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UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION)		
OF IDAHO POWER COMPANY FOR)		
AUTHORITY TO INCREASE ITS RATES)	CASE NO.	IPC-E-11-08
AND CHARGES FOR ELECTRIC SERVICE)		
TO ITS CUSTOMERS IN THE STATE OF)		
IDAHO.)		
)		

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

WILLIAM E. AVERA

DIRECT TESTIMONY OF WILLIAM E. AVERA

TABLE OF CONTENTS

I. IN	TRODI	UCTION	1	L
Α.	. 0	vervie	w	3
B.			of Conclusions	
II. FU	NDAM	ENTAL	ANALYSES 10)
Α.			ower Company 10)
В.			ng Risks	
С.			of Capital Market Conditions 22	2
III. CA	PITA	L MARK	ET ESTIMATES 27	7
Α.			w 27	
В.			ble Risk Proxy Groups 32	
С.			ted Cash Flow Analyses 37	
D.			Asset Pricing Model 55	5
E.	. R:	isk Pr	emium Approach 62	2
F.	. Co	ompara	ble Earnings Approach 65	5
G.			on Costs)
IV. RE	TURN	ON EQ	UITY FOR IDAHO POWER COMPANY	L
Α.			tions for Financial Integrity 72	2
В.	. Ca	apital	Structure 75	5
С.			on Equity Recommendation 81	L
Exhibit	No.	1:	Qualifications of William E. Avera	
Exhibit	No.	2:	DCF Model - Utility Proxy Group	
Exhibit	No.	3:	Sustainable Growth - Utility Proxy Group	
Exhibit	No.	4:	DCF Model - Non-Utility Proxy Group	
Exhibit	No.	5 :	Sustainable Growth - Non-Utility Proxy	
		_	Group	
Exhibit			CAPM - Current Bond Yield	
Exhibit		7:	CAPM - Projected Bond Yield	
Exhibit			Electric Utility Risk Premium	
Exhibit			Comparable Earnings Approach	
Exhibit	No.	10:	Capital Structure	

1 I. INTRODUCTION 2 0. Please state your name and business address. 3 William E. Avera, 3907 Red River, Austin, Α. 4 Texas. 5 Q. In what capacity are you employed? 6 I am the President of FINCAP, Inc., a firm Α. 7 providing financial, economic, and policy consulting 8 services to business and government. 9 Please describe your educational background 0. 10 and professional experience. 11 I received a Bachelor of Arts degree with a Α. 12 major in economics from Emory University. After serving in 13 the U.S. Navy, I entered the doctoral program in economics 14 at the University of North Carolina at Chapel Hill. 15 receiving my Ph.D., I joined the faculty at the University 16 of North Carolina and taught finance in the Graduate School 17 of Business. I subsequently accepted a position at the 18 University of Texas at Austin where I taught courses in 19 financial management and investment analysis. I then went 2.0 to work for International Paper Company in New York City as 21 Manager of Financial Education, a position in which I had 22 responsibility for all corporate education programs in 23 finance, accounting, and economics. 24 In 1977, I joined the staff of the Public Utility 25 Commission of Texas ("PUCT") as Director of the Economic 26 Research Division. During my tenure at the PUCT, I managed

a division responsible for financial analysis, cost

- 1 allocation and rate design, economic and financial research,
- 2 and data processing systems, and I testified in cases on a
- 3 variety of financial and economic issues. Since leaving the
- 4 PUCT, I have been engaged as a consultant. I have
- 5 participated in a wide range of assignments involving
- 6 utility-related matters on behalf of utilities, industrial
- 7 customers, municipalities, and regulatory commissions. I
- 8 have previously testified before the Federal Energy
- 9 Regulatory Commission ("FERC"), as well as the Federal
- 10 Communications Commission, the Surface Transportation Board
- 11 (and its predecessor, the Interstate Commerce Commission),
- 12 the Canadian Radio-Television and Telecommunications
- 13 Commission, and regulatory agencies, courts, and legislative
- 14 committees in over 40 states, including the Idaho Public
- Utilities Commission ("IPUC" or "the Commission").
- In 1995, I was appointed by the PUCT to the
- 17 Synchronous Interconnection Committee to advise the Texas
- 18 legislature on the costs and benefits of connecting Texas to
- 19 the national electric transmission grid. In addition, I
- 20 served as an outside director of Georgia System Operations
- 21 Corporation, the system operator for electric cooperatives
- 22 in Georgia.
- I have served as Lecturer in the Finance Department
- 24 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
- 27 regulatory topics in programs sponsored by universities and

- 1 industry groups. I have taught in hundreds of educational
- 2 programs for financial analysts in programs sponsored by the
- 3 Association for Investment Management and Research, the
- 4 Financial Analysts Review, and local financial analysts
- 5 societies. These programs have been presented in Asia,
- 6 Europe, and North America, including the Financial Analysts
- 7 Seminar at Northwestern University. I hold the Chartered
- 8 Financial Analyst (CFA®) designation and have served as Vice
- 9 President for Membership of the Financial Management
- 10 Association. I have also served on the Board of Directors
- 11 of the North Carolina Society of Financial Analysts. I was
- 12 elected Vice Chairman of the National Association of
- 13 Regulatory Commissioners ("NARUC") Subcommittee on Economics
- 14 and appointed to NARUC's Technical Subcommittee on the
- National Energy Act. I have also served as an officer of
- various other professional organizations and societies.
- 17 Exhibit No. 1 contains a resume presenting the details of my
- 18 experience and qualifications.
- 19 A. Overview.
- Q. What is the purpose of your testimony in this
- 21 case?
- 22 A. The purpose of my testimony is to present to
- 23 the 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

- 1 Power's 2011 test year rate base is developed in the
- 2 testimony of Mr. Steven R. Keen.
- 3 Q. Please summarize the information and materials
- 4 you relied on to support the opinions and conclusions
- 5 contained in your testimony.
- A. To prepare my testimony, I used information
- 7 from a variety of sources that would normally be relied upon
- 8 by a person in my capacity. I am familiar with the
- 9 organization, finances, and operations of Idaho Power from
- my participation in prior proceedings before the IPUC, the
- 11 Public Utility Commission of Oregon ("OPUC"), and the FERC.
- 12 In connection with the present filing, I considered and
- relied upon corporate disclosures and management.
- 14 discussions, publicly available financial reports and
- filings, and other published information relating to the
- 16 Company and its parent, IDACORP, Inc. ("IDACORP"). I also
- 17 reviewed information relating generally to current capital
- 18 market conditions and specifically to current investor
- 19 perceptions, requirements, and expectations for Idaho
- 20 Power's electric utility operations. These sources, coupled
- 21 with my experience in the fields of finance and utility
- 22 regulation, have given me a working knowledge of the issues
- 23 relevant to investors' required rate of return for Idaho
- Power, and they form the basis of my analyses and
- 25 conclusions.
- Q. What is the practical test of the
- 27 reasonableness of the ROE used in setting a utility's rates?

- 1 The ROE compensates investors for the use of Α. 2 their capital to finance the plant and equipment necessary 3 to provide utility service. Investors commit capital only if they expect to earn a return on their investment 4 5 commensurate with returns available from alternative 6 investments with comparable risks. To be consistent with 7 sound regulatory economics and the standards set forth by 8 the Supreme Court in the Bluefield and Hope cases, a 9 utility's allowed ROE should be sufficient to: (1) fairly 10 compensate the utility's investors, (2) enable the utility 11 to offer a return adequate to attract new capital on 12 reasonable terms, and (3) maintain the utility's financial 13 integrity. 14 How is your testimony organized? Ο. 15 Α. I first reviewed the operations and finances 16 of Idaho Power and the general conditions in the utility industry and the capital markets. With this as a
- industry and the capital markets. With this as a
 background, I described the conceptual principles underlying
 investors' required rate of return and then conducted
 various well-accepted quantitative analyses to estimate the
 current cost of equity, including alternative applications
 of the discounted cash flow ("DCF"), the Capital Asset

Pricing Model ("CAPM"), an equity risk premium approach

 $^{^{\}rm 1}$ 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).

- 1 based on allowed rates of return, as well as reference to
- 2 comparable earned rates of return expected for utilities.
- 3 Based on the cost of equity estimates indicated by my
- 4 analyses, the Company's ROE was evaluated taking into
- 5 account the specific risks and economic requirements for
- 6 Idaho Power, as well as other factors (e.g., flotation
- 7 costs) that are properly considered in setting a fair ROE
- 8 for the Company.

9 B. Summary of Conclusions.

- 10 Q. What are your findings regarding the fair rate
- of return on equity for Idaho Power?
- 12 A. Based on the results of my analyses and the
- economic requirements necessary to support continuous access
- 14 to capital, I recommend that Idaho Power be authorized a
- fair rate of return on equity in the range of a "bare bones"
- 16 low end of 10.40 percent to a high end (including flotation
- 17 costs) of 11.55 percent. The bases for my conclusion are
- 18 summarized below:
- In order to reflect the risks and
- 20 prospects associated with Idaho Power's jurisdictional
- 21 utility operations, my analyses focused on a proxy group of
- other utilities with comparable investment risks.
- 23 Consistent with the fact that utilities must compete for
- 24 capital with firms outside their own industry, I also
- 25 referenced a proxy group of comparable risk companies in the
- 26 non-utility sector of the economy;

- Because investors' required return on
- 2 equity is unobservable and no single method should be viewed
- 3 in isolation, I applied the DCF, CAPM, and risk premium
- 4 methods, as well as the comparable earnings approach, to
- 5 estimate a fair ROE for Idaho Power;
- Based on the results of these analyses,
- 7 and giving less weight to extremes at the high and low ends
- 8 of the range, I concluded that the cost of equity for the
- 9 proxy groups of utilities and non-utility companies is in
- the range of 10.4 percent to 11.4 percent, or 10.55 percent
- 11 to 11.55 percent after incorporating a minimal adjustment to
- 12 account for the impact of common equity flotation costs;
- Considering the expected upward trend in
- 14 capital costs and the need to support financial integrity
- and fund crucial capital investment even under adverse
- 16 circumstances, it is my opinion that this 10.55 percent to
- 17 11.55 percent range bounds a reasonable rate of return on
- 18 common equity for Idaho Power; and
- As reflected in the testimony of Mr.
- 20 Keen, Idaho Power is requesting a fair ROE of 10.5 percent
- 21 to balance customer impact during these challenging economic
- 22 times with the Company's need to maintain is financial
- 23 integrity and access to capital. This 10.5 percent ROE
- 24 falls at the bottom end of my "bare bones" cost of equity
- 25 range and, in my professional opinion, represents a

- 1 reasonable, even if conservative, rate of return on common
- 2 equity for Idaho Power.
- Q. What is your conclusion as to the
- 4 reasonableness of the Company's capital structure?
- 5 A. Based on my evaluation, I concluded that a
- 6 common equity ratio of approximately 51 percent represents a
- 7 reasonable basis from which to calculate Idaho Power's
- 8 overall rate of return. This conclusion was based on the
- 9 following findings:
- Idaho Power's proposed common equity ratio
- is entirely consistent with the range of capitalizations
- maintained by the firms in the proxy group of electric
- utilities at year-end 2010 and based on investors'
- 14 expectations;
- My conclusion is reinforced by the
- investment community's focus on the need for a greater equity
- cushion to accommodate higher operating risks, including the
- uncertainties posed by exposure to variable hydro conditions,
- 19 and the pressures of capital investments. Financial
- 20 flexibility plays a crucial role in ensuring the wherewithal
- 21 to meet the needs of customers, and Idaho Power's capital
- 22 structure reflects the Company's ongoing efforts to support
- 23 its credit standing and maintain access to capital on
- 24 reasonable terms.

1	Q. What other evidence did you consider in					
2	evaluating your recommendation in this case?					
3	A. My recommendation was reinforced by the					
4	following findings:					
5	• Sensitivity to financial market and					
6	regulatory uncertainties has increased dramatically and					
7	investors recognize that constructive regulation is a key					
8	ingredient in supporting utility credit standing and					
9	financial integrity;					
10	Because of Idaho Power's reliance on					
11	hydroelectric generation, the Company is exposed to					
12	relatively greater risks of power cost volatility;					
13	Providing Idaho Power with the opportunity					
14	to earn a return that reflects these realities is an					
15	essential ingredient to support the Company's financial					
16	position, which ultimately benefits customers by ensuring					
17	reliable service at lower long-run costs; and					
18	• Continued support for Idaho Power's					
19	financial integrity, including a reasonable ROE, is					
20	imperative to ensure that the Company has the capability to					
21	maintain an investment grade rating while confronting					

potential challenges associated with funding infrastructure

development necessary to meet the needs of its customers.

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1 II. FUNDAMENTAL ANALYSES

- Q. What is the purpose of this section?
- A. As a predicate to the quantitative analyses
- 4 that I address later in this testimony, this section briefly
- 5 reviews the operations and finances of Idaho Power. In
- 6 addition, it examines the risks and prospects for the
- 7 electric utility industry and conditions in the capital
- 8 markets and the general economy. An understanding of the
- 9 fundamental factors driving the risks and prospects of
- 10 electric utilities is essential in developing an informed
- opinion of investors' expectations and requirements that are
- 12 the basis of a fair ROE.
- 13 A. Idaho Power Company.
- Q. Briefly describe Idaho Power.
- 15 A. Idaho Power is a wholly-owned subsidiary of
- 16 IDACORP and is principally engaged in providing integrated
- 17 retail electric utility service in a 24,000 square mile area
- in southern Idaho and eastern Oregon. During 2010, Idaho
- 19 Power's energy deliveries totaled 15.5 million megawatt-
- 20 hours ("MWh"). Sales to residential customers comprised 37
- 21 percent of retail sales, with 28 percent to commercial, 23
- 22 percent to industrial end-users, and 12 percent attributable
- 23 to irrigation pumping. Idaho Power also participates in the
- 24 wholesale power market and supplies firm wholesale power
- 25 service under sales contracts. At year-end 2010, Idaho

- 1 Power had total assets of \$4.6 billion, with total revenues
- 2 amounting to approximately \$1.0 billion.
- In addition to its thermal baseload and peaking
- 4 units located in Wyoming, Nevada, Oregon, and Idaho, Idaho
- 5 Power's existing generating units include 17 hydroelectric
- 6 generating plants located in southern Idaho and eastern
- 7 Oregon. The electrical output of these hydro plants, which
- 8 has a significant impact on total energy costs, is dependent
- 9 on streamflows. Although Idaho Power estimates that
- 10 hydroelectric generation is capable of supplying
- 11 approximately 55 percent of total system requirements under
- 12 normal conditions, the Company has experienced prolonged
- periods of persistent below-normal water conditions in the
- 14 past.
- 15 Idaho Power's retail electric operations are subject
- to the jurisdiction of the IPUC and the OPUC, with the
- interstate jurisdiction regulated by FERC. Additionally,
- 18 Idaho Power's hydroelectric facilities are subject to
- 19 licensing under the Federal Power Act, which is administered
- 20 by FERC, as well as the Oregon Hydroelectric Act.
- 21 Relicensing is not automatic under federal law, and Idaho
- Power must demonstrate that it has operated its facilities
- 23 in the public interest, which includes adequately addressing
- 24 environmental concerns.
- Q. How are fluctuations in Idaho Power's
- operating expenses caused by varying hydro and power market
- 27 conditions accommodated in its rates?

