even during times of adverse capital market
20 conditions. As Fitch recently noted:

21 Companies that form growth plans and financial
22 structures without considering the potential for a
23 shift in the capital market environment or downturn
24 in valuations can run into financial problems down

1 the road.[70]

2 This is especially the case for electric utilities that are
3 exposed to potential significant fluctuations in power supply
4 costs, such as Idaho Power.

5 Q. What capitalization is representative for the proxy
6 group of utilities going forward?

7 A. As shown on Exhibit 9, Value Line expects that the
8 average common equity ratio for the proxy group of Western
9 utility holding companies will increase to 50.8 percent over
10 the next three to five years, with the individual common
11 equity ratios ranging from 43.0 percent to 60.5 percent.

12 Q. How does Idaho Power's common equity ratio compare
13 with those maintained by the reference group of utilities?

14 A. Although Idaho Power's requested common equity ratio
15 of approximately 50.3 percent for its 2007 test year is
16 slightly over the average maintained by the utility proxy
17 group based on year-end 2006 book values, it falls below the
18 50.8 equity ratio based on Value Line's expectations for the
19 industry.

20 Q. What other factors do investors consider in their
21 assessment of a company's capital structure?

22 A. Because power purchase agreements ("PPAs") typically

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[70] Fitch Ratings, Ltd., "U.S. Power and Gas 2007 Outlook," *Global Power/North America Special Report* (Dec. 15, 2006).

1 obligate the utility to make specified minimum contractual
2 payments akin to those associated with traditional debt
3 financing, investors consider a portion of these commitments
4 as debt in evaluating total financial risks. Similarly, when
5 a utility enters into a mandated PPA with a Qualifying
6 Facility under PURPA, the fixed charges associated with the
7 contract increase the utility's financial risk in the same way
8 that long-term debt and other financial obligations increase
9 financial leverage. The implications of purchased power
10 commitments have been repeatedly cited by major bond rating
11 agencies in connection with assessments of utility financial
12 risks. For example, in reviewing its evaluation of the credit
13 implications of PPAs, S&P affirmed its position that such
14 agreements are "debt-like in nature" and that the increased
15 financial risk must be considered in evaluating a utility's
16 credit risks.[71]

17 Q. What does this evidence suggest with respect to
18 Idaho Power's proposed capital structure?

19 A. While industry averages provide one benchmark for
20 comparison, each firm must select its capitalization based on
21 the risks and prospects it faces, as well its specific needs
22 to access the capital markets. A public utility with an
23 obligation to serve must maintain ready access to capital so

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[71] Standard & Poor's Corporation, "'Buy Versus Build': Debt Aspects of Purchased Power Agreements," *Utilities & Perspectives* (May 12, 2003).

1 that it can meet the service requirements of its customers.
2 The need for access becomes even more important when the
3 company has large capital requirements over a period of years,
4 and financing must be continuously available, even during
5 unfavorable capital market conditions.
6 The decline in Idaho Power's credit standing and the
7 heightened uncertainty associated with energy market
8 volatility magnifies the importance of preserving financial
9 flexibility. Under these circumstances, it is essential that
10 Idaho Power's capital structure include adequate borrowing
11 capacity to maintain an ongoing ability to raise capital
12 sufficient to fund planned capital investments and meet its
13 service obligations. While financial flexibility plays a
14 crucial role in ensuring the wherewithal to meet the needs of
15 customers, utilities with higher leverage may be foreclosed
16 from additional borrowing, especially during times of stress.
17 In this regard, Idaho Power's equity ratio reflects the
18 challenges posed by its resource mix, as well as the burden of
19 significant capital spending requirements.
20 Idaho Power's proposed capital structure is just one
21 reflection of the Company's ongoing efforts to enhance its
22 credit standing and maintain access to capital on reasonable
23 terms in order to ensure its ability to meet its obligations
24 to customers. The reasonableness of Idaho Power's requested
25 capital structure is reinforced by the ongoing uncertainties

1 associated with the electric power industry, the Company's
2 relative risks and circumstances, the need to support
3 continued system investment, and the imperative of maintaining
4 continuous access to capital, even during times of adverse
5 industry and market conditions.

6 **C. Return on Equity Recommendation**

7 Q. What then is your conclusion as to a fair rate of
8 return on equity for Idaho Power?

9 A. In evaluating the rate of return for Idaho Power, it
10 is important to consider investors' continued focus on the
11 unsettled conditions in restructured wholesale energy markets,
12 the Company's ongoing exposure to these markets to meet a
13 portion of its energy supply, as well as other risks
14 associated with the utility industry, such as heightened
15 exposure to regulatory uncertainties.

16 As explained earlier, based on the various capital
17 market oriented analyses described in my testimony, I
18 concluded that the fair rate of return on equity range was
19 11.2 percent to 12.2 percent. Considering capital market
20 expectations, the potential uncertainties faced by Idaho
21 Power, the Company's unique exposure to fluctuations in
22 hydroelectric generation, and the economic requirements
23 necessary to maintain financial integrity and support
24 additional capital investment even under adverse
25 circumstances, it is my opinion that this represents a fair

1 and reasonable ROE range for Idaho Power.

2 Q. Does this conclude your pre-filed direct testimony?

3 A. Yes.

QUALIFICATIONS OF WILLIAM E. AVERA

I received a B.A. degree with a major in economics from Emory University. After serving in the United States Navy, I entered the doctoral program in economics at the University of North Carolina at Chapel Hill. Upon receiving my Ph.D., I joined the faculty at the University of North Carolina and taught finance in the Graduate School of Business. I subsequently accepted a position at the University of Texas at Austin where I taught courses in financial management and investment analysis. I then went to work for International Paper Company in New York City as Manager of Financial Education, a position in which I had responsibility for all corporate education programs in finance, accounting, and economics.

In 1977, I joined the staff of the Public Utility Commission of Texas (PUCT) as Director of the Economic Research Division. During my tenure at the PUCT, I managed a division responsible for financial analysis, cost allocation and rate design, economic and financial research, and data processing systems, and I testified in cases on a variety of financial and economic issues. Since leaving the PUCT in 1979, I have been engaged as a consultant. I have participated in a wide range of assignments involving utility-related matters on behalf of utilities, industrial customers, municipalities, and regulatory commissions. I have previously testified before the Federal Energy Regulatory Commission, as well as the Federal Communications Commission, the Surface Transportation Board (and its predecessor, the Interstate Commerce Commission), the Canadian Radio-Television and Telecommunications Commission, and regulatory agencies, courts, and legislative committees in over 30 states.

In 1995, I was appointed by the PUCT, with the approval of the Governor, to the Synchronous Interconnection Committee to advise the Texas legislature on the costs and benefits of connecting Texas to the national electric transmission grid. In addition, I served as an outside

director of Georgia System Operations Corporation, the system operator for electric cooperatives in Georgia.

I have served as Lecturer in the Finance Department at the University of Texas at Austin and taught in the evening graduate program at St. Edward's University for twenty years. In addition, I have lectured on economic and regulatory topics in programs sponsored by universities and industry groups. I have taught in hundreds of educational programs for financial analysts in programs sponsored by the Association for Investment Management and Research, the Financial Analysts Review, and local financial analysts societies. These programs have been presented in Asia, Europe, and North America, including the Financial Analysts Seminar at Northwestern University. I hold the Chartered Financial Analyst (CFA®) designation and have served as Vice President for Membership of the Financial Management Association. I also have served on the Board of Directors of the North Carolina Society of Financial Analysts. I was elected Vice Chairman of the National Association of Regulatory Commissioners (NARUC) Subcommittee on Economics and appointed to NARUC's Technical Subcommittee on the National Energy Act. I also have served as an officer of various other professional organizations and societies. A resume containing the details of my experience and qualifications is attached.