- 1 A. The IPUC has approved a Power Cost Adjustment
- 2 ("PCA") mechanism for Idaho Power, under which rates are
- 3 adjusted annually to reflect changes in variable power
- 4 production and supply costs. When hydroelectric generation
- 5 is reduced and power supply costs rise above those included
- 6 in base rates, the PCA allows Idaho Power to increase rates
- 7 to recover a portion of its additional costs. Conversely,
- 8 rates are reduced when increased hydroelectric generation
- 9 leads to lower power supply costs. Although the PCA
- provides for rates to be adjusted annually, it applies to 95
- 11 percent of the deviation between actual power supply costs
- 12 and normalized rates.
- 13 Q. What credit ratings have been assigned to
- 14 Idaho Power?
- 15 A. Idaho Power has been assigned a corporate
- 16 credit rating of "BBB" by Standard & Poor's Corporation
- 17 ("S&P") and an issuer rating of "Baa1" from Moody's Investor
- 18 Services, Inc. ("Moody's").
- 19 B. Operating Risks.
- Q. How have investors' risk perceptions for the
- 21 utility industry evolved?
- 22 A. Implementation of structural change, along
- 23 with other factors impacting the economy and the industry,
- 24 has caused investors to rethink their assessment of the
- 25 relative risks associated with utilities. The past decade
- 26 witnessed steady erosion in credit quality throughout the
- 27 utility industry, both as a result of revised perceptions of

1 the risks in the industry and the weakened finances of the 2 utilities themselves. In December 2009, S&P observed with 3 respect to the industry's future that: 4 Looming costs associated with 5 environmental compliance, slack 6 demand caused by economic weakness, 7 the potential for permanent demand 8 destruction caused by changes 9 consumer behavior and closing 10 manufacturing facilities, 11 numerous regulatory filings seeking 12 recovery of costs are some of the 13 significant challenges the industry has to deal with ³ 14 Similarly, Moody's noted: 15 16 sustained period of sluggish 17 economic growth, characterized by 18 high unemployment, could stress the 19 sector's recovery prospects, 20 financial performance, and credit 21 quality ratings. of The 22 sector's cash flows are already 23 showing signs of decline, partly 24 because of higher operating costs 25 and investments.4

More recently, Moody's concluded, "we also see the sector's overall business and operating risks increasing." 5

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³ Standard & Poor's Corporation, "U.S. Regulated Electric Utilities Head into 2010 With Familiar Concerns," RatingsDirect (Dec. 28, 2009).

⁴ Moody's Investors Service, "U.S. Electric Utilities: Uncertain Times Ahead; Strengthening Balance Sheets Now Would Protect Credit," Special Comment (Oct. 28, 2010).

⁵ Moody's Investors Service, "Regulation Provides Stability as Risks Mount," Industry Outlook (Jan. 19, 2011).

1	Q. How does Idaho Power's generating resource mix					
2	affect investors' risk perceptions?					
3	A. Because approximately one-half of Idaho					
4	Power's total energy requirements are provided by					
5	hydroelectric facilities, the Company is exposed to a level					
6	of uncertainty not faced by most utilities. While					
7	hydropower confers advantages in terms of fuel cost savings					
8	and diversity, reduced hydroelectric generation due to					
9	below-average water conditions forces Idaho Power to rely					
LO	more heavily on wholesale power markets or more costly					
L1	thermal generating capacity to meet its resource needs. As					
L2	S&P has observed:					
13 14 15 16 17 18 19 20 21 22 23 24 25 26	A reduction in hydro generation typically increases an electric utility's costs by requiring it to buy replacement power or run more expensive generation to serve customer loads. Low hydro generation can also reduce utilities' opportunity to make offsystem sales. At the same time, low hydro years increase regional wholesale power prices, creating potentially a double impact — companies have to buy more power than under normal conditions, paying					
27	higher prices. 6					

Uncertainties over water conditions are a persistent operational risk associated with Idaho Power. Investors recognize that volatile energy markets, unpredictable stream

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⁶ Standard & Poor's Corporation, "Pacific Northwest Hydrology and Its Impact on Investor-Owned Utilities' Credit Quality," RatingsDirect (Jan. 28, 2008).

- 1 flows, and Idaho Power's reliance on wholesale purchases to
- 2 meet a significant portion of its resource needs can expose
- 3 the Company to the risk of reduced cash flows and
- 4 unrecovered power supply costs. S&P noted that Idaho Power,
- 5 along with Avista Corporation, "face the most substantial
- 6 risks despite their PCAs and cost-update mechanisms," and
- 7 recently concluded that Idaho Power's generation mix
- 8 "exposes the company to substantial replacement power risk
- 9 in the event of low water flows that lead to reduced
- 10 generation."8 Similarly, Moody's observed that Idaho Power
- 11 "has a high dependency . . . on hydro resources making it
- vulnerable to drought conditions." In addition to weather-
- 13 related fluctuations in water flows, Idaho Power is also
- 14 exposed to uncertainties regarding water rights and the
- 15 administration of those rights.
- 16 Q. Is the potential for energy market volatility
- 17 an ongoing concern for investors?
- 18 A. Yes. In recent years, utilities and their
- 19 customers have had to contend with dramatic fluctuations in
- 20 fuel costs due to ongoing price volatility in the spot
- 21 markets, and investors recognize the potential for further
- turmoil in energy markets. In times of extreme volatility,

⁷ Id.

⁸ Standard & Poor's Corporation, "Summary: Idaho Power Co.," RatingsDirect (Nov. 24, 2010).

Moody's Investors Service, "Credit Opinion: Idaho Power Company," Global Credit Research (Mar. 9, 2011).

- 1 utilities can quickly find themselves in a significant
- 2 under-recovery position with respect to power costs, which
- 3 can severely stress liquidity. The investment community
- 4 also recognizes that financial performance can be negatively
- 5 impacted when low wholesale prices impair revenues from
- 6 surplus energy sales, as has been the case recently in the
- 7 Pacific Northwest. 10
- 8 While current expectations for significantly lower
- 9 wholesale power prices reflect weaker fundamentals affecting
- 10 current load and fuel prices, investors recognize the
- 11 potential that such trends could quickly reverse. For
- 12 example, heightened uncertainties in the Middle East have
- 13 led to sharp increases in petroleum prices, and the
- 14 potential ramifications of the Japanese nuclear crisis on
- 15 the future cost and availability of nuclear generation in
- the U.S. have not been lost on investors. S&P observed that
- "short-term price volatility from numerous possibilities
- 18 . . . is always possible," while Moody's recognized that
- 19 "the inherent volatility of commodity costs comprises one of
- 20 the most significant risk factors to the industry,"12 and
- 21 concluded, "This view, that commodity prices remain low,

¹⁰ See, e.g., Standard & Poor's Corporation, "Summary: Energy Northwest, Washington Bonneville Power Administration, Oregon; Wholesale Electric," RatingsDirect (Apr. 27, 2011).

¹¹ Standard & Poor's Corporation, "Top 10 Investor Questions: U.S. Regulated Electric Utilities," RatingsDirect (Jan. 22, 2010).

Moody's Investors Service, "Credit Opinion: Avista Corp.," Global Research (Mar. 17, 2011).

- 1 could easily be proved incorrect, due to the evidence of
- 2 historical volatility."¹³
- 3 Q. Does the PCA completely shield Idaho Power
- 4 from exposure to fluctuations in power supply costs?
- 5 A. No. The investment community views the
- 6 Company's ability to periodically adjust retail rates to
- 7 accommodate fluctuations in fuel costs as an important
- 8 source of support for Idaho Power's financial integrity.
- 9 Nevertheless, they also recognize that there can still be a
- 10 lag between the time Idaho Power actually incurs the
- 11 expenditure and when it is recovered from ratepayers. This
- lag can impinge on the utility's financial strength through
- reduced liquidity and higher borrowings. As a result, the
- 14 Company is not insulated from the potential need to finance
- deferred fuel costs. 14 Indeed, despite the significant
- investment of resources to manage fuel procurement,
- 17 investors are aware that the best that Idaho Power can do is
- 18 to recover something less than its actual costs during times
- 19 of rising fuel costs. In other words, Idaho Power earns no
- 20 return on deferred fuel costs and is exposed to
- 21 disallowances for imprudence in its fuel procurement.
- 22 Similarly, as discussed in the testimony of Mr. Keen, Idaho

Moody's Investors Service, "U.S. Electric Utilities: Uncertain Times Ahead; Strengthening Balance Sheets Now Would Protect Credit," Special Comment (Oct. 28, 2010).

 $^{^{14}}$ S&P has noted that the Company's financial metrics have been negatively impacted in the past as a result of power cost deferrals. Standard & Poor's Corporation, "Idaho Power Co.," <code>RatingsDirect</code> (Feb. 1, 2008).

1 Power devotes considerable resources to the administratio

- of power purchase contracts ("PPAs"), which provide no
- 3 opportunity to earn a return for shareholders.
- Q. What other financial pressures impact
- 5 investors' risk assessment of Idaho Power?
- 6 A. Investors are aware of the financial and
- 7 regulatory pressures faced by utilities associated with
- 8 rising costs and the need to undertake significant capital
- 9 investments. S&P noted that cost increases and capital
- 10 projects, along with uncertain load growth, were a
- 11 significant challenge to the utility industry. 15 As Moody's
- 12 observed:

13 [W]e also see the sector's overall business risk and operating risks 14 15 primarily increasing, owing 16 rising costs associated 17 upgrading and expanding the nation's 18 trillion dollar electric infrastructure. 16 19

20 Similarly, S&P noted that cost increases and capital 21 projects, along with uncertain load growth, were a 22 significant challenge to the utility industry.¹⁷ Providing 23 the infrastructure necessary to meet the energy needs of

¹⁵ Standard & Poor's Corporation, "Industry Economic and Ratings Outlook," RatingsDirect (Feb. 2, 2010).

Moody's Investors Service, "Regulation Provides Stability as Risks Mount," Industry Outlook (Jan. 19, 2011).

¹⁷ Standard & Poor's Corporation, "Industry Economic and Ratings Outlook," RatingsDirect (Feb. 2, 2010).

- 1 customers imposes additional financial responsibilities on
- 2 Idaho Power.
- 3 Q. Does Idaho Power anticipate the need to access
- 4 the capital markets going forward?
- 5 A. Most definitely. Idaho Power will require
- 6 capital investment to meet customer growth, provide for
- 7 necessary maintenance and replacements of its utility
- 8 infrastructure, as well as fund new investment in electric
- 9 generation, transmission, and distribution facilities.
- 10 Idaho Power is in a period of significant infrastructure
- development and has several major projects in development,
- including construction of the 300 megawatt ("MW") Langley
- Gulch power plant, which is expected to achieve commercial
- operation in the summer of 2012.
- As Moody's noted, "IPC's capital expenditures are
- expected to range from \$775 \$805 million over the next
- 17 three years." 18 Investors are aware of the challenges posed
- by rising costs and burdensome capital expenditure
- 19 requirements, especially in light of ongoing capital market
- 20 and economic uncertainties. Support for Idaho Power's
- 21 financial integrity and flexibility will be instrumental in
- 22 attracting the capital necessary to fund these projects in
- 23 an effective manner.

¹⁸ Moody's Investors Service, "Credit Opinion: Idaho Power Company," Global Credit Research (Mar. 9, 2011).

- 1 Q. What other considerations affect investors'
- 2 evaluation of Idaho Power?
- 3 A. Utilities are confronting increased
- 4 environmental pressures that could impose significant
- 5 uncertainties and costs. Moody's noted that "the prospect
- 6 for new environmental emission legislation particularly
- 7 concerning carbon dioxide represents the biggest emerging
- 8 issue for electric utilities." While the momentum for
- 9 carbon emissions legislation has slowed, expectations for
- 10 eventual regulations continue to pose uncertainty. Fitch
- 11 recently concluded, "Prospects of costly environmental
- 12 regulations will create uncertainty for investors in the
- electricity business in 2011."20 Moody's observed that
- "increasingly stringent environmental mandates" were a key
- 15 risk confronting Idaho Power.²¹
- 16 Q. Would investors consider Idaho Power's
- 17 relative size in their assessment of the Company's risks and
- 18 prospects?
- 19 A. Yes. A firm's relative size has important
- 20 implications for investors in their evaluation of
- 21 alternative investments, and it is well established that

Moody's Investors Service, "U.S. Investor-Owned Electric Utilities," Industry Outlook (Jan. 2009).

Fitch Ratings Ltd., "2011 Outlook: U.S. Utilities, Power, and Gas," Global Power North America Special Report (Dec. 20, 2010).

²¹ Moody's Investors Service, "Credit Opinion: Idaho Power Company," Global Credit Research (Mar. 9, 2011).

- 1 smaller firms are more risky than larger firms. With a
- 2 market capitalization of approximately \$1.8 billion, Idaho
- 3 Power is one of the smallest publicly traded electric
- 4 utilities followed by The Value Line Investment Survey
- 5 ("Value Line"), which have an average capitalization of
- 6 approximately \$7.3 billion.²²

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The magnitude of the size disparity between Idaho Power and other firms in the utility industry has important practical implications with respect to the risks faced by investors. All else being equal, it is well accepted that smaller firms are more risky than their larger counterparts, due in part to their relative lack of diversification and lower financial resiliency.²³ These greater risks imply a higher required rate of return, and there is ample empirical evidence that investors in smaller firms realize higher rates of return than in larger firms.²⁴ Common sense and accepted financial doctrine hold that investors require higher returns from smaller companies, and unless that compensation is provided in the rate of return allowed for a

²² www.valueline.com (Retrieved Mar. 25, 2011).

²³ It is well established in the financial literature that smaller firms are more risky than larger firms. See, e.g., Eugene F. Fama and Kenneth R. French, "The Cross-Section of Expected Stock Returns," The Journal of Finance (June 1992); George E. Pinches, J. Clay Singleton, and Ali Jahankhani, "Fixed Coverage as a Determinant of Electric Utility Bond Ratings," Financial Management (Summer 1978).

²⁴ See for example Rolf W. Banz, "The Relationship Between Return and Market Value of Common Stocks," Journal of Financial Economics (September 1981) at 16.

1	utility, the legal tests embodied in the Hope and Bluefield
2	cases cannot be met.
3	
4	Q. What are the implications of recent capital
5	market conditions?
6	A. The deep financial and real estate crisis that
7	the country experienced in late 2008, and continuing into
8	2009, led to unprecedented price fluctuations in the capital
9	markets as investors dramatically revised their risk
10	perceptions and required returns. As a result of investors'
11	trepidation to commit capital, stock prices declined sharply
12	while the yields on corporate bonds experienced a dramatic
13	increase.
14	With respect to utilities specifically, as of March
15	2011, the Dow Jones Utility Average stock index remained
16	approximately 20 percent below the previous high reached in
17	May 2008. This prolonged sell-off in common stocks and
18	sharp fluctuations in utility bond yields reflect the fact
19	that the utility industry is not immune to the impact of
20	financial market turmoil and the ongoing economic downturn.
21	As the Edison Electric Institute noted in a letter to
22	congressional representatives in September 2008 as the
23	financial crisis intensified, capital market uncertainties
24	have serious implications for utilities and their customers:
25 26 27	In the wake of the continuing upheaval on Wall Street, capital markets are all but immobilized, and

short-term borrowing

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to

costs

1 utilities have already increased 2 substantially. If the financial 3 crisis is not resolved quickly. 4 financial pressures on utilities 5 will intensify sharply, resulting in 6 higher costs to our customers and, 7 ultimately, could compromise service reliability.25 8

While conditions have improved significantly since the depths of the crisis, investors have nonetheless had to confront ongoing fluctuations in share prices and stress in the credit markets. As the Wall Street Journal noted in February 2010:

Stocks pulled out of a 167-point hole with a late rally Friday, capping a wild week reminiscent of the most volatile days of the credit crisis.

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30 31 It was a return to the unusual relationships, or correlations, seen at major flash points over the past two years when investors fled risky assets and jumped into safe havens. This market behavior, which has reasserted itself repeatedly since the financial crisis began, suggests that investment decisions are still being driven more by government support and liquidity concerns than market fundamentals.²⁶

In response to renewed capital market uncertainties initiated by unrest in the Middle East, the natural disaster

Letter to House of Representatives, Thomas R. Kuhn, President, Edison Electric Institute (Sep. 24, 2008).

²⁶ Gongloff, Mark, "Stock Rebound Is a Crisis Flashback - Late Surge Recalls Market's Volatility at Peak of Credit Difficulties; Unusual Correlations," Wall Street Journal at B1 (Feb. 6, 2010).

- in Japan, ongoing concerns over the European sovereign debt
- 2 crisis, and questions over the sustainability of economic
- 3 growth, investors have repeatedly fled to the safety of U.S.
- 4 Treasury bonds, and stock prices have experienced renewed
- 5 volatility. 27 The dramatic rise in the price of gold and
- 6 other commodities also attests to investors' heightened
- 7 concerns over prospective challenges and risks, including
- 8 the overhanging threat of inflation and renewed economic
- 9 turmoil. With respect to utilities, Fitch observed that,
- 10 "the outlook for the sector would be adversely affected by
- 11 significantly higher inflation and interest rates."28
- 12 Moody's recently concluded:

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Over the past few months, we have been reminded that global financial markets, which are still receiving extraordinary intervention benefits by sovereign governments, are exposed to turmoil. Access to the capital markets could therefore become intermittent, even for safer, more defensive sectors like the power industry.²⁹

Uncertainties surrounding economic and capital market conditions heighten the risks faced by utilities,

The Wall Street Journal recently reported that the Dow Jones Industrial Average experienced its largest drop since August 2010, which marked the fourth triple-digit move in less than two weeks. Tom Lauricella and Jonathan Cheng, "Dow Below 12000 on Mideast Worries - Troubles in Europe and China Add to Jitters," Wall Street Journal C1 (March. 11, 2011).

²⁸ Fitch Ratings Ltd., "2011 Outlook: U.S. Utilities, Power, and Gas," Global Power North America Special Report (Dec. 20, 2010).

²⁹ Moody's Investors Service, "Regulation Provides Stability as Risks Mount," *Industry Outlook* (Jan. 19, 2011).

- which, as described earlier, face a variety of operating and financial challenges.
- Q. How do interest rates on long-term bonds compare with those projected for the next few years?
- A. Table WEA-1 below compares current interest rates on 30-year Treasury bonds, triple-A rated corporate bonds, and double-A rated utility bonds with near-term
- 8 projections from Value Line, IHS Global Insight, Blue Chip
- 9 Financial Forecasts ("Blue Chip"), and the Energy
- 10 Information Administration ("EIA"), which is a statistical
- agency of the U.S. Department of Energy:

12 TABLE WEA-1
13 INTEREST RATE TRENDS

	Current (a)	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
30-Yr. Treasury					
Value Line (b)	4.5%	4.9%	5.2%	5.5%	6.0%
IHS Global Insight (c)	4.5%	4.7%	5.0%	5.1%	6.0%
Blue Chip (d)	4.5%	4.8%	5.2%	5.4%	5.5%
AAA Corporate					
Value Line (b)	5.1%	5.6%	6.0%	6.3%	6.5%
IHS Global Insight (c)	5.1%	5.2%	6.0%	6.2%	6.8%
Blue Chip (d)	5.1%	5.4%	5.8%	6.1%	6.3%
S&P (e)	5.1%	6.1%	5.7%	5.9%	6.3%
AA Utility					
IHS Global Insight (c)	5.3%	5.4%	6.3%	6.4%	7.2%
EIA (f)	5.3%	5.5%	6.4%	7.0%	7.4%

⁽a) Based on monthly average bond yields for the six-month period Nov. 2010 - Apr. 2011 reported at www.credittrends.moodys.com and http://www.federalreserve.gov/releases/h15/data.htm.

⁽b) The Value Line Investment Survey, Forecast for the U.S. Economy (Feb. 25, 2011).

⁽c) IHS Global Insight, U.S. Economic Outlook at 19 (Feb. 2011).

⁽d) Blue Chip Financial Forecasts, Vol. 29, No. 12 (Dec. 1, 2010).

⁽e) Standard & Poor's Corporation, "U.S. Economic Forecast: Pouring Water On Troubled Oil," *RatingsDirect* (Mar. 8, 2011).

⁽f) Energy Information Administration, *Annual Energy Outlook 2011 Early Release* (Dec. 16, 2010).

- As evidenced above, there is a clear consensus that
- 2 the cost of permanent capital will be higher in the 2012-
- 3 2015 time frame than it is currently. As a result, current
- 4 cost of capital estimates are likely to understate
- 5 investors' requirements at the time the outcome of this
- 6 proceeding becomes effective and beyond.
- 7 Q. What do these events imply with respect to the
- 8 ROE for Idaho Power?
- 9 A. No one knows the future of our complex global
- 10 economy. We know that the financial crisis had been
- 11 building for a long time, and few predicted that the economy
- 12 would fall as rapidly as it did, or that corporate bond
- 13 yields would fluctuate as dramatically as they have. While
- 14 conditions in the economy and capital markets appear to have
- stabilized significantly since 2009, investors continue to
- 16 react swiftly and negatively to any future signs of trouble
- in the financial system or economy. The fact remains that
- 18 the electric utility industry requires significant new
- 19 capital investment. Given the importance of reliable
- 20 utility service, it would be unwise to ignore investors'
- 21 increased sensitivity to risk and future capital market
- trends in evaluating a fair ROE in this case. Similarly,
- 23 the Company's capital structure must also preserve the
- 24 financial flexibility necessary to maintain access to
- 25 capital even during times of unfavorable market conditions.

1 III. CAPITAL MARKET ESTIMATES

- Q. What is the purpose of this section?
- 3 A. This section presents capital market estimates
- 4 of the cost of equity. First, I examine the concept of the
- 5 cost of equity, along with the risk-return tradeoff
- 6 principle fundamental to capital markets. Next, I describe
- 7 DCF, CAPM, and risk premium analyses conducted to estimate
- 8 the cost of equity for benchmark groups of comparable risk
- 9 firms and evaluate comparable earned rates of return
- 10 expected for utilities. Finally, I examine other factors
- 11 (e.g., flotation costs) that are properly considered in
- 12 evaluating a fair ROE.
- A. Overview.
- Q. What role does the return on common equity
- 15 play in a utility's rates?
- 16 A. The return on common equity is the cost of
- inducing and retaining investment in the utility's physical
- 18 plant and assets. This investment is necessary to finance
- 19 the asset base needed to provide utility service.
- 20 Competition for investor funds is intense and investors are
- 21 free to invest their funds wherever they choose. Investors
- 22 will commit money to a particular investment only if they
- 23 expect it to produce a return commensurate with those from
- 24 other investments with comparable risks.

- 1 Q. What fundamental economic principle underlies
- any evaluation of investors' required return on equity?
- 3 A. The fundamental economic principle underlying
- 4 the cost of equity concept is the notion that investors are
- 5 risk averse. In capital markets where relatively risk-free
- 6 assets are available (e.g., U.S. Treasury securities),
- 7 investors can be induced to hold riskier assets only if they
- 8 are offered a premium, or additional return, above the rate
- 9 of return on a risk-free asset. Because all assets compete
- 10 with each other for investor funds, riskier assets must
- 11 yield a higher expected rate of return than safer assets to
- induce investors to invest and hold them.
- Given this risk-return tradeoff, the required rate
- of return (k) from an asset (i) can be generally expressed
- 15 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
- 19 i.
- Thus, the required rate of return for a particular
- 21 asset at any point in time is a function of: (1) the yield
- 22 on risk-free assets and (2) its relative risk, with
- 23 investors demanding correspondingly larger risk premiums for
- 24 assets bearing greater risk.

- Q. Is there evidence that the risk-return tradeoff principle actually operates in the capital markets?
- A. Yes. The risk-return tradeoff can be readily
- 4 documented in segments of the capital markets where required
- 5 rates of return can be directly inferred from market data
- 6 and where generally accepted measures of risk exist. Bond
- 7 yields, for example, reflect investors' expected rates of
- 8 return, and bond ratings measure the risk of individual bond
- 9 issues. Comparing the observed yields on government
- securities, which are considered free of default risk, to
- 11 the yields on bonds of various rating categories
- demonstrates that the risk-return tradeoff does, in fact,
- 13 exist.
- Q. Does the risk-return tradeoff observed with
- 15 fixed income securities extend to common stocks and other
- 16 assets?
- 17 A. It is generally accepted that the risk-return
- tradeoff evidenced with long-term debt extends to all
- 19 assets. Documenting the risk-return tradeoff for assets
- other than fixed income securities, however, is complicated
- 21 by two factors. First, there is no standard measure of risk
- 22 applicable to all assets. Second, for most assets -
- 23 including common stock required rates of return cannot be
- 24 directly observed. Yet there is every reason to believe
- 25 that investors exhibit risk aversion in deciding whether or
- not to hold common stocks and other assets, just as when
- 27 choosing among fixed-income securities.

- 1 Q. Is this risk-return tradeoff limited to
- 2 differences between firms?
- A. No. The risk-return tradeoff principle
- 4 applies not only to investments in different firms, but also
- 5 to different securities issued by the same firm. The
- 6 securities issued by a utility vary considerably in risk
- 7 because they have different characteristics and priorities.
- 8 Long-term debt secured by a mortgage on property is senior
- 9 among all capital in its claim on a utility's net revenues
- and is, therefore, the least risky. Following bonds are
- 11 other debt instruments also holding contractual claims on
- 12 the utility's net revenues, such as subordinated debentures.
- 13 The last investors in line are common shareholders. They
- 14 receive only the net revenues, if any, remaining after all
- other claimants have been paid. As a result, the rate of
- 16 return that investors require from a utility's common stock,
- 17 the most junior and riskiest of its securities, must be
- 18 considerably higher than the yield offered by the utility's
- 19 senior, long-term debt.
- Q. What does the above discussion imply with
- 21 respect to estimating the cost of equity for a utility?
- 22 A. Although the cost of equity cannot be observed
- 23 directly, it is a function of the returns available from
- 24 other investment alternatives and the risks to which the
- 25 equity capital is exposed. Because it is unobservable, the
- 26 cost of equity for a particular utility must be estimated by
- 27 analyzing information about capital market conditions

- 1 generally, assessing the relative risks of the company
- 2 specifically, and employing various quantitative methods
- 3 that focus on investors' required rates of return. These
- 4 various quantitative methods typically attempt to infer
- 5 investors' required rates of return from stock prices,
- 6 interest rates, or other capital market data.
- 7 Q. Did you rely on a single method to estimate
- 8 the cost of equity for Idaho Power?
- 9 A. No. In my opinion, no single method or model
- should be relied on by itself to determine a utility's cost
- of common equity because no single approach can be regarded
- 12 as definitive. Therefore, I applied both the DCF and CAPM
- methods to estimate the cost of common equity, and
- 14 considered the results of the risk premium and comparable
- earnings approaches. In my opinion, comparing estimates
- produced by one method with those produced by other
- approaches ensures that the estimates of the cost of common
- 18 equity pass fundamental tests of reasonableness and economic
- 19 logic.
- 20 Q. Are you aware that the IPUC has traditionally
- 21 relied primarily on the DCF and comparable earnings methods?
- 22 A. Yes, although the Commission has also
- evidenced a willingness to weigh alternatives in evaluating
- 24 an allowed ROE. For example, while noting that it had not
- focused on the CAPM for determining the cost of equity, the
- 26 IPUC recognized in Order No. 29505 that "methods to evaluate
- 27 a common equity rate of return are imperfect predictors" and

- 1 emphasized "that by evaluating all the methods presented in
- 2 this case and using each as a check on the other," the
- 3 Commission had avoided the pitfalls associated with reliance
- 4 on a single method.³⁰
- 5 B. Comparable Risk Proxy Groups.
- 6 Q. How did you implement these quantitative
- 7 methods to estimate the cost of common equity for Idaho
- 8 Power?
- 9 A. Application of the DCF model and other
- 10 quantitative methods to estimate the cost of equity requires
- observable capital market data, such as stock prices.
- Moreover, even for a firm with publicly traded stock, the
- 13 cost of equity can only be estimated. As a result, applying
- 14 quantitative models using observable market data only
- 15 produces an estimate that inherently includes some degree of
- observation error. Thus, the accepted approach to increase
- 17 confidence in the results is to apply the DCF model and
- other quantitative methods to a proxy group of publicly
- 19 traded companies that investors regard as risk comparable.
- 20 Q. What specific proxy group did you rely on for
- 21 your analysis?
- 22 A. In order to reflect the risks and prospects
- associated with Idaho Power's jurisdictional utility
- operations, my DCF analyses focused on a reference group of
- other utilities composed of those companies included by

 $^{^{30}}$ Order No. 29505 at 38 (emphasis added).

- 1 Value Line in its Electric Utilities Industry groups with:
- 2 (1) S&P corporate credit ratings of "BBB-" to "BBB+," (2) a
- 3 Value Line Safety Rank of "2" or "3," and (3) a Value Line
- 4 Financial Strength Rating of "B+" to "B++."31 I refer to
- 5 this group as the "Utility Proxy Group."
- 6 Q. What other proxy group did you consider in
- 7 evaluating a fair ROE for Idaho Power?
- 8 A. Under the regulatory standards established by
- 9 Hope and Bluefield, the salient criterion in establishing a
- 10 meaningful benchmark to evaluate a fair ROE is relative
- 11 risk, not the particular business activity or degree of
- 12 regulation. With regulation taking the place of competitive
- market forces, required returns for utilities should be in
- 14 line with those of non-utility firms of comparable risk
- 15 operating under the constraints of free competition.
- 16 Consistent with this accepted regulatory standard, I also
- 17 applied the DCF model to a select group of low-risk risk
- 18 companies in the non-utility sectors of the economy. I
- refer to this group as the "Non-Utility Proxy Group."
- Q. What criteria did you apply to develop the
- 21 Non-Utility Proxy Group?
- A. My comparable risk proxy group of non-utility
- 23 firms was composed of those U.S. companies followed by Value

³¹ In addition, I excluded three utilities (FirstEnergy Corp., Northeast Utilities, and Progress Energy, Inc.) that otherwise would have been in the proxy group, but are not appropriate for inclusion because they are currently involved in a major merger or acquisition.

- 1 Line that: (1) pay common dividends; (2) have a Safety Rank
- of "1"; (3) have a Financial Strength Rating of "B++" or
- 3 greater; (4) have a beta of 0.85 or less; and (5) have
- 4 investment grade credit ratings from S&P.
- 5 Q. Do these criteria provide objective evidence
- 6 to evaluate investors' risk perceptions?
- 7 A. Yes. Credit ratings are assigned by
- 8 independent rating agencies for the purpose of providing
- 9 investors with a broad assessment of the creditworthiness of
- 10 a firm. Ratings generally extend from triple-A (the
- 11 highest) to D (in default). Other symbols (e.g., "A+") are
- 12 used to show relative standing within a category. Because
- 13 the rating agencies' evaluation includes virtually all of
- 14 the factors normally considered important in assessing a
- 15 firm's relative credit standing, corporate credit ratings
- provide a broad, objective measure of overall investment
- 17 risk that is readily available to investors. Although the
- 18 credit rating agencies are not immune to criticism, their
- 19 rankings and analyses are widely cited in the investment
- 20 community and referenced by investors. 32 Investment
- 21 restrictions tied to credit ratings continue to influence
- 22 capital flows, and credit ratings are also frequently used

³² While the ratings agencies were faulted during the financial crisis for failing to adequately assess the risk associated with structured finance products, investors continue to regard corporate credit ratings as a reliable guide to investment risks.