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Summary of Qualifications

Ph.D. in economics and finance; Chartered Financial Analyst (CFA ®) designation; extensive expert witness testimony before courts, alternative dispute resolution panels, regulatory agencies and legislative committees; lectured in executive education programs around the world on ethics, investment analysis, and regulation; undergraduate and graduate teaching in business and economics; appointed to leadership positions in government, industry, academia, and the military.

Employment

Principal,
FINCAP, Inc.
(Sep. 1979 to present)

Financial, economic and policy consulting to business and government. Perform business and public policy research, cost/benefit analyses and financial modeling, valuation of businesses (over 150 entities valued), estimation of damages, statistical and industry studies. Provide strategy advice and educational services in public and private sectors, and serve as expert witness before regulatory agencies, legislative committees, arbitration panels, and courts.

Director, Economic Research Division,
Public Utility Commission of Texas
(Dec. 1977 to Aug. 1979)

Responsible for research and testimony preparation on rate of return, rate structure, and econometric analysis dealing with energy, telecommunications, water and sewer utilities. Testified in major rate cases and appeared before legislative committees and served as Chief Economist for agency. Administered state and federal grant funds. Communicated frequently with political leaders and representatives from consumer groups, media, and investment community.

Manager, Financial Education,
International Paper Company
New York City
(Feb. 1977 to Nov. 1977)

Directed corporate education programs in accounting, finance, and economics. Developed course materials, recruited and trained instructors, liaison within the company and with academic institutions. Prepared operating budget and designed financial controls for corporate professional development program.

Lecturer in Finance,
The University of Texas at Austin
(Sep. 1979 to May 1981)
Assistant Professor of Finance,
(Sep. 1975 to May 1977)

Taught graduate and undergraduate courses in financial management and investment theory. Conducted research in business and public policy. Named Outstanding Graduate Business Professor and received various administrative appointments.

Assistant Professor of Business,
University of North Carolina at Chapel Hill
(Sep. 1972 to Jul. 1975)

Taught in BBA, MBA, and Ph.D. programs. Created project course in finance, Financial Management for Women, and participated in developing Small Business Management sequence. Organized the North Carolina Institute for Investment Research, a group of financial institutions that supported academic research. Faculty advisor to the Media Board, which funds student publications and broadcast stations.

Education

Ph.D., Economics and Finance,
University of North Carolina at Chapel Hill
(Jan. 1969 to Aug. 1972)

Elective courses included financial management, public finance, monetary theory, and econometrics. Awarded the Stonier Fellowship by the American Bankers' Association and University Teaching Fellowship. Taught statistics, macroeconomics, and microeconomics.

Dissertation: *The Geometric Mean Strategy as a Theory of Multiperiod Portfolio Choice*

B.A., Economics,
Emory University, Atlanta, Georgia
(Sep. 1961 to Jun. 1965)

Active in extracurricular activities, president of the Barkley Forum (debate team), Emory Religious Association, and Delta Tau Delta chapter. Individual awards and team championships at national collegiate debate tournaments.

Professional Associations

Received Chartered Financial Analyst (CFA) designation in 1977; Vice President for Membership, Financial Management Association; President, Austin Chapter of Planning Executives Institute; Board of Directors, North Carolina Society of Financial Analysts; Candidate Curriculum Committee, Association for Investment Management and Research; Executive Committee of Southern Finance Association; Vice Chair, Staff Subcommittee on Economics and National Association of Regulatory Utility Commissioners (NARUC); Appointed to NARUC Technical Subcommittee on the National Energy Act.

Teaching in Executive Education Programs

University-Sponsored Programs: Central Michigan University, Duke University, Louisiana State University, National Defense University, National University of Singapore, Texas A&M University, University of Kansas, University of North Carolina, University of Texas.

Business and Government-Sponsored Programs: Advanced Seminar on Earnings Regulation, American Public Welfare Association, Association for Investment Management and Research, Congressional Fellows Program, Cost of Capital Workshop, Electricity Consumers Resource Council, Financial Analysts Association of Indonesia, Financial Analysts Review, Financial Analysts Seminar at Northwestern University, Governor's Executive Development Program of Texas, Louisiana Association of Business and Industry, National Association of Purchasing Management, National Association of Tire Dealers, Planning Executives Institute, School of Banking of the South, State of Wisconsin Investment Board, Stock Exchange of Thailand, Texas Association of State Sponsored Computer Centers, Texas Bankers' Association, Texas Bar Association, Texas Savings and Loan League, Texas Society of CPAs, Tokyo Association of Foreign Banks, Union Bank of Switzerland, U.S. Department of State, U.S. Navy, U.S. Veterans Administration, in addition to Texas state agencies and major corporations.

Presented papers for Mills B. Lane Lecture Series at the University of Georgia and Heubner Lectures at the University of Pennsylvania. Taught graduate courses in finance and economics in evening program at St. Edward's University in Austin from January 1979 through 1998.

Expert Witness Testimony

Testified in over 200 cases before regulatory agencies addressing cost of capital, regulatory policy, rate design, and other economic and financial issues.

Federal Agencies: Federal Communications Commission, Federal Energy Regulatory Commission, Surface Transportation Board, Interstate Commerce Commission, and the Canadian Radio-Television and Telecommunications Commission.

State Regulatory Agencies: Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Kansas, Maryland, Michigan, Missouri, Nevada, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Utah, Virginia, Washington, West Virginia, and Wisconsin.

Testified in 40 cases before federal and state courts, arbitration panels, and alternative dispute tribunals (75 depositions given) regarding damages, valuation, antitrust liability, fiduciary duties, and other economic and financial issues.

Board Positions and Other Professional Activities

Audit Committee and Outside Director, Georgia System Operations Corporation (electric system operator for member-owned electric cooperatives in Georgia); Chairman, Board of Print Depot, Inc. and FINCAP, Inc.; Co-chair, Synchronous Interconnection Committee, appointed by Public Utility Commission of Texas and approved by governor; Operator of AAA Ranch, a certified organic producer of agricultural products; Appointed to Organic Livestock Advisory Committee by Texas Agricultural Commissioner Susan Combs; Appointed by Texas Railroad Commissioners to study group for *The UP/SP Merger: An Assessment of the Impacts on the State of Texas; A*ppointed by Hawaii Public Utilities Commission to team reviewing affiliate relationships of Hawaiian Electric Industries; Chairman, Energy Task Force, Greater Austin-San Antonio Corridor Council; Consultant to Public Utility Commission of Texas on cogeneration policy and other matters; Consultant to Public Service Commission of New Mexico on cogeneration policy; Evaluator of Energy Research Grant Proposals for Texas Higher Education Coordinating Board.

Community Activities

Board Member, Sustainable Food Center; Chair, Board of Deacons, Finance Committee, and Elder, Central Presbyterian Church of Austin; Founding Member, Orange-Chatham County (N.C.) Legal Aid Screening Committee.