- 1 as a primary risk indicator in establishing proxy groups to
- 2 estimate the cost of common equity.
- 3 While credit ratings provide the most widely
- 4 referenced benchmark for investment risks, other quality
- 5 rankings published by investment advisory services also
- 6 provide relative assessments of risks that are considered by
- 7 investors in forming their expectations for common stocks.
- 8 Value Line's primary risk indicator is its Safety Rank,
- 9 which ranges from "1" (Safest) to "5" (Riskiest). This
- 10 overall risk measure is intended to capture the total risk
- of a stock, and incorporates elements of stock price
- 12 stability and financial strength. Given that Value Line is
- perhaps the most widely available source of investment
- 14 advisory information, its Safety Rank provides useful
- 15 guidance regarding the risk perceptions of investors.
- The Financial Strength Rating is designed as a guide
- to overall financial strength and creditworthiness, with the
- 18 key inputs including financial leverage, business volatility
- 19 measures, and company size. Value Line's Financial Strength
- 20 Ratings range from "A++" (strongest) down to "C" (weakest)
- 21 in nine steps. Finally, Value Line's beta measures the
- volatility of a security's price relative to the market as a
- 23 whole. A stock that tends to respond less to market
- 24 movements has a beta less than 1.00, while stocks that tend
- 25 to move more than the market have betas greater than 1.00.
- Q. How do the overall risks of your proxy groups
- 27 compare with Idaho Power?

A. Table WEA-2 compares the Utility Proxy Group
with the Non-Utility Proxy Group and Idaho Power across four
key indicators of investment risk. Because the Company does
not have publicly traded common stock, the Value Line risk
measures shown reflect those published for the Company's
parent, IDACORP:

TABLE WEA-2 COMPARISON OF RISK INDICATORS

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S&P Value Line Credit Safety Financial **Beta** Rating Rank Strength 3 0.76 Utility Group **BBB** B+ Non-Utility Group Α 1 A+0.71 Idaho Power BBB 3 B+ 0.70

Q. Do these comparisons indicate that investors would view the firms in your proxy groups as risk-comparable to Idaho Power?

A. Yes. Considered together, a comparison of these objective measures, which consider a broad spectrum of risks, including financial and business position, and exposure to firm-specific factors, indicates that investors would likely conclude that the overall investment risks for Idaho Power are generally comparable to those of the firms in the Utility Proxy Group.

With respect to the Non-Utility Proxy Group, its average credit ratings, Safety Rank, and Financial Strength Rating suggest less risk than for Idaho Power, with its 0.71 average beta indicating essentially identical risk. While the impact of differences in regulation is reflected in

- 1 objective risk measures, my analyses conservatively focus on
- 2 a lower-risk group of non-utility firms.
- 3 C. Discounted Cash Flow Analyses.
- 4 Q. What is the economic basis underlying the DCF
- 5 model?
- A. The DCF model attempts to replicate the market
- 7 valuation process that sets the price investors are willing
- 8 to pay for a share of a company's stock. The model rests on
- 9 the assumption that investors evaluate the risks and
- 10 expected rates of return from all securities in the capital
- 11 markets. Given these expectations, the price of each stock
- is adjusted by the market until investors are adequately
- 13 compensated for the risks they bear. Therefore, we can look
- 14 to the market to determine what investors believe a share of
- 15 common stock is worth. By estimating the cash flows
- 16 investors expect to receive from the stock in the way of
- future dividends and capital gains, we can calculate their
- 18 required rate of return. In other words, the cash flows
- 19 that investors expect from a stock are estimated, and given
- 20 its current market price, we can "back-into" the discount
- 21 rate, or cost of equity, that investors implicitly used in
- 22 bidding the stock to that price. Notationally, the general
- 23 form of the DCF model is as follows:

$$P_0 = \frac{D_1}{(1+k_e)^1} + \frac{D_2}{(1+k_e)^2} + \cdots + \frac{D_t}{(1+k_e)^t} + \frac{P_t}{(1+k_e)^t}$$

1 where: P_0 = Current price per share; 2 Pt = Expected future price per share in 3 period t; 4 D_t = Expected dividend per share in period t; 5 k_e = Cost of equity. 6 Ο. What form of the DCF model is customarily used 7 to estimate the cost of equity in rate cases? 8 Rather than developing annual estimates of 9 cash flows into perpetuity, the DCF model can be simplified to a "constant growth" form: 33 10 $P_0 = \frac{D_1}{k_1 - g}$ 11 12 where: P_0 = Current price per share; 13 D_1 = Expected dividend per share in coming 14 year; 15 $k_e = Cost of equity;$ g = Investors' long-term growth expectations. 16 17 The cost of equity (Ke) can be isolated by 18 rearranging terms: $k_e = \frac{D_1}{P_0} + g$ 19 20 This constant growth form of the DCF model 21 recognizes that the rate of return to stockholders consists 22 of two parts: (1) dividend yield (D_1/P_0) and (2) growth 23 "g." In other words, investors expect to receive a portion

³³ The constant growth DCF model is dependent on a number of strict assumptions, which in practice are never strictly met. 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.

- of their total return in the form of current dividends and
- 2 the remainder through price appreciation.
- 3 Q. What form of the DCF model did you use?
- 4 A. I applied the constant growth DCF model to
- 5 estimate the cost of equity for Idaho Power, which is the
- 6 form of the model most commonly relied on to establish the
- 7 cost of equity for traditional regulated utilities and the
- 8 method most often referenced by regulators.
- 9 Q. How is the constant growth form of the DCF
- 10 model typically used to estimate the cost of equity?
- 11 A. The first step in implementing the constant
- growth DCF model is to determine the expected dividend yield
- 13 (D_1/P_0) for the firm in question. This is usually
- 14 calculated based on an estimate of dividends to be paid in
- 15 the coming year divided by the current price of the stock.
- 16 The second, and more controversial, step is to estimate
- investors' long-term growth expectations "g" for the firm.
- The final step is to sum the firm's dividend yield and
- 19 estimated growth rate to arrive at an estimate of its cost
- 20 of equity.
- Q. How was the dividend yield for the Utility
- 22 Proxy Group determined?
- 23 A. Estimates of dividends to be paid by each of
- 24 these utilities over the next twelve months, obtained from
- Value Line, served as D_1 . This annual dividend was then
- 26 divided by the corresponding stock price for each utility to
- 27 arrive at the expected dividend yield. The expected

- 1 dividends, stock prices, and resulting dividend yields for
- 2 the firms in the Utility Proxy Group are presented on
- 3 Exhibit No. 2. As shown there, dividend yields for the
- 4 firms in the Utility Proxy Group ranged from 2.0 percent to
- 5 5.9 percent.
- 6 Q. What is the next step in applying the constant
- 7 growth DCF model?
- 8 A. The next step is to evaluate long-term growth
- 9 expectations, or "g," for the firm in question. In constant
- 10 growth DCF theory, earnings, dividends, book value, and
- 11 market price are all assumed to grow in lockstep, and the
- 12 growth horizon of the DCF model is infinite. But
- implementation of the DCF model is more than just a
- 14 theoretical exercise; it is an attempt to replicate the
- 15 mechanism investors used to arrive at observable stock
- 16 prices. A wide variety of techniques can be used to derive
- 17 growth rates, but the only "g" that matters in applying the
- DCF model is the value that investors expect.
- 19 Q. Are historical growth rates likely to be
- 20 representative of investors' expectations for utilities?
- 21 A. No. If past trends in earnings, dividends,
- 22 and book value are to be representative of investors'
- 23 expectations for the future, then the historical conditions
- 24 giving rise to these growth rates should be expected to
- 25 continue. That is clearly not the case for electric
- 26 utilities, where structural and industry changes have led to
- 27 declining growth in dividends, earnings pressure, and, in

- 1 many cases, significant write-offs. While these conditions
- 2 serve to depress historical growth measures, they are not
- 3 representative of long-term expectations for the electric
- 4 utility industry or the expectations that investors have
- 5 incorporated into current market prices. As a result,
- 6 historical growth measures for utilities do not currently
- 7 meet the requirements of the DCF model.
- Q. What are investors most likely to consider in
- 9 developing their long-term growth expectations?
- 10 A. While the DCF model is technically concerned
- 11 with growth in dividend cash flows, implementation of this
- 12 DCF model is solely concerned with replicating the forward-
- looking evaluation of real-world investors. In the case of
- 14 electric utilities, dividend growth rates are not likely to
- 15 provide a meaningful quide to investors' current growth
- 16 expectations. This is because utilities have significantly
- 17 altered their dividend policies in response to more
- accentuated business risks in the industry. 34 As a result
- of this trend towards a more conservative payout ratio,
- 20 dividend growth in the utility industry has remained largely
- 21 stagnant as utilities conserve financial resources to
- 22 provide a hedge against heightened uncertainties.

³⁴ For example, the payout ratio for electric utilities fell from approximately 80 percent historically to on the order of 60 percent. The Value Line Investment Survey (Sep. 15, 1995 at 161, Feb. 4, 2011 at 2237).

Τ	As payout ratios for firms in the electric utility
2	industry trended downward, investors' focus has increasingly
3	shifted from dividends to earnings as a measure of long-term
4	growth. Future trends in earnings, which provide the source
5	for future dividends and ultimately support share prices,
6	play a pivotal role in determining investors' long-term
7	growth expectations. The importance of earnings in
8	evaluating investors' expectations and requirements is well
9	accepted in the investment community. As noted in Finding
10	Reality in Reported Earnings published by the Association
11	for Investment Management and Research:
12 13 14	[E]arnings, presumably, are the basis for the investment benefits that we all seek. 'Healthy earnings

[E]arnings, presumably, are the basis for the investment benefits that we all seek. 'Healthy earnings equal healthy investment benefits' seems a logical equation, but earnings are also a scorecard by which we compare companies, a filter through which we assess management, and a crystal ball in which we try to foretell future performance.³⁵

Value Line's near-term projections and its

Timeliness Rank, 36 which is the principal investment rating
assigned to each individual stock, are also based primarily
on various quantitative analyses of earnings. As Value Line
explained:

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

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.

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%. 37

The fact that investment advisory services 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. 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 three ranked dividends first while 276 ranked it last. The article concluded that "Earnings and cash flow are considered far more important than book value and dividends." 39

More recently, the Financial Analysts Journal reported the results of a study of the relationship between valuations based on alternative multiples and actual market

³⁷ The Value Line Investment Survey, Subscriber's Guide, p. 53.

³⁸ Block, Stanley B., "A Study of Financial Analysts: Practice and Theory," Financial Analysts Journal (July/August 1999).

³⁹ Id. at 88.

- 1 prices, which concluded, "In all cases studied, earnings
- dominated operating cash flows and dividends."40
- Q. Do the growth rate projections of security
- 4 analysts consider historical trends?
- 5 A. Yes. Professional security analysts study
- 6 historical trends extensively in developing their
- 7 projections of future earnings. Hence, to the extent there
- 8 is any useful information in historical patterns, that
- 9 information is incorporated into analysts' growth forecasts.
- 10 Q. What are security analysts currently
- 11 projecting in the way of growth for the firms in the Utility
- 12 Proxy Group?
- 13 A. The earnings growth projections for each of
- 14 the firms in the Utility Proxy Group reported by Value Line,
- Thomson Reuters ("IBES"), and Zacks Investment Research
- 16 ("Zacks") are displayed on Exhibit No. 2.41
- Q. Some argue that analysts' assessments of
- 18 growth rates are biased. Do you believe these projections
- 19 are inappropriate for estimating investors' required return
- 20 using the DCF model?
- 21 A. No. In applying the DCF model to estimate the
- 22 cost of common equity, the only relevant growth rate is the

⁴⁰ Liu, Jing, Nissim, Doron, & Thomas, Jacob, "Is Cash Flow King in Valuations?," Financial Analysts Journal, Vol. 63, No. 2 (March/April 2007) at 56.

⁴¹ Formerly I/B/E/S International, Inc., IBES growth rates are now compiled and published by Thomson Reuters.

- 1 forward-looking expectations of investors that are captured
- 2 in current stock prices. Investors, just like securities
- 3 analysts and others in the investment community, do not know
- 4 how the future will actually turn out. They can only make
- 5 investment decisions based on their best estimate of what
- 6 the future holds in the way of long-term growth for a
- 7 particular stock, and securities prices are constantly
- 8 adjusting to reflect their assessment of available
- 9 information.
- Any claims that analysts' estimates are not relied
- 11 upon by investors are illogical given the reality of a
- 12 competitive market for investment advice. If financial
- analysts' forecasts do not add value to investors' decision
- 14 making, then it is irrational for investors to pay for these
- 15 estimates. Similarly, those financial analysts who fail to
- 16 provide reliable forecasts will lose out in competitive
- markets relative to those analysts whose forecasts investors
- 18 find more credible. The reality that analyst estimates are
- 19 routinely referenced in the financial media and in
- 20 investment advisory publications (e.g., Value Line) implies
- 21 that investors use them as a basis for their expectations.
- The continued success of investment services such as
- 23 Thompson Reuters and Value Line, and the fact that projected
- 24 growth rates from such sources are widely referenced,
- 25 provides strong evidence that investors give considerable
- 26 weight to analysts' earnings projections in forming their
- 27 expectations for future growth. While the projections of

- 1 securities analysts may be proven optimistic or pessimistic
- 2 in hindsight, this is irrelevant in assessing the expected
- 3 growth that investors have incorporated into current stock
- 4 prices, and any bias in analysts' forecasts whether
- 5 pessimistic or optimistic is similarly irrelevant if
- 6 investors share the analysts' views. Earnings growth
- 7 projections of security analysts provide the most frequently
- 8 referenced guide to investors' views and are widely accepted
- 9 in applying the DCF model. As explained in New Regulatory
- 10 Finance:

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Because of the dominance institutional investors and their influence on individual investors, long-run analysts' forecasts of growth rates provide a sound basis estimating required returns. Financial analysts exert a strong influence on the expectations of many investors who do not possess the resources to make their forecasts, that is, they are a cause of q [growth]. The accuracy of these forecasts in the sense of whether they turn out to be correct is not an issue here, as long as reflect widely thev expectations. 42

- Q. How else are investors' expectations of future long-term growth prospects often estimated for use in the constant growth DCF model?
- 31 A. In constant growth theory, growth in book 32 equity will be equal to the product of the earnings

⁴² Morin, Roger A., "New Regulatory Finance," Public Utilities Reports, Inc., at 298 (2006).