Military

Captain, U.S. Naval Reserve (retired after 28 years service); Commanding Officer, Naval Special Warfare Engineering Support Unit; Officer-in-charge of SWIFT patrol boat in Vietnam; Enlisted service as weather analyst (advanced to second class petty officer).

Bibliography

Monographs

Ethics and the Investment Professional (video, workbook, and instructor's guide) and *Ethics Challenge Today* (video), Association for Investment Management and Research (1995)

"Definition of Industry Ethics and Development of a Code" and "Applying Ethics in the Real World," in *Good Ethics: The Essential Element of a Firm's Success*, Association for Investment Management and Research (1994)

"On the Use of Security Analysts' Growth Projections in the DCF Model," with Bruce H. Fairchild in *Earnings Regulation Under Inflation*, J. R. Foster and S. R. Holmberg, eds. Institute for Study of Regulation (1982)

An Examination of the Concept of Using Relative Customer Class Risk to Set Target Rates of Return in Electric Cost-of-Service Studies, with Bruce H. Fairchild, Electricity Consumers Resource Council (ELCON) (1981); portions reprinted in *Public Utilities Fortnightly* (Nov. 11, 1982)

"Usefulness of Current Values to Investors and Creditors," *Research Study on Current-Value Accounting Measurements and Utility*, George M. Scott, ed., Touche Ross Foundation (1978)

"The Geometric Mean Strategy and Common Stock Investment Management," with Henry A. Latané in *Life Insurance Investment Policies*, David Cummins, ed. (1977)

Investment Companies: Analysis of Current Operations and Future Prospects, with J. Finley Lee and Glenn L. Wood, American College of Life Underwriters (1975)

Articles

"Should Analysts Own the Stocks they Cover?" *The Financial Journalist*, (March 2002)

"Liquidity, Exchange Listing, and Common Stock Performance," with John C. Groth and Kerry Cooper, *Journal of Economics and Business* (Spring 1985); reprinted by National Association of Security Dealers

"The Energy Crisis and the Homeowner: The Grief Process," *Texas Business Review* (Jan.–Feb. 1980); reprinted in *The Energy Picture: Problems and Prospects*, J. E. Pluta, ed., Bureau of Business Research (1980)

"Use of IFPS at the Public Utility Commission of Texas," *Proceedings of the IFPS Users Group Annual Meeting* (1979)

"Production Capacity Allocation: Conversion, CWIP, and One-Armed Economics," *Proceedings of the NARUC Biennial Regulatory Information Conference* (1978)

"Some Thoughts on the Rate of Return to Public Utility Companies," with Bruce H. Fairchild in *Proceedings of the NARUC Biennial Regulatory Information Conference* (1978)

"A New Capital Budgeting Measure: The Integration of Time, Liquidity, and Uncertainty," with David Cordell in *Proceedings of the Southwestern Finance Association* (1977)

"Usefulness of Current Values to Investors and Creditors," in *Inflation Accounting/Indexing and Stock Behavior* (1977)

"Consumer Expectations and the Economy," *Texas Business Review* (Nov. 1976)

"Portfolio Performance Evaluation and Long-run Capital Growth," with Henry A. Latané in *Proceedings of the Eastern Finance Association* (1973)

Book reviews in *Journal of Finance* and *Financial Review*. Abstracts for *CFA Digest*. Articles in *Carolina Financial Times*.

Selected Papers and Presentations

"The Who, What, When, How, and Why of Ethics", San Antonio Financial Analysts Society (Jan. 16, 2002). Similar presentation given to the Austin Society of Financial Analysts (Jan. 17, 2002)

"Ethics for Financial Analysts," Sponsored by Canadian Council of Financial Analysts: delivered in Calgary, Edmonton, Regina, and Winnipeg, June 1997. Similar presentations given to Austin Society of Financial Analysts (Mar. 1994), San Antonio Society of Financial Analysts (Nov. 1985), and St. Louis Society of Financial Analysts (Feb. 1986)

"Cost of Capital for Multi-Divisional Corporations," Financial Management Association, New Orleans, Louisiana (Oct. 1996)

"Ethics and the Treasury Function," Government Treasurers Organization of Texas, Corpus Christi, Texas (Jun. 1996)

"A Cooperative Future," Iowa Association of Electric Cooperatives, Des Moines (December 1995). Similar presentations given to National G & T Conference, Irving, Texas (June 1995), Kentucky Association of Electric Cooperatives Annual Meeting, Louisville (Nov. 1994), Virginia, Maryland, and Delaware Association of Electric Cooperatives Annual Meeting, Richmond (July 1994), and Carolina Electric Cooperatives Annual Meeting, Raleigh (Mar. 1994)

"Information Superhighway Warnings: Speed Bumps on Wall Street and Detours from the Economy," Texas Society of Certified Public Accountants Natural Gas, Telecommunications and Electric Industries Conference, Austin (Apr. 1995)

"Economic/Wall Street Outlook," Carolinas Council of the Institute of Management Accountants, Myrtle Beach, South Carolina (May 1994). Similar presentation given to Bell Operating Company Accounting Witness Conference, Santa Fe, New Mexico (Apr. 1993)

"Regulatory Developments in Telecommunications," Regional Holding Company Financial and Accounting Conference, San Antonio (Sep. 1993)

"Estimating the Cost of Capital During the 1990s: Issues and Directions," The National Society of Rate of Return Analysts, Washington, D.C. (May 1992)

"Making Utility Regulation Work at the Public Utility Commission of Texas," Center for Legal and Regulatory Studies, University of Texas, Austin (June 1991)

"Can Regulation Compete for the Hearts and Minds of Industrial Customers," Emerging Issues of Competition in the Electric Utility Industry Conference, Austin (May 1988)

"The Role of Utilities in Fostering New Energy Technologies," Emerging Energy Technologies in Texas Conference, Austin (Mar. 1988)

"The Regulators' Perspective," Bellcore Economic Analysis Conference, San Antonio (Nov. 1987)

"Public Utility Commissions and the Nuclear Plant Contractor," Construction Litigation Superconference, Laguna Beach, California (Dec. 1986)

"Development of Cogeneration Policies in Texas," University of Georgia Fifth Annual Public Utilities Conference, Atlanta (Sep. 1985)

"Wheeling for Power Sales," Energy Bureau Cogeneration Conference, Houston (Nov. 1985).

"Asymmetric Discounting of Information and Relative Liquidity: Some Empirical Evidence for Common Stocks" (with John Groth and Kerry Cooper), Southern Finance Association, New Orleans (Nov. 1982)

"Used and Useful Planning Models," Planning Executive Institute, 27th Corporate Planning Conference, Los Angeles (Nov. 1979)

"Staff Input to Commission Rate of Return Decisions," The National Society of Rate of Return Analysts, New York (Oct. 1979)

"Electric Rate Design in Texas," Southwestern Economics Association, Fort Worth (Mar. 1979)

"Discounted Cash Life: A New Measure of the Time Dimension in Capital Budgeting," with David Cordell, Southern Finance Association, New Orleans (Nov. 1978)

"The Relative Value of Statistics of Ex Post Common Stock Distributions to Explain Variance," with Charles G. Martin, Southern Finance Association, Atlanta (Nov. 1977)

"An ANOVA Representation of Common Stock Returns as a Framework for the Allocation of Portfolio Management Effort," with Charles G. Martin, Financial Management Association, Montreal (Oct. 1976)

"A Growth-Optimal Portfolio Selection Model with Finite Horizon," with Henry A. Latané, American Finance Association, San Francisco (Dec. 1974)

"An Optimal Approach to the Finance Decision," with Henry A. Latané, Southern Finance Association, Atlanta (Nov. 1974)

"A Pragmatic Approach to the Capital Structure Decision Based on Long-Run Growth," with Henry A. Latané, Financial Management Association, San Diego (Oct. 1974)

"Multi-period Wealth Distributions and Portfolio Theory," Southern Finance Association, Houston (Nov. 1973)

"Growth Rates, Expected Returns, and Variance in Portfolio Selection and Performance Evaluation," with Henry A. Latané, Econometric Society, Oslo, Norway (Aug. 1973)

CONSTANT GROWTH DCF MODEL

UTILITY PROXY GROUP

	(a)	(a)		(b)	(c)	(d)	(e)	(f)	(f)	(f)	(f)
	Dividend Yield			Growth Rates				Cost of Equity Estimates			
Company	Recent Price	Dividends	Yield	IBES	VL EPS	Reuters	br+sv	IBES	VL EPS	Reuters	br+sv Growth
Alliant Energy	$ 45.21	$ 1.27	2.8%	6.0%	5.0%	5.7%	4.3%	8.8%	7.8%	8.5%	7.1%
American Elec Pwr	$ 47.26	$ 1.62	3.4%	4.0%	7.0%	4.8%	6.1%	7.4%	10.4%	8.2%	9.5%
CenterPoint Energy	$ 17.83	$ 0.70	3.9%	11.0%	9.5%	9.6%	9.8%	14.9%	13.4%	13.5%	13.8%
Dominion Resources	$ 87.65	$ 2.87	3.3%	8.0%	15.0%	9.3%	11.1%	11.3%	18.3%	12.5%	14.4%
DPL, Inc.	$ 30.32	$ 1.04	3.4%	8.0%	8.0%	9.0%	8.8%	11.4%	11.4%	12.4%	12.2%
DTE Energy	$ 47.47	$ 2.15	4.5%	6.0%	4.0%	5.8%	2.5%	10.5%	8.5%	10.3%	7.0%
Energy East Corp.	$ 24.75	$ 1.22	4.9%	4.0%	3.0%	4.0%	2.6%	8.9%	7.9%	8.9%	7.5%
IDACORP, Inc.	$ 33.53	$ 1.20	3.6%	5.0%	8.0%	5.0%	4.6%	8.6%	11.6%	8.6%	8.1%
Integrys Energy	$ 54.54	$ 2.64	4.8%	5.0%	1.0%	4.3%	5.4%	9.8%	5.8%	9.2%	10.3%
NiSource Inc.	$ 24.20	$ 0.92	3.8%	3.0%	5.5%	3.4%	3.5%	6.8%	9.3%	7.2%	7.3%
Northeast Utilities	$ 31.39	$ 0.77	2.5%	11.0%	7.5%	8.4%	4.1%	13.5%	10.0%	10.9%	6.6%
Pepco Holdings	$ 27.14	$ 1.04	3.8%	9.0%	8.0%	7.3%	6.0%	12.8%	11.8%	11.2%	9.9%
PG&E Corp.	$ 47.32	$ 1.44	3.0%	8.0%	5.5%	8.1%	5.9%	11.0%	8.5%	11.1%	8.9%
PNM Resources	$ 31.39	$ 0.94	3.0%	10.0%	6.0%	10.2%	4.9%	13.0%	9.0%	13.2%	7.9%
PPL Corp.	$ 38.92	$ 1.22	3.1%	12.0%	10.5%	10.6%	9.0%	15.1%	13.6%	13.7%	12.1%
Progress Energy	$ 50.70	$ 2.45	4.8%	4.0%	0.0%	4.5%	2.2%	8.8%	4.8%	9.4%	7.0%
P S Enterprise Group	$ 78.30	$ 2.34	3.0%	9.0%	6.0%	10.8%	8.0%	12.0%	9.0%	13.8%	11.0%
Wisconsin Energy	$ 48.80	$ 1.02	2.1%	9.0%	6.5%	7.8%	6.9%	11.1%	8.6%	9.9%	9.0%
Xcel Energy, Inc.	$ 24.13	$ 0.93	3.9%	6.0%	6.0%	6.5%	4.6%	9.9%	9.9%	10.4%	8.4%
Average (g)								**11.1%**	**10.1%**	**10.7%**	**10.0%**

(a) The Value Line Investment Survey, Summary and Index (Mar. 30, 2007).
(b) I/B/E/S International growth rates from Standard & Poor's Earnings Guide, (March 2007).
(c) The Value Line Investment Survey (Feb. 9, Mar. 2, & Mar. 30, 2007).
(d) http://stocks.us.reuters.com (retrieved Apr. 18, 2007).
(e) See Exhibit 3.
(f) Sum of dividend yield and respective growth rate.
(g) Excludes highlighted figures.

UTILITY PROXY GROUP

SUSTAINABLE GROWTH RATE

	(a)	(a)	(a)	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	Projections			Historical		Mid-Year					
			Net Book	Net Book	Annual	Adjustment		Adjusted	"b x r"	"sv"	Sustainable
Company	EPS	DPS	Value	Value	Change	Factor	"b"	"r"	growth	Factor	Growth
Alliant Energy	$2.75	$1.49	$28.20	$22.83	4.3%	1.0211	45.8%	10.0%	4.6%	-0.23%	4.3%
American Elec Pwr	$4.00	$2.20	$31.75	$23.73	6.0%	1.0291	45.0%	13.0%	5.8%	0.27%	6.1%
CenterPoint Energy	$1.50	$1.00	$7.50	$4.96	8.6%	1.0413	33.3%	20.8%	6.9%	2.89%	9.8%
Dominion Resources	$10.00	$3.30	$63.50	$37.00	11.4%	1.0540	67.0%	16.6%	11.1%	0.00%	11.1%
DPL, Inc.	$1.90	$1.20	$10.15	$5.95	11.3%	1.0534	36.8%	19.7%	7.3%	1.55%	8.8%
DTE Energy	$3.50	$2.40	$38.25	$33.02	3.0%	1.0147	31.4%	9.3%	2.9%	-0.42%	2.5%
Energy East Corp.	$2.00	$1.45	$21.50	$18.95	2.6%	1.0126	27.5%	9.4%	2.6%	0.00%	2.6%
IDACORP, Inc.	$2.45	$1.20	$30.45	$24.04	4.8%	1.0236	51.0%	8.2%	4.2%	0.36%	4.6%
Integrys Energy	$4.20	$2.76	$42.95	$35.35	4.0%	1.0195	34.3%	10.0%	3.4%	2.02%	5.4%
NiSource Inc.	$1.75	$1.00	$22.00	$18.32	3.7%	1.0183	42.9%	8.1%	3.5%	0.00%	3.5%
Northeast Utilities	$1.75	$0.98	$20.45	$16.70	4.1%	1.0203	44.0%	8.7%	3.8%	0.30%	4.1%
Pepco Holdings	$2.45	$1.20	$21.55	$18.75	2.8%	1.0139	51.0%	11.5%	5.9%	0.16%	6.0%
PG&E Corp.	$3.00	$1.66	$26.95	$19.60	6.6%	1.0318	44.7%	11.5%	5.1%	0.72%	5.9%
PNM Resources	$2.00	$1.10	$24.70	$18.70	5.7%	1.0278	45.0%	8.3%	3.7%	1.17%	4.9%
PPL Corp.	$3.75	$2.00	$18.00	$13.30	6.2%	1.0303	46.7%	21.5%	10.0%	-1.01%	9.0%
Progress Energy	$3.20	$2.54	$34.45	$32.15	1.4%	1.0069	20.6%	9.4%	1.9%	0.25%	2.2%
P S Enterprise Group	$5.20	$2.58	$38.20	$25.50	8.4%	1.0404	50.4%	14.2%	7.1%	0.90%	8.0%
Wisconsin Energy	$3.50	$1.30	$32.75	$24.70	5.8%	1.0282	62.9%	11.0%	6.9%	0.00%	6.9%
Xcel Energy	$1.75	$1.10	$16.25	$13.37	4.0%	1.0195	37.1%	11.0%	4.1%	0.50%	4.6%