- 1 retention ratio (one minus the dividend payout ratio) and
- 2 the earned rate of return on book equity. Furthermore, if
- 3 the earned rate of return and the payout ratio are constant
- 4 over time, growth in earnings and dividends will be equal to
- 5 growth in book value. Despite the fact that these
- 6 conditions are seldom, if ever, met in practice, this
- 7 "sustainable growth" approach may provide a rough guide for
- 8 evaluating a firm's growth prospects and is frequently
- 9 proposed in regulatory proceedings.
- Accordingly, while I believe that analysts'
- 11 forecasts provide a superior and more direct guide to
- investors' growth expectations, I have included the
- "sustainable growth" approach for completeness. The
- sustainable growth rate is calculated by the formula,
- 15 g = br+sv, where "b" is the expected retention ratio, "r" is
- the expected earned return on equity, "s" is the percent of
- 17 common equity expected to be issued annually as new common
- 18 stock, and "v" is the equity accretion rate.
- 19 Q. What is the purpose of the "sv" term?
- 20 A. Under DCF theory, the "sv" factor is a
- 21 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

- 1 earnings and dividends, with the "sv" factor incorporating
- 2 this additional growth component.
- 3 Q. What growth rate does the earnings retention
- 4 method suggest for the Utility Proxy Group?
- 5 A. The sustainable, "br+sv" growth rates for each
- 6 firm in the Utility Proxy Group are summarized on Exhibit
- 7 No. 2, with the underlying details being presented on
- 8 Exhibit No. 3. For each firm, the expected retention ratio
- 9 "b" was calculated based on Value Line's projected dividends
- 10 and earnings per share. Likewise, each firm's expected
- 11 earned rate of return "r" was computed by dividing projected
- 12 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
- 15 the year, consistent with the theory underlying this
- 16 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
- 19 product of the projected market-to-book ratio and growth in
- 20 common shares outstanding, while the equity accretion rate
- 21 "v" was computed as 1 minus the inverse of the projected
- 22 market-to-book ratio.
- Q. What cost of equity estimates were implied for
- 24 the Utility Proxy Group using the DCF model?
- 25 A. After combining the dividend yields and
- 26 respective growth projections for each utility, the

- 1 resulting cost of equity estimates are shown on Exhibit No.
- 2 2.
- 3 Q. In evaluating the results of the constant
- 4 growth DCF model, is it appropriate to eliminate cost of
- 5 equity estimates that are extreme low or high outliers?
- A. Yes. In applying quantitative methods to
- 7 estimate the cost of equity, it is essential that the
- 8 resulting values pass fundamental tests of reasonableness
- 9 and economic logic. Accordingly, DCF estimates that are
- implausibly low or high should be eliminated when evaluating
- 11 the results of this method.
- 12 Q. How did you evaluate DCF estimates at the low
- end of the range?
- 14 A. It is a basic economic principle that
- investors can be induced to hold more risky assets only if
- they expect to earn a return to compensate them for their
- 17 risk bearing. As a result, the rate of return that
- investors require from a utility's common stock, the most
- junior and riskiest of its securities, must be considerably
- 20 higher than the yield offered by senior, long-term debt.
- 21 Consistent with this principle, the DCF results must be
- 22 adjusted to eliminate estimates that are determined to be
- 23 extreme low outliers when compared against the yields
- 24 available to investors from less risky utility bonds.
- Q. What does this test of logic imply with
- 26 respect to the DCF results for the Utility Proxy Group?

1	A. As noted earlier, the average S&P corporate
2	credit rating for the Utility proxy Group is "BBB," the same
3	as for Idaho Power. Companies rated "BBB-," "BBB," and
4	"BBB+" are all considered part of the triple-B rating
5	category, with Moody's monthly yields on triple-B bonds
6	averaging approximately 6.0 percent in April 2011.43 It is
7	inconceivable that investors are not requiring a
8	substantially higher rate of return for holding common
9	stock. Consistent with this principle, the DCF results for
LO	the Utility Proxy Group must be adjusted to eliminate
11	estimates that are determined to be extreme low outliers
L2	when compared against the yields available to investors from
L3	less risky utility bonds.
L 4	Q. Have similar tests been applied by regulators?
L5	A. Yes. FERC has noted that adjustments are
L 6	justified where applications of the DCF approach produce
L7	illogical results. FERC evaluates DCF results against
L8	observable yields on long-term public utility debt and has
L9	recognized that it is appropriate to eliminate estimates
20	that do not sufficiently exceed this threshold. In a 2002
21	opinion establishing its current precedent for determining
22	ROEs for electric utilities, for example, FERC noted:
23 24 25 26 27	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

 $^{^{\}rm 43}$ Moody's Investors Service, www.credittrends.com.

2 3 4 5 6 7 8	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. 44
9	Similarly, in its August 2006 decision in Kern River
10	Gas Transmission Company, FERC noted that:
11 12 13 14 15	[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. 45
16	The Commission upheld the opinion of Staff and the
17	Administrative Law Judge that cost of equity estimates for
18	these two proxy group companies "were too low to be
19	credible." 46

bond yield of 8.06 percent, for

21 been affirmed in numerous FERC proceedings, 47 and in its 22 April 15, 2010, decision in *SoCal Edison*, FERC affirmed 23 that, "it is reasonable to exclude any company whose low-end

The practice of eliminating low-end outliers has

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 $^{^{44}}$ Southern California Edison Company, 92 FERC \P 61,070 at p. 22 (2000).

 $^{^{45}}$ Kern River Gas Transmission Company, Opinion No. 486, 117 FERC \P 61,077 at P 140 & n. 227 (2006).

⁴⁶ Id.

 $^{^{47}}$ See, e.g., Virginia Electric Power Co., 123 FERC \P 61,098 at P 64 (2008).

- 1 ROE fails to exceed the average bond yield by about 100
- 2 basis points or more."48
- Q. What else should be considered in evaluating
- 4 DCF estimates at the low end of the range?
- A. As indicated earlier, while corporate bond
- 6 yields have declined substantially as the worst of the
- 7 financial crisis has abated, it is generally expected that
- 8 long-term interest rates will rise as the recession ends and
- 9 the economy returns to a more normal pattern of growth. As
- shown in Table WEA-3 below, forecasts of IHS Global Insight
- and the EIA imply an average triple-B bond yield of 7.15
- 12 percent over the period 2012-2015:

TABLE WEA-3
14 IMPLIED BBB BOND YIELD

	2012-15
Projected AA Utility Yield	
IHS Global Insight (a)	6.33%
EIA (b)	6.58%
Average	6.45%
Current BBB - AA Yield Spread (c)	0.70%
Implied Triple-B Utility Yield	7.15%

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The increase in debt yields anticipated by IHS

16 Global Insight and EIA is also supported by the widely-

⁽a) IHS Global Insight, U.S. Economic Outlook at 19 (Feb. 2011).

⁽b) Energy Information Administration, Annual Energy Outlook 2011 Early Release (Dec. 16, 2010).

⁽c) Based on monthly average bond yields for the six-month period Nov. 2010 - Apr. 2011.

 $^{^{48}}$ Southern California Edison Co., 131 FERC ¶ 61,020 at P 55 (2010) ("SoCal Edison").

- 1 referenced Blue Chip Financial Forecasts, which projects
- 2 that yields on corporate bonds will climb more than 100
- 3 basis points through the period 2012-2016.49
- 4 Q. What does this test of logic imply with
- 5 respect to the DCF results for the Utility Proxy Group?
- A. As shown on Exhibit No. 2, eight low-end DCF
- 7 estimates ranged from 2.4 percent to 7.0 percent. Three of
- 8 these values were below current utility bond yields, with
- 9 cost of equity estimates of 7.0 percent or below being less
- than the yield on triple-B utility bonds expected during the
- 11 period 2012-2015. In light of the risk-return tradeoff
- 12 principle and the test applied in SoCal Edison, 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
- 16 a result, consistent with the test of economic logic applied
- 17 by FERC and the upward trend expected for utility bond
- 18 yields, these values provide little guidance as to the
- 19 returns investors require from utility common stocks and
- 20 should be excluded.
- Q. Do you also recommend excluding estimates at
- 22 the high end of the range of DCF results?
- 23 A. Yes. The upper end of the cost of common
- 24 equity range produced by the DCF analysis presented in

⁴⁹ Blue Chip Financial Forecasts, Vol. 29, No. 12 (Dec. 1, 2010) & Vol. 30, No. 3 (Mar. 1, 2011).

- 1 Exhibit No. 2 was set by five cost of equity estimates
- 2 ranging from 17.0 percent to 23.3 percent. When compared
- 3 with the balance of the remaining estimates, these values
- 4 are clearly implausible and should be excluded in evaluating
- 5 the results of the DCF model for the Utility Proxy Group.
- 6 This is also consistent with the precedent adopted by FERC,
- 7 which has established that estimates found to be "extreme
- 8 outliers" should be disregarded in interpreting the results
- 9 of the DCF model.⁵⁰
- 10 Q. What cost of equity is implied by your DCF
- 11 results for the Utility Proxy Group?
- 12 A. As shown on Exhibit No. 2 and summarized in
- 13 Table WEA-4, below, after eliminating illogical low- and
- 14 high-end values, application of the constant growth DCF
- model resulted in the following cost of equity estimates:

16 TABLE WEA-4 17 DCF RESULTS - UTILITY PROXY GROUP

Growth Rate	Average Cost of Equity
Value Line	11.4%
IBES	10.5%
Zacks	10.4%
br+sv	9.1%

- Q. What were the results of your DCF analysis for the Non-Utility Proxy Group?
- 20 A. I applied the DCF model to the Non-Utility
 21 Proxy Group in exactly the same manner described earlier for

 $^{^{50}}$ See, e.g., ISO New England, Inc., 109 FERC \P 61,147 at P 205 (2004).

- 1 the Utility Proxy Group. The results of my DCF analysis for
- 2 the Non-Utility Proxy Group are presented in Exhibit No. 4,
- 3 with the sustainable, "br+sv" growth rates being developed
- 4 on Exhibit No. 5. As shown on Exhibit No. 4 and summarized
- 5 in Table WEA-5, below, after eliminating illogical low- and
- 6 high-end values, application of the constant growth DCF
- 7 model resulted in cost of common equity estimates on the
- 8 order of at least 12 percent:

9 TABLE WEA-5 10 DCF RESULTS - NON-UTILITY PROXY GROUP

Growth Rate	Average Cost of Equity
Value Line	11.9%
IBES	12.4%
Zacks	12.5%
br+sv	12.1%

- 11 As discussed earlier, reference to the Non-Utility
- 12 Proxy Group is consistent with established regulatory
- principles and required returns for utilities should be in
- line with those of non-utility firms of comparable risk
- operating under the constraints of free competition.
- D. Capital Asset Pricing Model.
- 17 Q. Please describe the CAPM.
- 18 A. The CAPM is generally considered to be the
- 19 most widely referenced method for estimating the cost of
- 20 equity both among academicians and professional
- 21 practitioners, with the pioneering researchers of this
- 22 method receiving the Nobel Prize in 1990. The CAPM is a
- 23 theory of market equilibrium that measures risk using the

- 1 beta coefficient. Assuming investors are fully diversified,
- 2 the relevant risk of an individual asset (e.g., common
- 3 stock) is its volatility relative to the market as a whole,
- 4 with beta reflecting the tendency of a stock's price to
- 5 follow changes in the market. The CAPM is mathematically
- 6 expressed as:
- $R_{j} = R_{f} + \beta_{j} (R_{m} R_{f})$

- where: R_i = required rate of return for stock j;
- $R_f = risk-free rate;$
- R_{m} = expected return on the market portfolio;
- 12 and,
- β_j = beta, or systematic risk, for stock j.
- 14 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
- investors in the market, not with backward-looking,
- 20 historical data.
- 21 Q. How did you apply the CAPM to estimate the
- 22 cost of equity?
- 23 A. Application of the CAPM to the Utility Proxy
- 24 Group based on a forward-looking estimate for investors'
- 25 required rate of return from common stocks is presented on
- 26 page 1 of Exhibit No. 6. In order to capture the
- 27 expectations of today's investors in current capital
- 28 markets, the expected market rate of return was estimated by

- 1 conducting a DCF analysis on the dividend paying firms in
- 2 the S&P 500 Composite Index.
- 3 The dividend yield for each firm was calculated
- 4 based on the annual indicated dividend payment obtained from
- 5 Value Line, increased by one-years' growth using the rate
- 6 discussed subsequently (1 + q) to convert them to year-ahead
- 7 dividend yields presumed by the constant growth DCF model.
- 8 The growth rate was equal to the consensus earnings growth
- 9 projections for each firm published by IBES, with each
- 10 firm's dividend yield and growth rate being weighted by its
- 11 proportionate share of total market value. Based on the
- weighted average of the projections for the 354 individual
- firms, current estimates imply an average growth rate over
- 14 the next five years of 10.5 percent. Combining this average
- growth rate with a year-ahead dividend yield of 2.3 percent
- 16 results in a current cost of common equity estimate for the
- market as a whole (R_m) of approximately 12.8 percent.
- 18 Subtracting a 4.5 percent risk-free rate based on the
- 19 average yield on 30-year Treasury bonds produced a market
- 20 equity risk premium of 8.3 percent.
- Q. What was the source of the beta values you
- used to apply the CAPM?
- A. I relied on the beta values reported by Value
- Line, which in my experience is the most widely referenced
- 25 source for beta in regulatory proceedings. As noted in New
- 26 Regulatory Finance:

Value	Line	is	the	large	est	and	most
widely	, (circ	ulate	ed	inc	lepei	ndent
invest	ment	ad	visor	y se	ervi	ce,	and
influe	nces	the	e ex	pecta	tion	s (of a
large	numb	er	of i	nstit	utio	onal	and
indivi	dual	inv	restor	cs		. 7	Value
Line	beta	S	are	comp	uted	. 0	n a
theore	tical	ly	sound	d bas	sis	usi	ng a
broadl	y bas	ed i	marke	t ind	ex,	and	they
are a	adjust	ed	for	the	re	gre	ssion
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- Q. What else should be considered in applying the
- 14 CAPM?

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A. As explained by Morningstar:

One of the most remarkable discoveries of modern finance is that of a relationship between firm size and return. The relationship across cuts the entire spectrum but is most evident among smaller companies, which have higher returns on average than larger ones. 52

Because empirical research indicates that the CAPM does not fully account for observed differences in rates of return attributable to firm size, a modification is required to account for this size effect.

According to the CAPM, the expected return on a security should consist of the riskless rate, plus a premium to compensate for the systematic risk of the particular security. The degree of systematic risk is represented by

Morin, Roger A., "New Regulatory Finance," Public Utilities Reports at 71 (2006).

 $^{^{52}}$ Morningstar, "Ibbotson SBBI 2011 Valuation Yearbook," at p. 83 (footnote omitted).

- 1 the beta coefficient. The need for the size adjustment
- 2 arises because differences in investors' required rates of
- 3 return that are related to firm size are not fully captured
- 4 by beta. To account for this, Morningstar has developed
- 5 size premiums that need to be added to the theoretical CAPM
- 6 cost of equity estimates to account for the level of a
- 7 firm's market capitalization in determining the CAPM cost of
- 8 equity. 53 Accordingly, my CAPM analyses incorporated an
- 9 adjustment to recognize the impact of size distinctions, as
- 10 measured by the average market capitalization for the
- 11 respective proxy groups.
- 12 Q. What cost of equity estimate was indicated for
- 13 the Utility Proxy Group based on this forward-looking
- 14 application of the CAPM?
- 15 A. The average market capitalization of the
- 16 Utility Proxy Group is \$5.3 billion. Based on data from
- 17 Morningstar, this means that the theoretical CAPM cost of
- 18 equity estimate must be increased by 101 basis points to
- 19 account for the industry group's relative size. As shown on
- 20 Exhibit No. 6, adjusting the theoretical CAPM result to
- 21 incorporate this size adjustment results in an average
- 22 indicated cost of common equity of 11.8 percent.

⁵³ *Id.* at Table C-1.

- 1 O. What cost of common equity was indicated for
- 2 the Non-Utility Proxy Group based on this forward-looking
- 3 application of the CAPM?
- A. As shown on page 2 of Exhibit No. 6, applying
- 5 the forward-looking CAPM approach to the firms in the Non-
- 6 Utility Proxy Group results in an average implied cost of
- 7 common equity of 10.0 percent.
- 8 Q. Is it appropriate to consider anticipated
- 9 capital market changes in applying THE CAPM?
- 10 A. Yes. As discussed earlier, there is
- widespread consensus that interest rates will increase
- 12 materially as the economy continues to strengthen. As a
- 13 result, current bond yields are likely to understate capital
- 14 market requirements at the time the outcome of this
- 15 proceeding becomes effective. Accordingly, in addition to
- 16 the use of current bond yields, I also applied the CAPM
- 17 based on the forecasted long-term Treasury bond yields
- developed based on projections published by Value Line, IHS
- 19 Global Insight and Blue Chip.
- Q. What cost of equity was produced by the CAPM
- 21 after incorporating forecasted bond yields?
- A. As shown on page 1 of Exhibit No. 7,
- 23 incorporating a forecasted yield for 2012-2015 implied a
- 24 cost of equity of approximately 12.0 percent for the Utility
- 25 Proxy Group, or 10.2 percent for the group of non-utility
- 26 firms (page 2 of Exhibit No. 7).