(a) The Value Line Investment Survey (Feb. 9, Mar. 2 & Mar. 30, 2007).
(b) Annual growth in book value per share from historical to projected period.
(c) Equal to 2(1+b)/(2+b), where b = annual change in net book value.
(d) (EPS-DPS)/EPS.
(e) (Projected EPS/Projected Net Book Value) x Mid-Year Adjustment Factor.
(f) (d) x (e).
(g) "s" equals projected market-to-book ratio x growth in common shares. "v" equals (1- 1/projected market-to-book ratio).
(h) (f) + (g).

DISCOUNTED CASH FLOW MODEL

NON-UTILITY PROXY GROUP

		(a)	(b)	(a)	(c)	(d)	(e)	(e)	(e)	(e)
			Growth Rates				Cost of Equity Estimates			
	Company	Dividend Yield	I/B/E/S	VL EPS	Reuters	br+sv	I/B/E/S	VL EPS	Reuters	br+sv
1	3M Company	2.52%	11%	7.0%	10.9%	13.1%	13.5%	9.5%	13.5%	15.6%
2	Abbott Labs.	2.33%	10%	8.0%	10.5%	13.3%	12.3%	10.3%	12.8%	15.6%
3	Allstate Corp.	2.53%	10%	8.0%	8.8%	7.9%	12.5%	10.5%	11.3%	10.4%
4	Anheuser-Busch	2.35%	9%	5.5%	9.1%	28.9%	11.4%	7.9%	11.4%	31.2%
5	Automatic Data Proc.	1.89%	12%	11.0%	13.0%	10.2%	13.9%	12.9%	14.9%	12.1%
6	Bard (C.R.)	0.70%	15%	14.5%	14.8%	12.1%	15.7%	15.2%	15.5%	12.8%
7	BB&T Corp.	4.24%	9%	7.5%	8.1%	8.2%	13.2%	11.7%	12.3%	12.5%
8	Becton, Dickinson	1.29%	13%	11.0%	12.3%	12.9%	14.3%	12.3%	13.5%	14.2%
9	Bemis Co.	2.47%	11%	9.0%	10.7%	8.3%	13.5%	11.5%	13.1%	10.8%
10	Brown-Forman 'B'	1.85%	10%	12.0%	11.3%	13.9%	11.9%	13.9%	13.2%	15.7%
11	Coca-Cola	2.83%	8%	6.5%	8.5%	9.5%	10.8%	9.3%	11.3%	12.3%
12	Colgate-Palmolive	2.15%	10%	11.0%	10.3%	20.9%	12.2%	13.2%	12.4%	23.1%
13	Commerce Bancshs.	2.06%	7%	5.0%	6.8%	8.5%	9.1%	7.1%	8.8%	10.6%
14	Du Pont	3.00%	8%	8.0%	7.6%	13.3%	11.0%	11.0%	10.6%	16.3%
15	Ecolab Inc.	1.08%	18%	12.5%	14.2%	22.4%	19.1%	13.6%	15.3%	23.5%
16	Exxon Mobil Corp.	1.68%	10%	8.0%	6.0%	11.7%	11.7%	9.7%	7.7%	13.4%
17	Fifth Third Bancorp	4.31%	10%	5.5%	10.2%	5.1%	14.3%	9.8%	14.5%	9.4%
18	Fortune Brands	1.98%	11%	7.0%	11.2%	12.8%	13.0%	9.0%	13.2%	14.8%
19	Gannett Co.	2.21%	8%	3.0%	6.7%	8.0%	10.2%	5.2%	8.9%	10.3%
20	Gen'l Dynamics	1.51%	10%	12.0%	10.4%	13.0%	11.5%	13.5%	12.0%	14.5%
21	Gen'l Mills	2.56%	8%	7.5%	8.6%	7.2%	10.6%	10.1%	11.2%	9.8%
22	Genuine Parts	3.00%	12%	9.5%	9.0%	9.3%	15.0%	12.5%	12.0%	12.3%
23	Harte-Hanks	1.01%	11%	11.0%	10.8%	15.2%	12.0%	12.0%	11.8%	16.2%
24	Heinz (H.J.)	2.98%	7%	6.0%	7.1%	10.3%	10.0%	9.0%	10.0%	13.3%
25	Hershey Co.	1.98%	9%	9.0%	9.1%	22.3%	11.0%	11.0%	11.1%	24.3%
26	Hormel Foods	1.62%	10%	12.0%	9.4%	12.0%	11.6%	13.6%	11.0%	13.7%
27	Illinois Tool Works	1.62%	13%	12.0%	12.5%	13.7%	14.6%	13.6%	14.1%	15.3%
28	ITT Corp.	0.93%	12%	14.0%	12.7%	17.1%	12.9%	14.9%	13.6%	18.0%
29	Johnson & Johnson	2.49%	8%	7.5%	9.8%	9.9%	10.5%	10.0%	12.3%	12.4%
30	Kimberly-Clark	3.08%	7%	6.5%	7.4%	10.1%	10.1%	9.6%	10.5%	13.2%
31	Kraft Foods	3.17%	7%	5.0%	7.4%	4.7%	10.2%	8.2%	10.6%	7.8%
32	Lilly (Eli)	3.18%	8%	7.5%	8.1%	11.7%	11.2%	10.7%	11.3%	14.8%
33	Liz Claiborne	0.53%	13%	7.5%	12.1%	11.6%	13.5%	8.0%	12.6%	12.2%
34	Lockheed Martin	1.43%	11%	13.5%	10.0%	16.2%	12.4%	14.9%	11.4%	17.6%
35	Manulife Financial	2.25%	14%	10.0%	12.0%	9.4%	16.3%	12.3%	14.2%	11.7%