1 Should the CAPM approach be applied using 0. 2 historical rates of return? 3 The CAPM cost of common equity estimate Α. 4 is calibrated from investors' required risk premium between 5 Treasury bonds and common stocks. In response to heightened 6 uncertainties, investors have repeatedly sought a safe haven 7 in U.S. government bonds and this "flight to safety" has 8 pushed Treasury yields significantly lower while yield 9 spreads for corporate debt have widened. This distortion 10 not only impacts the absolute level of the CAPM cost of 11 equity estimate, but it affects estimated risk premiums. 12 Economic logic would suggest that investors' required risk 13 premium for common stocks over Treasury bonds has also 14 increased. 15 Meanwhile, backward-looking approaches incorrectly 16 assume that investors' assessment of the required risk 17 premium between Treasury bonds and common stocks is 18 constant, and equal to some historical average. At no time 19 in recent history has the fallacy of this assumption been 20 demonstrated more concretely than it is today. 21 incongruity between investors' current expectations and 22 historical risk premiums is particularly relevant during

periods of heightened uncertainty and rapidly changing

1 capital market conditions, such as those experienced

2 recently.⁵⁴

3 E. Risk Premium Approach.

- Q. Briefly describe the risk premium method.
- 5 A. The risk premium method of estimating

6 investors' required rate of return extends to common stocks

7 the risk-return tradeoff observed with bonds. The cost of

8 equity is estimated by first determining the additional

9 return investors require to forgo the relative safety of

10 bonds and to bear the greater risks associated with common

11 stock, and by then adding this equity risk premium to the

12 current yield on bonds. Like the DCF model, the risk

13 premium method is capital market oriented. However, unlike

DCF models, which indirectly impute the cost of equity, risk

premium methods directly estimate investors' required rate

of return by adding an equity risk premium to observable

17 bond yields.

18 Q. How did you implement the risk premium method?

19 A. I based my estimates of equity risk premiums

20 for electric utilities on surveys of previously authorized

21 rates of return on common equity. Authorized returns

22 presumably reflect regulatory commissions' best estimates of

23 the cost of equity, however determined, at the time they

FERC has previously rejected CAPM methodologies based on historical data because whatever historical relationships existed between debt and equity securities may no longer hold. See Orange & Rockland Utils., Inc., 40 F.E.R.C. P63,053, at pp. 65,208 -09 (1987), aff'd, Opinion No. 314, 44 F.E.R.C. P61,253 at 65,208.

- 1 issued their final order. Such returns should represent a
- 2 balanced and impartial outcome that considers the need to
- 3 maintain a utility's financial integrity and ability to
- 4 attract capital. Moreover, allowed returns are an important
- 5 consideration for investors and have the potential to
- 6 influence other observable investment parameters, including
- 7 credit ratings and borrowing costs. Thus, this data
- 8 provides a logical and frequently referenced basis for
- 9 estimating equity risk premiums for regulated utilities.
- 10 Q. How did you implement the risk premium
- approach using surveys of allowed rates of return?
- 12 A. Surveys of previously authorized rates of
- return on common equity are frequently referenced as the
- 14 basis for estimating equity risk premiums. The rates of
- return on common equity authorized utilities by regulatory
- 16 commissions across the U.S. are compiled by Regulatory
- 17 Research Associates and published in its Regulatory Focus
- 18 report. In Exhibit No. 8, the average yield on public
- 19 utility bonds is subtracted from the average allowed rate of
- 20 return on common equity for electric utilities to calculate
- 21 equity risk premiums for each year between 1974 and 2010.
- Over this 37-year period, these equity risk premiums for
- electric utilities averaged 3.36 percent, and the yield on
- public utility bonds averaged 9.01 percent.

- 1 Q. Is there any capital market relationships that
- 2 must be considered when implementing the risk premium
- 3 method?
- 4 A. Yes. There is considerable evidence that the
- 5 magnitude of equity risk premiums is not constant and that
- 6 equity risk premiums tend to move inversely with interest
- 7 rates. In other words, when interest rate levels are
- 8 relatively high, equity risk premiums narrow, and when
- 9 interest rates are relatively low, equity risk premiums
- 10 widen. The implication of this inverse relationship is that
- 11 the cost of equity does not move as much as, or in lockstep
- 12 with, interest rates. Accordingly, for a 1 percent increase
- or decrease in interest rates, the cost of equity may only
- 14 rise or fall, say, 50 basis points. Therefore, when
- implementing the risk premium method, adjustments may be
- 16 required to incorporate this inverse relationship if current
- interest rate levels have changed since the equity risk
- 18 premiums were estimated.
- 19 Finally, it is important to recognize that the
- 20 historical focus of the risk premium studies almost
- 21 certainly ensures that they fail to fully capture the
- 22 significantly greater risks that investors now associate
- 23 with providing electric utility service. As a result, they
- 24 are likely to understate the cost of equity for a firm
- operating in today's electric power industry.

- 1 Q. What cost of equity is implied by surveys of
- 2 allowed rates of return on equity?
- 3 A. Based on the regression output between the
- 4 interest rates and equity risk premiums displayed on page 3
- of Exhibit No. 8, the equity risk premium for electric
- 6 utilities increased approximately 41 basis points for each
- 7 percentage point drop in the yield on average public utility
- 8 bonds. As illustrated on page 1 of Exhibit No. 8, with the
- 9 yield on average public utility bonds in April 2011 being
- 10 5.62 percent, this implied a current equity risk premium of
- 11 4.75 percent for electric utilities. Adding this equity
- 12 risk premium to the average yield on triple-B utility bonds
- of 5.98 percent produces a current cost of equity of
- 14 approximately 10.7 percent.
- Q. What cost of equity was produced by the risk
- premium approach after incorporating forecasted bond yields?
- A. As shown on page 2 of Exhibit No. 8,
- incorporating a forecasted yield for 2012-2015 and adjusting
- 19 for changes in interest rates since the study period implied
- 20 an equity risk premium of 4.21 percent for electric
- 21 utilities. Adding this equity risk premium to the average
- 22 implied yield on triple-B public utility bonds for 2012-2015
- of 7.15 percent resulted in an implied cost of equity of
- approximately 11.4 percent.
- 25 F. Comparable Earnings Approach.
- Q. What other benchmarks did you develop to
- 27 evaluate the ROE for Idaho Power?

- 1 As I noted earlier, I also evaluated the ROE Α. 2 by reference to expected rates of return for electric 3 utilities. Reference to rates of return available from alternative investments of comparable risk can provide an important benchmark in assessing the return necessary to 5 assure confidence in the financial integrity of a firm and 7 its ability to attract capital. This approach is consistent with the economic underpinnings for a fair rate of return, 8 9 as reflected in the comparable earnings test established by 10 the Supreme Court in Hope and Bluefield. Moreover, it 11 avoids the complexities and limitations of capital market 12 methods and instead focuses on the returns earned on book
- Q. What economic premise underlies the comparable earnings approach?

equity, which are readily available to investors.

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16 Α. The simple, but powerful concept underlying 17 the expected earnings approach is that investors compare 18 each investment alternative with the next best opportunity. If the utility is unable to offer a return similar to that 19 20 available from other opportunities of comparable risk, 21 investors will become unwilling to supply the capital on 22 reasonable terms. For existing investors, denying the 23 utility an opportunity to earn what is available from other 24 similar risk alternatives prevents them from earning their 25 opportunity cost of capital. In this situation the 26 government is effectively taking the value of investors' 27 capital without adequate compensation.

- 1 Q. How is the comparison of opportunity costs 2 typically implemented?
- 3 Α. The traditional comparable earnings test 4 identifies a group of companies that are believed to be 5 comparable in risk to the utility. The actual earnings of 6 those companies on the book value of their investment are 7 then compared to the allowed return of the utility. 8 the traditional comparable earnings test is implemented 9 using historical data taken from the accounting records, it 10 is also common to use projections of returns on book 11 investment, such as those published by recognized investment 12 advisory publications (e.g., Value Line). Because these 13 expected returns on book value equity are analogous to the 14 allowed return on a utility's rate base, this measure of 15 opportunity costs results in a direct, "apples to apples" 16 comparison. My application of the expected earnings 17 approach was focused exclusively on forward-looking 18 projections, not historical data.

Moreover, regulators do not set the returns that investors earn in the capital markets — they can only establish the allowed return on the value of a utility's investment, as reflected on its accounting records. As a result, the comparable earnings approach provides a direct guide to ensure that the allowed ROE is similar to what other utilities of comparable risk will earn on invested capital. This opportunity cost test does not require theoretical models to indirectly infer investors'

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1 1	perceptions	from st	ock prices	or other	market	data.	As	lone

- 2 as the proxy companies are similar in risk, their expected
- 3 earned returns on invested capital provide a direct
- 4 benchmark for investors' opportunity costs that is
- 5 independent of fluctuating stock prices, market-to-book
- 6 ratios, debates over DCF growth rates, or the limitations
- 7 inherent in any theoretical model of investor behavior.
- 8 Q. What rates of return on equity are indicated
- 9 for electric utilities based on the comparable earnings
- 10 approach?
- 11 A. Value Line reports that its analysts
- 12 anticipate an average rate of return on common equity for
- 13 the electric utility industry of 10.5 percent over its
- 14 forecast horizon. 55 Meanwhile, for the firms in the Utility
- 15 Proxy Group specifically, the returns on common equity
- 16 projected by Value Line over its forecast horizon are shown
- on Exhibit No. 9. Consistent with the rationale underlying
- 18 the development of the br+sv growth rates, these year-end
- 19 values were converted to average returns using the same
- 20 adjustment factor discussed earlier and developed on Exhibit
- No. 3. As shown on Exhibit No. 9, Value Line's projections
- for the Utility Proxy Group suggest an average ROE of 10.4
- 23 percent after eliminating outliers.

⁵⁵ The Value Line Investment Survey at 901 (Mar. 25, 2011).

- 1 G. Flotation Costs.
- Q. What other considerations are relevant in
- 3 determining the ROE for Idaho Power?
- 4 A. The common equity used to finance the
- 5 investment in utility assets is provided from either the
- 6 sale of stock in the capital markets or from retained
- 7 earnings not paid out as dividends. When equity is raised
- 8 through the sale of common stock, there are costs associated
- 9 with "floating" the new equity securities. These flotation
- 10 costs include services such as legal, accounting, and
- 11 printing, as well as the fees and discounts paid to
- 12 compensate brokers for selling the stock to the public.
- 13 Also, some argue that the "market pressure" from the
- 14 additional supply of common stock and other market factors
- may further reduce the amount of funds that a utility nets
- when it issues common equity.
- 17 Q. Is there an established mechanism for a
- 18 utility to recognize equity issuance costs?
- 19 A. No. While debt flotation costs are recorded
- on the books of the utility, amortized over the life of the
- 21 issue, and thus increase the effective cost of debt capital,
- 22 there is no similar accounting treatment to ensure that
- 23 equity flotation costs are recorded and ultimately
- 24 recognized. Alternatively, no rate of return is authorized
- on flotation costs necessarily incurred to obtain a portion
- of the equity capital used to finance plant. In other
- words, equity flotation costs are not included in a

- 1 utility's rate base because neither that portion of the
- 2 gross proceeds from the sale of common stock used to pay
- 3 flotation costs is available to invest in plant and
- 4 equipment, nor are flotation costs capitalized as an
- 5 intangible asset. Unless some provision is made to
- 6 recognize these issuance costs, a utility's revenue
- 7 requirements will not fully reflect all of the costs
- 8 incurred for the use of investors' funds. Because there is
- 9 no accounting convention to accumulate the flotation costs
- 10 associated with equity issues, they must be accounted for
- indirectly, with an upward adjustment to the cost of common
- 12 equity being the most logical mechanism.
- Q. What is the magnitude of the adjustment to the
- "bare bones" cost of common equity to account for issuance
- 15 costs?
- 16 A. While there are a number of ways in which a
- 17 flotation cost adjustment can be calculated, one of the most
- 18 common methods used to account for flotation costs in
- 19 regulatory proceedings is to apply an average flotation-cost
- 20 percentage to a utility's dividend yield. Based on a review
- 21 of the finance literature, New Regulatory Finance concluded:
- The flotation cost allowance
- requires an estimated adjustment to
- 24 the return on equity of
- approximately 5% to 10%, depending
- on the size and risk of the issue. 56

⁵⁶ Roger A. Morin, "New Regulatory Finance," Public Utilities Reports, Inc. at 323 (2006).

1	AL	ternative	ly, a	study	of da	ıta fr	om Morga	n Stanley
2	regarding	issuance	costs	assoc	iated	with	utility	common

3 stock issuances suggests an average flotation cost

4 percentage of 3.6 percent.⁵⁷

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Issuance costs are a legitimate consideration in setting the ROE for a utility, and applying these expense percentages to a representative dividend yield for a utility of 4.5 percent implies a flotation cost adjustment on the order of 15 to 45 basis points.

Q. Has the IPUC Staff previously considered flotation costs in establishing a fair ROE for Idaho Power?

A. Yes. For example, in Case No. IPC-E-08-10, IPUC Staff witness Terri Carlock noted that she had adjusted her DCF analysis to incorporate an allowance for flotation costs. 58

IV. RETURN ON EQUITY FOR IDAHO POWER COMPANY

Q. What is the purpose of this section?

A. In addition to presenting the conclusions of my evaluation of a fair rate of return on equity for Idaho Power, this section also discusses the relationship between ROE and preservation of a utility's financial integrity and

 $^{^{57}}$ 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 percent.

 $^{^{58}}$ Case No. IPC-E-08-10, Direct Testimony of Terri Carlock at 12-13 (Oct. 24, 2008).

- 1 the ability to attract capital. In addition, I evaluate the
- 2 reasonableness of Idaho Power's requested capital structure.
- 3 A. Implications for Financial Integrity.
- 4 Q. Why is it important to allow Idaho Power an
- 5 adequate authorized ROE?
- A. Given the importance of the utility industry
- 7 to the economy and society, it is essential to maintain
- 8 reliable and economical service to all consumers. While
- 9 Idaho Power remains committed to deliver reliable service, a
- 10 utility's ability to fulfill its mandate can be compromised
- 11 if it lacks the necessary financial wherewithal or is unable
- 12 to earn a return sufficient to attract capital.
- As documented earlier, the major rating agencies
- 14 have warned of exposure to uncertainties associated with
- 15 capital expenditure requirements, uncertain economic and
- 16 financial market conditions, future environmental compliance
- 17 costs, and the potential for continued energy price
- 18 volatility. As discussed earlier, Idaho Power faces a
- 19 number of potential challenges that might require the
- 20 relatively swift commitment of significant capital resources
- 21 in order to maintain the high level of service to which
- 22 customers have become accustomed.
- 23 Investors understand how swiftly unforeseen
- 24 circumstances can lead to deterioration in a utility's
- 25 financial condition, and stakeholders have discovered first
- 26 hand how difficult and complex it can be to remedy the
- 27 situation after the fact. While providing the

- 1 infrastructure necessary to enhance the power system and
- 2 meet the energy needs of customers is certainly desirable,
- 3 it imposes additional financial responsibilities on Idaho
- 4 Power. For a utility with an obligation to provide reliable
- 5 service, investors' increased reticence to supply additional
- 6 capital during times of crisis highlights the necessity of
- 7 preserving the flexibility necessary to overcome periods of
- 8 adverse capital market conditions. These considerations
- 9 heighten the importance of allowing Idaho Power an adequate
- 10 return on its investment.
- 11 Q. What role does regulation play in ensuring
- 12 Idaho Power's access to capital?
- 13 A. The major rating agencies have warned
- investors of the exposure to uncertainties associated with
- political and regulatory developments. Investors recognize
- that constructive regulation is a key ingredient in
- supporting utility credit ratings and financial integrity,
- particularly during times of adverse conditions. Fitch
- noted that a weak economic backdrop "could result in
- 20 political push-back to rate increase requests."59 Fitch
- 21 concluded, "[G]iven the lingering rate of unemployment and
- voter concerns about the economy, there could well be
- 23 pockets of adverse rate decisions, and those companies with

⁵⁹ Fitch Ratings Ltd., "U.S. Utilities, Power and Gas 2009 Outlook," Global Power North America Special Report (Dec. 22, 2008).

- 1 little financial cushion could suffer adverse effects."60
- 2 S&P has also emphasized the need for regulatory support,
- 3 concluding, "the quality of regulation is at the forefront
- 4 of our analysis of utility creditworthiness."61 Similarly,
- 5 Moody's concluded:

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For the longer term, however, we are becoming increasingly concerned possible changes fundamental assumptions about regulatory risk, particularly the prospect of a more adversarial therefore political (and regulatory) environment. prolonged recessionary climate with high unemployment, or an intense period of inflation, could make cost recovery more uncertain. 62

- 18 Moody's concluded that political risks associated with
- "growing consumer intolerance for steadily increasing rates"
- was a key longer-term challenge for utilities that would be
- 21 intensified by prolonged unemployment. 63 With respect to
- 22 Idaho Power specifically, the major bond rating agencies
- 23 have noted the importance of constructive regulatory
- 24 decisions in mitigating financial pressures, while observing

⁶⁰ Fitch Ratings Ltd., "U.S. Utilities, Power and Gas 2010 Outlook," Global Power North America Special Report (Dec. 4, 2009).

⁶¹ Standard & Poor's Corporation, "Assessing U.S. Utility Regulatory Environments," RatingsDirect (Nov. 7, 2008).

⁶² Moody's Investors Service, "U.S. Regulated Electric Utilities, Six-Month Update," Industry Outlook (July 2009).

⁶³ Moody's Investors Service, "U.S. Electric Utilities Face Challenges Beyond Near-Term," Industry Outlook (Jan. 2010).

- 1 that waning support would likely lead to a deterioration in
- 2 the Company's credit standing.⁶⁴
- 3 Q. Do customers benefit by enhancing the
- 4 utility's financial flexibility?
- 5 A. Yes. While providing an ROE that is
- 6 sufficient to maintain Idaho Power's ability to attract
- 7 capital, even in times of financial and market stress, is
- 8 consistent with the economic requirements embodied in the
- 9 Supreme Court's Hope and Bluefield decisions, it is also in
- 10 customers' best interests. Customers and the service area
- 11 economy enjoy the benefits that come from ensuring that the
- 12 utility has the financial wherewithal to take whatever
- actions are required to ensure reliable service.
- 14 B. <u>Capital Structure</u>.
- 15 Q. Is an evaluation of the capital structure
- 16 maintained by a utility relevant in assessing its return on
- 17 equity?
- 18 A. Yes. Other things equal, a higher debt ratio,
- or lower common equity ratio, translates into increased
- 20 financial risk for all investors. A greater amount of debt
- 21 means more investors have a senior claim on available cash
- 22 flow, thereby reducing the certainty that each will receive
- 23 his contractual payments. This increases the risks to which
- lenders are exposed, and they require correspondingly higher

⁶⁴ See, e.g., Moody's Investors Service, "Credit Opinion: Idaho Power Company," Global Credit Research (Mar. 9, 2011).

- 1 rates of interest. From common shareholders' standpoints, a
- 2 higher debt ratio means that there are proportionately more
- 3 investors ahead of them, thereby increasing the uncertainty
- 4 as to the amount of cash flow, if any, that will remain.
- 5 Q. What common equity ratio is implicit in Idaho
- 6 Power's requested capital structure?
- 7 A. Idaho Power's capital structure is presented
- 8 in the testimony of Mr. Keen. As summarized in his
- 9 testimony, the common equity ratio used to compute Idaho
- 10 Power's overall rate of return was approximately 51 percent
- 11 in this filing.
- 12 Q. What was the average capitalization maintained
- 13 by the Utility Proxy Group?
- A. As shown on Exhibit No. 10, for the firms in
- 15 the Utility Proxy Group, common equity ratios at December
- 16 31, 2010, ranged from 25.3 percent to 63.8 percent and
- 17 averaged 46.4 percent.
- 18 Q. What capitalization is representative for the
- 19 proxy group of utilities going forward?
- A. As shown on Exhibit No. 10, Value Line expects
- 21 an average common equity ratio for the proxy group of
- 22 utilities of 48.9 percent for its three-to-five year
- 23 forecast horizon, with the individual common equity ratios
- ranging from 29.0 percent to 67.5 percent.
- Q. What implication do the uncertainties facing
- 26 the utility industry have for the capital structures
- 27 maintained by electric utilities?

Τ	A. As discussed earlier, utilities are facing
2	energy market volatility, rising cost structures, the need
3	to finance significant capital investment plans, changing
4	environmental mandates, uncertainties over accommodating
5	economic and financial market uncertainties, and ongoing
6	regulatory risks. Taken together, these considerations
7	warrant a stronger balance sheet to deal with an
8	increasingly uncertain environment. A more conservative
9	financial profile, in the form of a higher common equity
10	ratio, is consistent with increasing uncertainties and the
11	need to maintain the continuous access to capital under
12	reasonable terms that is required to fund operations and
13	necessary system investment, even during times of adverse
14	capital market conditions.
15	Moody's has repeatedly warned investors of the risks
16	associated with debt leverage and fixed obligations and
17	advised utilities not to squander the opportunity to
18	strengthen the balance sheet as a buffer against future
19	uncertainties. 65 More recently, Moody's concluded:
20	From a credit perspective, we

believe a strong balance sheet coupled with abundant sources of liquidity represents one of the best defenses against business and

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⁶⁵ Moody's Investors Service, "Storm Clouds Gathering on the Horizon for the North American Electric Utility Sector," Special Comment (Aug. 2007); "U.S. Electric Utility Sector," Industry Outlook (Jan. 2008).

operating risk and potential negative ratings actions. 66

Similarly, S&P noted that, "we generally consider a 3 debt to capital level of 50% or greater to be aggressive or 4 highly leveraged for utilities."67 Fitch affirmed that it 5 expects regulated utilities "to extend their conservative 6 7 balance sheet stance," and employ "a judicious mix of debt and equity to finance high levels of planned investments."68 8 This is especially the case for electric utilities that are 10 exposed to potential significant fluctuations in power 11 supply costs, such as Idaho Power.

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

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A. Depending on their specific attributes, contractual agreements or other obligations that require the utility to make specified payments may be treated as debt in evaluating Idaho Power's financial risk. PPAs and other contractual commitments typically obligate the utility to make specified minimum payments akin to those associated with traditional debt financing, and investors consider a portion of these obligations as debt in evaluating total financial risks.

⁶⁶ Moody's Investors Service, "U.S. Electric Utilities Face Challenges Beyond Near-Term," Industry Outlook (Jan. 2010).

⁶⁷ Standard & Poor's Corporation, "Ratings Roundup: U.S. Electric Utility Sector Maintained Strong Credit Quality in a Gloomy 2009," RatingsDirect (Jan. 26, 2010).

⁶⁸ Fitch Ratings Ltd., "U.S. Utilities, Power, and Gas 2010 Outlook," Global Power North America Special Report (Dec. 4, 2009).

1 Similarly, when a utility enters into a mandated PPA 2 with a Qualifying Facility ("OF") under PURPA, the fixed 3 charges associated with the contract increase the utility's 4 financial risk in the same way that long-term debt and other 5 financial obligations increase financial leverage. As 6 discussed in the testimony of Mr. Keen, Idaho Power's 7 obligations under PPAs with QFs have expanded dramatically 8 in recent years. Because investors consider the debt impact 9 of such fixed obligations in assessing a utility's financial 10 position, they imply greater risk and reduced financial 11 flexibility. 12

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In order to offset the debt equivalent associated with commitments under PPAs with QF developers and other fixed obligations, Idaho Power must rebalance its capital structure by increasing its common equity in order to restore its effective capitalization ratios to previous levels. These commitments have been repeatedly cited by major bond rating agencies in connection with assessments of utility financial risks. ⁶⁹ For example, S&P reported that it adjusts Idaho Power's capitalization to include approximately \$327 million in imputed debt from PPAs,

⁶⁹ See, e.g., Standard & Poor's Corporation, "Standard & Poor's Methodology For Imputing Debt For U.S. Utilities' Power Purchase Agreements," RatingsDirect (May 7, 2007); Standard & Poor's Corporation, "Implications of Operating Leases on Analysis of U.S. Electric Utilities," RatingsDirect (Jan. 15, 2008); Standard & Poor's Corporation, "Top 10 Investor Questions: U.S. Regulated Electric Utilities," RatingsDirect (Jan. 22, 2010).

- leases, and postretirement benefit obligations. 70 The
- 2 capital structure ratios presented earlier do not include
- 3 imputed debt associated with power purchase agreements or
- 4 the impact of other off-balance sheet obligations. Unless
- 5 Idaho Power takes action to offset this additional financial
- 6 risk by maintaining a higher equity ratio, the resulting
- 7 leverage will weaken the Company's creditworthiness,
- 8 implying a higher required rate of return to compensate
- 9 investors for the greater risks. 71
- 10 Q. What did you conclude with respect to the
- 11 Company's capital structure?
- 12 A. Based on my evaluation, I concluded that Idaho
- Power's requested capital structure represents a reasonable
- 14 mix of capital sources from which to calculate the Company's
- overall rate of return. Idaho Power's requested common
- 16 equity ratio of approximately 51 percent is consistent with
- 17 the range of capitalizations implied for the Utility Proxy
- 18 Group based on year-end 2010 data and Value Line's near-term
- 19 projections.
- While industry averages provide one benchmark for
- 21 comparison, each firm must select its capitalization based
- 22 on the risks and prospects it faces, as well its specific

 $^{^{70}}$ Standard & Poor's Corporation, "Idaho Power Co.," $\it RatingsDirect$ (May 14, 2010).

⁷¹ Apart from the immediate impact that the fixed obligation of purchased power costs has on the utility's financial risk, higher fixed charges also reduce ongoing financial flexibility, and the utility may face other uncertainties, such as potential replacement power costs in the event of supply disruption.

- 1 needs to access the capital markets. A public utility with
- 2 an obligation to serve must maintain ready access to capital
- 3 under reasonable terms so that it can meet the service
- 4 requirements of its customers. Idaho Power's proposed
- 5 capital structure is consistent with industry benchmarks and
- 6 reflects the Company's ongoing efforts to maintain its
- 7 credit standing and support access to capital on reasonable
- 8 terms. The reasonableness of the Company's requested
- 9 capital structure is reinforced by the ongoing uncertainties
- 10 associated with the utility industry, the magnitude of the
- 11 Company's fixed obligations, including QF contracts, and the
- importance of supporting continued investment in system
- improvements, even during times of adverse industry or
- 14 market conditions.
- 15 C. Return on Equity Recommendation.
- 16 Q. Please summarize the results of your analyses.
- 17 A. Reflecting the fact that investors' required
- ROE is unobservable and no single method should be viewed in
- isolation, I used the DCF, CAPM, and risk premium methods
- 20 and evaluated comparable earned rates of return expected for
- 21 utilities. In order to reflect the risks and prospects
- 22 associated with Idaho Power's jurisdictional electric
- 23 utility operations, my analyses focused on a proxy group of
- 24 comparable risk electric utilities. Consistent with the
- 25 fact that utilities must compete for capital with firms
- outside their own industry, I also referenced a proxy group

of low-risk companies in the non-utility sectors of the economy.

3 My application of the constant growth DCF model 4 considered three alternative growth measures based on projected earnings growth, as well as the sustainable, 5 "br+sv" growth rate for each firm in the respective proxy 6 7 In addition, I evaluated the reasonableness of the 8 resulting DCF estimates and eliminated low- and high-end outliers that failed to meet threshold tests of economic 10 logic. My CAPM analyses focused on forward-looking data 11 that best reflects the underlying assumptions of this 12 approach, and my applications of the risk premium and 13 comparable earnings methods focused directly on electric 14 utilities. The results of my alternative analyses are 15 summarized below in Table WEA-6:

16 TABLE WEA-6 17 SUMMARY OF QUANTITATIVE RESULTS

DCF	<u>Utility</u>	Non-Utility
Earnings Growth		
Value Line	11.4%	11.9%
IBES	10.5%	12.4%
Zacks	10.4%	12.5%
br + sv	9.1%	12.1%
CAPM		
Current Bond Yields	11.8%	10.0%
Projected Bond Yields	12.0%	10.2%
Electric Utility Risk Premium		
Current Bond Yields	10.7%	
Projected Bond Yields	11.4%	
Expected Earnings		
Value Line 2014-16	10.5%	
Utility Proxy Group	10.4%	

- Q. What then is your conclusion as to a fair ROE range for Idaho Power?
- 3 Α. Based on my assessment of the relative strengths and weaknesses inherent in each method, and 4 5 conservatively giving less emphasis to the upper- and lower-6 most boundaries of the range of results, I concluded that 7 the cost of common equity indicated by my analyses is in the 8 10.4 percent to 11.4 percent range. After incorporating a 9 minimal adjustment for flotation costs of 15 basis points to 10 my "bare bones" cost of equity range, I concluded that my 11 analyses indicate a fair ROE in the 10.55 percent to 11.55 12 percent range. As discussed in the testimony of Mr. Keen, 13 Idaho Power Energy is requesting an ROE of 10.50 percent in 14 Because the Company's requested ROE falls near this case. 15 the bottom end of my "bare bones" cost of equity range, it 16 represents a conservative compromise between balancing the 17 impact on customers and the need to provide Idaho Power with 18 a return that is adequate to compensate investors, maintain financial integrity, and attract capital. 19

Apart from the results of the quantitative methods summarized above, it is crucial to recognize the importance of supporting the Company's financial position so that Idaho Power remains prepared to respond to unforeseen events that may materialize in the future. Recent challenges in the economic and financial market environment highlight the imperative of maintaining the Company's financial strength in attracting the capital needed to secure reliable service

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- 1 at a lower cost for customers. The reasonableness of the
- 2 Company's requested ROE is reinforced by the fact that
- 3 current cost of capital estimates are likely to understate
- 4 investors' requirements at the time the outcome of this
- 5 proceeding becomes effective and beyond.
- 6 Q. Does this conclude your direct testimony?
- 7 A. Yes.

BEFORE THE

2011 JUN - 1 PM 2: 43

UTILITIES COMMISSION

IDAHO PUBLIC UTILITIES COMMISSION

CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

AVERA, DI TESTIMONY

WILLIAM E. AVERA

FINCAP, INC. Financial Concepts and Applications Economic and Financial Counsel 3907 Red River Austin, Texas 78751 (512) 458-4644 FAX (512) 458-4768 fincap@texas.net

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)

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

Manager, Financial Education, International Paper Company New York City (Feb. 1977 to Nov. 1977) Financial, economic and policy consulting to business and government. Perform business and public policy research, cost/benefit analyses and financial modeling, valuation of businesses (almost 200 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.

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.

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

<u>University-Sponsored Programs:</u> 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.

<u>Business and Government-Sponsored Programs:</u> 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 for evening program at St. Edward's University in Austin from January 1979 through 1998.

Expert Witness Testimony

Testified in over 300 cases before regulatory agencies addressing cost of capital, regulatory policy, rate design, and other economic and financial issues.