DISCOUNTED CASH FLOW MODEL

NON-UTILITY PROXY GROUP

		(a)	(b)	(a)	(c)	(d)	(e)	(e)	(e)	(e)
			Growth Rates				Cost of Equity Estimates			
	Company	Dividend Yield	I/B/E/S	VL EPS	Reuters	br+sv	I/B/E/S	VL EPS	Reuters	br+sv
36	McClatchy Co.	2.29%	8%	-1.0%	6.3%	5.3%	10.3%	1.3%	8.5%	7.6%
37	McGraw-Hill	1.31%	12%	10.5%	11.4%	12.7%	13.3%	11.8%	12.7%	14.0%
38	Medtronic, Inc.	0.90%	14%	12.5%	14.5%	13.6%	14.9%	13.4%	15.4%	14.5%
39	Meredith Corp.	1.29%	12%	14.0%	11.9%	12.2%	13.3%	15.3%	13.2%	13.5%
40	Moody's Corp.	0.52%	14%	14.5%	14.0%	34.0%	14.5%	15.0%	14.6%	34.5%
41	National City Corp.	4.36%	7%	2.5%	8.1%	6.5%	11.4%	6.9%	12.5%	10.8%
42	New York Times	3.91%	8%	-3.5%	5.7%	5.2%	11.9%	0.4%	9.6%	9.1%
43	NIKE, Inc. 'B'	1.41%	14%	10.5%	14.2%	11.0%	15.4%	11.9%	15.6%	12.4%
44	PepsiCo, Inc.	1.89%	11%	10.5%	11.0%	14.3%	12.9%	12.4%	12.9%	16.2%
45	Pfizer, Inc.	4.57%	5%	4.0%	6.6%	4.6%	9.6%	8.6%	11.2%	9.1%
46	Pitney Bowes	2.91%	9%	7.5%	10.0%	20.3%	11.9%	10.4%	12.9%	23.2%
47	Procter & Gamble	1.96%	11%	10.5%	11.2%	7.1%	13.0%	12.5%	13.1%	9.0%
48	Sara Lee Corp.	2.39%	7%	-5.0%	6.8%	7.9%	9.4%	-2.6%	9.2%	10.3%
49	Sigma-Aldrich	1.11%	9%	7.0%	10.4%	14.8%	10.1%	8.1%	11.5%	15.9%
50	SLM Corporation	2.45%	16%	14.0%	15.8%	14.5%	18.5%	16.5%	18.3%	16.9%
51	Sysco Corp.	2.25%	14%	12.5%	13.6%	11.3%	16.3%	14.8%	15.8%	13.6%
52	Union Pacific	1.38%	17%	16.5%	12.8%	9.4%	18.4%	17.9%	14.2%	10.7%
53	United Parcel Serv.	2.40%	12%	10.0%	11.5%	11.2%	14.4%	12.4%	13.9%	13.6%
54	UnitedHealth Group	0.06%	16%	16.0%	15.8%	12.5%	16.1%	16.1%	15.9%	12.5%
55	Wal-Mart Stores	1.88%	13%	10.5%	12.4%	13.8%	14.9%	12.4%	14.3%	15.7%
56	Walgreen Co.	0.67%	15%	14.5%	15.4%	14.3%	15.7%	15.2%	16.1%	15.0%
57	Washington Federal	3.50%	7%	9.0%	7.9%	9.6%	10.5%	12.5%	11.4%	13.1%
58	Washington Post	1.07%	10%	11.0%	9.7%	10.4%	11.1%	12.1%	10.8%	11.4%
59	Wells Fargo	3.24%	13%	10.5%	11.2%	11.2%	16.2%	13.7%	14.4%	14.4%
60	Wilmington Trust	3.06%	9%	9.5%	8.8%	11.5%	12.1%	12.6%	11.9%	14.6%
61	Wrigley (Wm.) Jr.	2.28%	10%	8.5%	10.4%	10.5%	12.3%	10.8%	12.7%	12.8%
	Average (f)						**12.6%**	**11.9%**	**12.5%**	**12.8%**

(a) www.valueline.com (retrieved Apr. 5, 2007).
(b) I/B/E/S International growth rates from Standard & Poor's Earnings Guide, (March 2007).
(c) http://stocks.us.reuters.com (retrieved Apr. 5, 2007).
(d) See Exhibit 5.
(e) Sum of dividend yield and respective growth rate.
(f) Excludes highlighted figures.

NON-UTILITY PROXY GROUP

SUSTAINABLE GROWTH RATE

		(a)	(a)	(a)	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
		Projections			Historical		Mid-Year					
				Net Book	Net Book	Annual	Adjustment		Adjusted	"b x r"	"sv"	Sustainable
	Company	EPS	DPS	Value	Value	Change	Factor	"b"	"r"	growth	Factor	Growth
1	3M Company	$5.50	$2.18	$21.70	$13.39	10.1%	1.0482	60.4%	25.3%	15.3%	-2.24%	13.1%
2	Abbott Labs.	$4.00	$1.60	$19.25	$10.15	13.7%	1.0639	60.0%	22.1%	13.3%	0.00%	13.3%
3	Allstate Corp.	$6.25	$2.00	$55.85	$35.12	9.7%	1.0464	68.0%	11.7%	8.0%	-0.07%	7.9%
4	Anheuser-Busch	$3.55	$1.18	$6.60	$4.31	8.9%	1.0426	66.8%	56.1%	37.4%	-8.55%	28.9%
5	Automatic Data Proc.	$2.90	$1.00	$18.40	$9.97	13.0%	1.0612	65.5%	16.7%	11.0%	-0.79%	10.2%
6	Bard (C.R.)	$6.35	$1.00	$32.50	$16.55	14.5%	1.0674	84.3%	20.9%	17.6%	-5.42%	12.1%
7	BB&T Corp.	$4.00	$1.95	$25.80	$20.49	4.7%	1.0230	51.3%	15.9%	8.1%	0.09%	8.2%
8	Becton, Dickinson	$5.40	$1.60	$29.00	$15.63	13.2%	1.0617	70.4%	19.8%	13.9%	-1.01%	12.9%
9	Bemis Co.	$2.80	$1.04	$21.55	$14.05	8.9%	1.0427	62.9%	13.5%	8.5%	-0.17%	8.3%
10	Brown-Forman 'B'	$5.00	$1.40	$22.40	$12.76	11.9%	1.0562	72.0%	23.6%	17.0%	-3.11%	13.9%
11	Coca-Cola	$3.00	$1.56	$11.55	$6.90	10.9%	1.0515	48.0%	27.3%	13.1%	-3.61%	9.5%
12	Colgate-Palmolive	$5.00	$2.16	$10.40	$2.32	35.0%	1.1489	56.8%	55.2%	31.4%	-10.45%	20.9%
13	Commerce Bancshs.	$4.00	$1.20	$31.50	$20.59	8.9%	1.0425	70.0%	13.2%	9.3%	-0.73%	8.5%
14	Du Pont	$4.00	$1.68	$16.65	$10.22	10.3%	1.0488	58.0%	25.2%	14.6%	-1.35%	13.3%
15	Ecolab Inc.	$2.65	$0.65	$9.80	$6.70	7.9%	1.0380	75.5%	28.1%	21.2%	1.22%	22.4%
16	Exxon Mobil Corp.	$6.75	$1.70	$36.55	$19.87	13.0%	1.0609	74.8%	19.6%	14.7%	-2.97%	11.7%
17	Fifth Third Bancorp	$3.50	$2.10	$22.65	$18.00	4.7%	1.0230	40.0%	15.8%	6.3%	-1.26%	5.1%
18	Fortune Brands	$6.80	$1.75	$44.50	$24.87	12.3%	1.0581	74.3%	16.2%	12.0%	0.79%	12.8%
19	Gannett Co.	$5.75	$1.56	$50.00	$31.80	9.5%	1.0452	72.9%	12.0%	8.8%	-0.72%	8.0%
20	Gen'l Dynamics	$6.75	$1.40	$42.50	$24.22	11.9%	1.0562	79.3%	16.8%	13.3%	-0.32%	13.0%
21	Gen'l Mills	$4.10	$1.70	$19.25	$15.38	4.6%	1.0224	58.5%	21.8%	12.7%	-5.52%	7.2%
22	Genuine Parts	$4.20	$1.90	$23.50	$14.95	9.5%	1.0452	54.8%	18.7%	10.2%	-0.91%	9.3%
23	Harte-Hanks	$2.15	$0.40	$9.30	$6.92	6.1%	1.0296	81.4%	23.8%	19.4%	-4.17%	15.2%
24	Heinz (H.J.)	$3.20	$1.68	$9.10	$6.18	8.0%	1.0387	47.5%	36.5%	17.3%	-7.00%	10.3%
25	Hershey Co.	$3.45	$1.45	$5.65	$4.25	5.9%	1.0285	58.0%	62.8%	36.4%	-14.06%	22.3%
26	Hormel Foods	$3.20	$0.80	$20.80	$11.42	12.7%	1.0599	75.0%	16.3%	12.2%	-0.18%	12.0%
27	Illinois Tool Works	$4.85	$1.00	$24.80	$16.09	9.0%	1.0432	79.4%	20.4%	16.2%	-2.53%	13.7%
28	ITT Corp.	$5.00	$0.60	$28.95	$14.75	14.4%	1.0673	88.0%	18.4%	16.2%	0.84%	17.1%
29	Johnson & Johnson	$5.20	$2.04	$25.45	$13.75	13.1%	1.0615	60.8%	21.7%	13.2%	-3.24%	9.9%
30	Kimberly-Clark	$5.15	$2.75	$17.80	$13.38	5.9%	1.0285	46.6%	29.8%	13.9%	-3.76%	10.1%
31	Kraft Foods	$2.60	$1.00	$23.00	$17.72	5.4%	1.0261	61.5%	11.6%	7.1%	-2.47%	4.7%
32	Lilly (Eli)	$4.30	$2.10	$15.85	$9.55	10.7%	1.0506	51.2%	28.5%	14.6%	-2.93%	11.7%
33	Liz Claiborne	$4.35	$0.23	$35.45	$19.08	13.2%	1.0619	94.7%	13.0%	12.3%	-0.71%	11.6%
34	Lockheed Martin	$8.65	$2.25	$39.50	$16.35	19.3%	1.0880	74.0%	23.8%	17.6%	-1.47%	16.2%
35	Manulife Financial	$2.90	$0.90	$20.35	$14.26	7.4%	1.0355	69.0%	14.8%	10.2%	-0.76%	9.4%

NON-UTILITY PROXY GROUP

SUSTAINABLE GROWTH RATE

	Company	(a) Projections EPS	(a) Projections DPS	(a) Projections Net Book Value	(a) Historical Net Book Value	(b) Annual Change	(c) Mid-Year Adjustment Factor	(d) "b"	(e) Adjusted "r"	(f) "b x r" growth	(g) "sv" Factor	(h) Sustainable Growth
36	McClatchy Co.	$3.10	$0.96	$46.95	$33.49	7.0%	1.0338	69.0%	6.8%	4.7%	0.64%	5.3%
37	McGraw-Hill	$3.50	$0.82	$17.70	$8.80	15.0%	1.0698	76.6%	21.2%	16.2%	-3.54%	12.7%
38	Medtronic, Inc.	$4.35	$0.83	$18.00	$10.00	12.5%	1.0587	80.9%	25.6%	20.7%	-7.11%	13.6%
39	Meredith Corp.	$4.85	$0.90	$24.45	$13.22	13.1%	1.0614	81.4%	21.1%	17.1%	-4.97%	12.2%
40	Moody's Corp.	$3.85	$0.44	$8.40	$0.60	69.5%	1.2579	88.6%	57.7%	51.1%	-17.07%	34.0%
41	National City Corp.	$3.90	$1.85	$31.00	$23.06	6.1%	1.0296	52.6%	13.0%	6.8%	-0.33%	6.5%
42	New York Times	$1.50	$0.85	$11.60	$10.44	2.1%	1.0105	43.3%	13.1%	5.7%	-0.49%	5.2%
43	NIKE, Inc. 'B'	$7.20	$1.78	$44.20	$21.49	15.5%	1.0720	75.3%	17.5%	13.1%	-2.16%	11.0%
44	PepsiCo, Inc.	$4.25	$1.56	$13.50	$8.58	9.5%	1.0453	63.3%	32.9%	20.8%	-6.51%	14.3%
45	Pfizer, Inc.	$2.50	$1.32	$11.65	$8.88	5.6%	1.0271	47.2%	22.0%	10.4%	-5.83%	4.6%
46	Pitney Bowes	$3.90	$1.40	$9.15	$5.74	9.8%	1.0466	64.1%	44.6%	28.6%	-8.31%	20.3%
47	Procter & Gamble	$4.50	$1.48	$33.30	$19.33	11.5%	1.0543	67.1%	14.2%	9.6%	-2.48%	7.1%
48	Sara Lee Corp.	$1.00	$0.40	$2.95	$3.74	-4.6%	0.9763	60.0%	33.1%	19.9%	-11.92%	7.9%
49	Sigma-Aldrich	$2.65	$0.52	$14.75	$10.40	7.2%	1.0349	80.4%	18.6%	14.9%	-0.15%	14.8%
50	SLM Corporation	$4.75	$1.45	$22.50	$7.81	23.6%	1.1054	69.5%	23.3%	16.2%	-1.73%	14.5%
51	Sysco Corp.	$2.50	$1.10	$6.55	$4.39	8.3%	1.0400	56.0%	39.7%	22.2%	-10.90%	11.3%
52	Union Pacific	$10.00	$1.48	$89.30	$54.50	10.4%	1.0493	85.2%	11.8%	10.0%	-0.64%	9.4%
53	United Parcel Serv.	$5.75	$2.00	$30.55	$17.25	12.1%	1.0571	65.2%	19.9%	13.0%	-1.78%	11.2%
54	UnitedHealth Group	$5.60	$0.05	$24.50	$15.47	9.6%	1.0459	99.1%	23.9%	23.7%	-11.22%	12.5%
55	Wal-Mart Stores	$4.25	$0.90	$23.20	$12.77	12.7%	1.0596	78.8%	19.4%	15.3%	-1.48%	13.8%
56	Walgreen Co.	$3.45	$0.48	$20.40	$10.04	15.2%	1.0708	86.1%	18.1%	15.6%	-1.30%	14.3%
57	Washington Federal	$2.75	$0.96	$18.80	$14.46	5.4%	1.0262	65.1%	15.0%	9.8%	-0.21%	9.6%
58	Washington Post	$54.45	$9.40	$456.50	$274.74	10.7%	1.0507	82.7%	12.5%	10.4%	0.00%	10.4%
59	Wells Fargo	$3.75	$1.28	$21.90	$11.61	13.5%	1.0634	65.9%	18.2%	12.0%	-0.83%	11.2%
60	Wilmington Trust	$3.80	$1.60	$21.40	$14.92	7.5%	1.0361	57.9%	18.4%	10.7%	0.86%	11.5%
61	Wrigley (Wm.) Jr.	$2.90	$1.25	$13.70	$7.99	11.4%	1.0539	56.9%	22.3%	12.7%	-2.22%	10.5%

(a) www.valueline.com (retrieved Apr. 5, 2007).
(b) Annual growth in book value per share from historical to projected period.
(c) Equal to 2(1+b)/(2+b), where b = annual change in net book value.
(d) (EPS-DPS)/EPS.
(e) (Projected EPS/Projected Net Book Value) x Mid-Year Adjustment Factor.
(f) (d) x (e).
(g) "s" equals projected market-to-book ratio x growth in common shares. "v" equals (1- 1/projected market-to-book ratio).
(h) (f) + (g).

CAPITAL ASSET PRICING MODEL

FORWARD-LOOKING RISK PREMIUM

Market Rate of Return		
Dividend Yield (a)	2.1%	
Growth Rate (b)	11.2%	
Market Return (c)		13.3%
Less: Risk-Free Rate (d)		
Long-term Treasury Bond Yield		4.8%
Market Risk Premium (e)		8.5%
Utility Proxy Group Beta (f)		0.95
Utility Proxy Group Risk Premium (g)		8.0%
Plus: Risk-free Rate (d)		
Long-term Treasury Bond Yield		4.8%
Implied Cost of Equity (h)		**12.8%**

(a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (Retreived Feb. 9, 2007).
(b) Weighted average of IBES and Value Line growth rates for the dividend paying firms in the S&P 500 based on data from Standard & Poor's Earnings Guide (Jan. 2007) and www.valueline.com (Retreived Feb. 9, 2007).
(c) (a) + (b)
(d) Average yield on 20-year Treasury bonds for Mar. 2007 from the Federal Reserve Board at http://www.federalreserve.gov/releases/h15/data.htm.
(e) (c) - (d).
(f) The Value Line Investment Survey (Feb. 9, Mar 2, & Mar. 30, 2007)
(g) (e) x (f).
(h) (d) + (g).

CAPITAL ASSET PRICING MODEL

HISTORICAL RISK PREMIUM

Market Risk Premium	
Long-Horizon Equity Risk Premium (a)	7.1%
Utility Proxy Group Beta (b)	0.95
Utility Proxy Group Risk Premium (c)	6.7%
Plus: Risk-free Rate (d)	
Long-term Treasury Bond Yield	4.8%
Implied Cost of Equity (e)	**11.5%**

(a) Arithmetic mean risk premium on Large Company Stocks from 1926-2005 reported by Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, Valuation Edition, 2006 Yearbook* , at Appendix C, Table C-1, p. 262.

(b) The Value Line Investment Survey (Feb. 9, Mar 2, & Mar. 30, 2007)

(c) (a) x (b).

(d) Average yield on 20-year Treasury bonds for Mar. 2007 from the Federal Reserve Board at http://www.federalreserve.gov/releases/h15/data.htm.

(e) (c) + (d).

COMPARABLE EARNINGS APPROACH

UTILITY PROXY GROUP

Company	(a) Expected Return on Common Equity	(b) Adjustment Factor	(c) Adjusted Return on Common Equity
Alliant Energy	9.5%	1.0211	9.7%
American Elec Pwr	12.5%	1.0291	12.9%
CenterPoint Energy	20.0%	1.0413	20.8%
Dominion Resources	16.0%	1.0540	16.9%
DPL, Inc.	18.5%	1.0534	19.5%
DTE Energy	9.5%	1.0147	9.6%
Energy East Corp.	9.5%	1.0126	9.6%
IDACORP, Inc.	8.0%	1.0236	8.2%
Integrys Energy	10.0%	1.0195	10.2%
NiSource Inc.	8.0%	1.0183	8.1%
Northeast Utilities	8.5%	1.0203	8.7%
Pepco Holdings	11.0%	1.0139	11.2%
PG&E Corp.	11.0%	1.0318	11.4%
PNM Resources	8.0%	1.0278	8.2%
PPL Corp.	21.5%	1.0303	22.2%
Progress Energy	9.0%	1.0069	9.1%
P S Enterprise Group	13.5%	1.0404	14.0%
Wisconsin Energy	11.0%	1.0282	11.3%
Xcel Energy, Inc.	11.0%	1.0195	11.2%
Average (d)			**10.6%**

(a) 3-5 year projections from The Value Line Investment Survey (Feb. 9, Mar. 2, & Mar. 30, 2007)
(b) See Exhibit 3.
(c) (a) x (b).
(d) Excludes highlighted figures.

UTILITY PROXY GROUP

CAPITAL STRUCTURE

	At December 31, 2006 (a)			Value Line Projected (b)		
Company	Long-term Debt	Preferred	Common Equity	Long-term Debt	Other	Common Equity
Alliant Energy	34.4%	5.5%	60.1%	43.5%	4.0%	52.5%
American Elec Pwr	59.1%	0.3%	40.6%	57.0%	0.0%	43.0%
Black Hills Corp.	44.8%	0.0%	55.2%	47.0%	0.0%	53.0%
Constellation Energy	51.0%	1.9%	47.1%	38.5%	1.5%	60.0%
Dominion Resources	53.7%	0.9%	45.4%	44.0%	1.0%	55.0%
DTE Energy	57.1%	0.0%	42.9%	57.0%	0.0%	43.0%
Edison International	51.9%	5.0%	43.2%	46.5%	4.5%	49.0%
Empire District Elec.	49.7%	0.0%	50.3%	51.5%	0.0%	48.5%
Energy East Corp.	58.0%	0.4%	41.7%	54.5%	0.5%	45.0%
Entergy Corp.	51.2%	2.0%	46.8%	48.5%	1.5%	50.0%
FirstEnergy Corp.	53.5%	0.0%	46.5%	47.5%	0.0%	52.5%
Great Plains Energy	41.9%	1.6%	56.4%	49.0%	0.0%	51.0%
Hawaiian Elec.	50.1%	1.5%	48.4%	46.5%	1.5%	52.0%
IDACORP, Inc.	47.7%	0.0%	52.3%	47.5%	0.0%	52.5%
NiSource Inc.	51.1%	0.0%	48.9%	47.5%	0.0%	52.5%
Northeast Utilities	50.4%	2.0%	47.6%	49.5%	1.5%	49.0%
OGE Energy Corp.	45.7%	0.0%	54.3%	44.0%	0.0%	56.0%
Otter Tail Corp.	33.8%	2.0%	64.2%	49.0%	1.5%	49.5%
PG&E Corp.	46.4%	1.7%	51.9%	46.5%	1.5%	52.0%
PNM Resources	50.9%	0.3%	48.8%	51.5%	0.5%	48.0%
PPL Corp.	58.6%	2.3%	39.2%	49.5%	2.0%	48.5%
Progress Energy	52.2%	0.5%	47.3%	50.0%	0.5%	49.5%
PS Enterprise Group	57.1%	1.6%	41.3%	49.0%	0.5%	50.5%
Puget Energy	55.9%	0.8%	43.3%	52.0%	0.0%	48.0%
Sempra Energy	40.4%	1.4%	58.2%	38.5%	1.0%	60.5%
Westar Energy	50.0%	0.7%	49.3%	50.5%	0.5%	49.0%
Wisconsin Energy	53.6%	0.5%	45.9%	48.5%	0.5%	51.0%
Xcel Energy, Inc.	53.4%	0.8%	45.8%	49.5%	0.5%	50.0%
Average	**50.1%**	**1.2%**	**48.7%**	**48.4%**	**0.9%**	**50.8%**

(a) Company Form 10-K and Annual Reports.

(b) The Value Line Investment Survey (Feb. 9, Mar. 2, & Mar. 30, 2007).