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

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

Testified in 42 cases before federal and state courts, arbitration panels, and alternative dispute tribunals (89 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; Appointed by Hays County Commission to Citizens Advisory Committee of Habitat Conservation Plan, 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; Appointed* 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 of Directors, 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 (SEAL) 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

- "Economic Perspective on Water Marketing in Texas," 2009 Water Law Institute, The University of Texas School of Law, Austin, TX (Dec. 2009).
- "Estimating Utility Cost of Equity in Financial Turmoil," SNL EXNET 15th Annual FERC Briefing, Washington, D.C. (Mar. 2009)
- "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)
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- "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)
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- ""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)
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- "Growth Rates, Expected Returns, and Variance in Portfolio Selection and Performance Evaluation," with Henry A. Latané, Econometric Society, Oslo, Norway (Aug. 1973)

BEFORE THE

2011 JUN -1 PM 2: 43

IDAHO PUBLIC UTILITIES COMMISSION CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

AVERA, DI TESTIMONY

DCF MODEL

UTILITY PROXY GROUP

		(a)	(a)		9	(2)	(p)	(e)	(£)	()	Ξ	(£)
			Dividend Yield			Growt	Growth Rates		Ő	st of Equi	Cost of Equity Estimates	es
	Company	Price	Dividends	<u>Yield</u>	V Line	IBES	Zacks	br+sv	V Line	IBES	Zacks	br+sv
1	Ameren Corp.	\$ 28.25	\$ 1.54	2.5%	-5.0%	-0.7%	4.0%	2.5%	3.5%	4.8%	9.5%	%6.2
7	American Elec Pwr	\$ 35.17	\$ 1.84	5.2%	3.5%	3.7%	4.0%	4.9%	8.7%	8.9%	9.5%	10.1%
3	Avista Corp.	\$ 23.15	\$ 1.08	4.7%	8.5%	4.7%	4.7%	3.4%	13.2%	9.4%	9.4%	8.1%
4	Black Hills Corp.	\$ 32.44	\$ 1.46	4.5%	6.5%	%0.9	%0.9	3.2%	11.0%	10.5%	10.5%	7.7%
гO	CenterPoint Energy	\$ 17.64	\$ 0.79	4.5%	2.5%	5.1%	5.5%	4.5%	7.0%	%9.6	10.0%	8.9%
9	Cleco Corp.	\$ 34.58	\$ 1.09	3.2%	8.0%	3.0%	7.0%	4.1%	11.2%	6.2%	10.2%	7.3%
7	CMS Energy	\$ 19.04	\$ 0.84	4.4%	7.0%	2.9%	5.5%	4.7%	11.4%	10.3%	%6.6	9.1%
∞	Constellation Energy	\$ 33.12	\$ 0.96	2.9%	%0.9	3.7%	%6.6	4.7%	8.9%	%9.9	12.8%	%9.2
6	DTE Energy Co.	\$ 48.37	\$ 2.30	4.8%	2.5%	5.8%	2.0%	3.6%	10.3%	10.6%	%8.6	8.3%
10	Edison International	\$ 38.20	\$ 1.29	3.4%	-1.0%	4.3%	2.0%	4.7%	2.4%	7.7%	8.4%	8.1%
11	Empire District Elec	\$ 21.53	\$ 1.28	2.9%	7.0%	NA	NA	7.6%	12.9%	NA	NA	8.5%
12	Great Plains Energy	\$ 20.01	\$ 0.83	4.1%	%0.9	%6.2	%0.6	2.1%	10.1%	12.0%	13.1%	6.3%
13	Hawaiian Elec.	\$ 24.42	\$ 1.24	5.1%	11.5%	7.7%	8.6%	4.3%	16.6%	12.8%	13.7%	9.4%
14	IDACORP, Inc.	\$ 38.39	\$ 1.20	3.1%	5.5%	4.7%	4.7%	4.9%	8.6%	7.8%	7.8%	8.0%
15	Integrys Energy Group	\$ 49.62	\$ 2.72	5.5%	6.5%	7.5%	10.4%	3.1%	15.0%	13.0%	15.9%	8.6%
16		\$ 68.69	\$ 1.37	2.0%	14.0%	16.7%	15.0%	13.7%	16.0%	18.7%	17.0%	15.7%
17	Otter Tail Corp.	\$ 22.31	\$ 1.19	5.3%	17.0%	16.5%	18.0%	3.5%	22.3%	21.8%	23.3%	8.9%
18	Pepco Holdings	\$ 18.35	\$ 1.08	2.9%	0.5%	2.0%	4.3%	7.0%	6.4%	12.9%	10.2%	7.9%
19	PG&E Corp.	\$ 44.06	\$ 1.92	4.4%	%0.9	6.3%	5.5%	6.2%	10.4%	10.7%	%6.6	10.6%
20	Pinnacle West Capital	\$ 42.53	\$ 2.10	4.9%	%0.9	6.4%	4.7%	3.5%	10.9%	11.3%	%9.6	8.4%
21	Portland General Elec.	\$ 23.85	\$ 1.07	4.5%	3.0%	4.7%	5.2%	3.7%	7.5%	9.5%	9.7%	8.1%
22	TECO Energy	\$ 18.68	\$ 0.84	4.5%	8.0%	6.1%	5.3%	6.1%	12.5%	10.6%	%8.6	10.6%
23	UIL Holdings	\$ 30.19	\$ 1.73	5.7%	3.0%	3.1%	2.7%	5.7%	8.7%	8.8%	8.4%	11.4%
24	Westar Energy	\$ 25.85	\$ 1.28	2.0%	8.5%	6.2%	5.3%	4.6%	13.5%	11.2%	10.3%	%9.6
22	Wisconsin Energy	\$ 29.67	\$ 1.04	3.5%	7.5%	8.0%	8.0%	5.5%	11.0%	11.5%	11.5%	9.1%
	Average (g)								11.4%	10.5%	10.4%	9.1%

(a) www.valueline.com (retrieved Apr. 20, 2011).
(b) The Value Line Investment Survey (Feb. 4, Feb. 25, & Mar. 25, 2011).
(c) Thomson ReutersCompany in Context Report (Apr. 19, 2011).
(d) www.zacks.com (retrieved Apr. 20, 2011).
(e) See Exhibit No. 3.
(f) Sum of dividend yield and respective growth rate.
(g) Excludes highlighted figures.

BEFORE THE

2011 JUN - 1 PM 2: 43

IDAHO PUBLIC UTILITIES COMMISSION CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

AVERA, DI TESTIMONY

BR+SV GROWTH RATE

UTILITY PROXY GROUP

														2.1%												
														-0.29%												
(e)	sv" Factor	>	(0.2167)	0.2000	0.1818	0.0538	0.5125	0.1231	0.3140	(0.1938)	0.1913	(0.0063)	0.3000	(0.1190)	0.2653	0.0875	0.1000	0.6359	0.2200	(0.0286)	0.2368	0.1000	0.0500	0.3690	0.2286	0.2000
Ð	-	ø	0.0104	0.0097	0.0126	0.0048	0.0051	•	0.0063	0.0083	0.0086	•	0.0080	0.0241	0.0127	0.0131	0.0033	0.0398	0.0401	0.0126	0.0162	0.0264	0.0382	0.0075	0.1394	0.0275
		þt	2.7%	4.7%	3.2%	3.1%	4.2%	4.1%	4.5%	4.8%	3.4%	4.7%	2.3%	2.4%	4.0%	4.8%	3.0%	11.1%	2.7%	2.0%	2.8%	3.2%	3.5%	2.8%	2.5%	4.1%
<u> </u>		Adjusted r	7.0%	10.7%	%0.6	8.2%	13.7%	%6.6	12.2%	7.0%	6.3%	8.2%	10.1%	2.6%	11.3%	8.7%	9.5%	16.4%	8.9%	7.3%	12.1%	9.4%	8.7%	13.6%	9.4%	10.2%
9	Adjustment	Factor	1.0188	1.0287	1.0177	1.0125	1.0253	1.0265	1.0300	1.0250	1.0200	1.0198	1.0119	1.0231	1.0183	1.0230	1.0141	1.0553	1.0353	1.0210	1.0306	1.0227	1.0291	1.0289	1.0819	1.0207
		-	%8.9	10.4%	8.9%	8.1%	13.3%	%9.6	11.9%	%8.9	9.1%	8.1%	10.0%	7.4%	11.1%	8.5%	9.4%	15.5%	8.6%	7.2%	11.7%	9.5%	8.4%	13.2%	8.7%	10.0%
		م	38.4%	44.0%	35.0%	38.0%	30.8%	41.8%	37.1%	69.2%	36.5%	26.9%	22.9%	31.4%	35.0%	54.8%	32.0%	68.2%	29.7%	27.7%	48.2%	34.3%	40.0%	42.9%	26.4%	40.0%
(a)	***************************************	BVPS	\$36.50	\$36.00	\$22.50	\$30.75	\$9.75	\$28.50	\$14.75	\$47.75	\$46.50	\$40.25	\$17.50	\$23.50	\$18.00	\$36.50	\$42.75	\$35.50	\$21.45	\$21.60	\$36.25	\$38.25	\$23.75	\$13.25	\$27.00	\$24.00
(a)	2015	DPS	\$1.54	\$2.10	\$1.30	\$1.55	\$0.90	\$1.60	\$1.10	\$1.00	\$2.70	\$1.40	\$1.35	\$1.20	\$1.30	\$1.40	\$2.72	\$1.75	\$1.30	\$1.12	\$2.20	\$2.30	\$1.20	\$1.00	\$1.73	\$1.44
(a)	***************************************	EPS	\$2.50	\$3.75	\$2.00	\$2.50	\$1.30	\$2.75	\$1.75	\$3.25	\$4.25	\$3.25	\$1.75	\$1.75	\$2.00	\$3.10	\$4.00	\$5.50	\$1.85	\$1.55	\$4.25	\$3.50	\$2.00	\$1.75	\$2.35	\$2.40
		Company	Ameren Corp.	American Elec Pwr										_		_	Integrys Energy Group		_			Pinnacle West Capital		-		
			—	7	6									12			15					20	21	22	23	74

BR+SV GROWTH RATE

UTILITY PROXY GROUP

		(a)	(a)	(J)	(a)		(£)	(8)	(a)	(a)		Œ	(a)	(a) (a) (g)	(8)
			- 2010 -		***************************************	- 1		Chg	20	15 Price			Com	mon Sha	res
	Company	Eq Ratio	Tot Cap	Com Eq	Eq Ratio		Com Eq	Equity	High	Low	Avg.	M/B	2010	2015	Growth
1	Ameren Corp.	20.9%	\$15,185	\$7,729	53.0%		\$9,328	3.8%	\$35.00	\$25.00	\$30.00	0.822	240.40	256.00	1.27%
	American Elec Pwr	46.5%	\$29,185	\$13,571	50.5%		\$18,079	2.9%	\$55.00	\$35.00	\$45.00	1.250	481.00	500.00	0.78%
	Avista Corp.	51.5%	\$2,200	\$1,133	52.0%		\$1,352	3.6%	\$30.00	\$25.00	\$27.50	1.222	57.00	90.09	1.03%
4	Black Hills Corp.	20.0%	\$2,425	\$1,213	49.5%	\$2,775	\$1,374	2.5%	\$40.00	\$25.00	\$32.50	1.057	43.75	44.75	0.45%
	CenterPoint Energy	26.2%	\$12,199	\$3,196	29.0%		\$4,118	5.2%	\$25.00	\$15.00	\$20.00	2.051	424.70	430.00	0.25%
	Cleco Corp.	48.5%	\$2,718	\$1,318	22.0%		\$1,719	5.5%	\$40.00	\$25.00	\$32.50	1.140	60.75	60.75	0.00%
	CMS Energy	29.5%	\$9,473	\$2,795	34.0%		\$3,774	6.2%	\$25.00	\$18.00	\$21.50	1.458	249.60	255.00	0.43%
	Constellation Energy	62.8%	\$12,468	\$7,830	67.5%		\$10,058	5.1%	\$50.00	\$30.00	\$40.00	0.838	199.00	209.00	%66'0
	DTE Energy Co.	48.7%	\$13,811	\$6,726	47.5%		\$8,218	4.1%	\$70.00	\$45.00	\$57.50	1.237	170.00	176.00	0.70%
	Edison International	45.5%	\$23,600	\$10,738	45.0%		\$13,095	4.0%	\$50.00	\$30.00	\$40.00	0.994	325.81	325.81	0.00%
	Empire District Elec	48.7%	\$1,351	\$658	52.0%		\$741	2.4%	\$30.00	\$20.00	\$25.00	1.429	41.58	42.75	0.56%
12	Great Plains Energy	49.2%	\$5,868	\$2,887	48.5%		\$3,638	4.7%	\$25.00	\$17.00	\$21.00	0.894	135.71	155.00	2.69%
13	Hawaiian Elec.	54.5%	\$2,740	\$1,493	52.0%		\$1,794	3.7%	\$30.00	\$19.00	\$24.50	1.361	94.50	99.00	0.93%
14	IDACORP, Inc.	51.0%	\$2,950	\$1,505	50.5%		\$1,894	4.7%	\$50.00	\$30.00	\$40.00	1.096	49.00	52.00	1.20%
15	Integrys Energy Group	26.8%	\$5,119	\$2,907	54.0%		\$3,348	2.9%	\$55.00	\$40.00	\$47.50	1.111	77.35	78.50	0.30%
16	ITC Holdings Corp.	30.9%	\$3,614	\$1,117	33.5%		\$1,943	11.7%	\$115.00	\$80.00	\$97.50	2.746	50.72	54.50	1.45%
17	Otter Tail Corp.	59.2%	\$1,067	\$632	61.0%		\$900	7.3%	\$35.00	\$20.00	\$27.50	1.282	36.00	42.00	3.13%
18	Pepco Holdings	52.5%	\$8,000	\$4,200	48.0%		\$5,184	4.3%	\$25.00	\$17.00	\$21.00	0.972	225.00	240.00	1.30%
19	PG&E Corp.	49.5%	\$22,575	\$11,175	54.0%		\$15,174	6.3%	\$55.00	\$40.00	\$47.50	1.310	395.00	420.00	1.23%
20	Pinnacle West Capital	26.0%	\$6,625	\$3,710	53.5%		\$4,655	4.6%	\$50.00	\$35.00	\$42.50	1.111	108.50	122.00	2.37%
21	Portland General Elec.	47.0%	\$3,400	\$1,598	20.0%		\$2,138	%0.9	\$30.00	\$20.00	\$25.00	1.053	75.30	90.00	3.63%
2	TECO Energy	40.8%	\$5,318	\$2,170	47.5%		\$2,898	%0.9	\$25.00	\$17.00	\$21.00	1.585	214.90	220.00	0.47%
23	UIL Holdings	47.5%	\$1,250	\$594	41.5%		\$1,349	17.8%	\$40.00	\$30.00	\$35.00	1.296	30.00	20.00	10.76%
54	Westar Energy	46.4%	\$5,181	\$2,404	45.5%		\$2,958	4.2%	\$35.00	\$25.00	\$30.00	1.250	112.13	125.00	2.20%
22	Wisconsin Energy	49.0%	\$7,765	\$3,805	48.0%		\$4,716	4.4%	\$45.00	\$30.00	\$37.50	1.852	233.80	233.80	0.00%

Computed using the formula 2*(1+5-Yr. Change in Equity)/(2+5 Yr. Change in Equity). (a) The Value Line Investment Survey (Feb. 4, Feb. 25, & Mar. 25, 2011).
(b) Computed using the formula 2*(1+5-Yr. Change in Equity)/(2+5 Yr. Change (c) Product of average year-end "r" for 2015 and Adjustment Factor.
(d) Product of change in common shares outstanding and M/B Ratio.
(e) Computed as 1 - B/M Ratio.
(f) Product of total capital and equity ratio.
(g) Five-year rate of change.
(h) Average of High and Low expected market prices divided by 2014-16 BVI

Average of High and Low expected market prices divided by 2014-16 BVPS.

BEFORE THE

2011 JUN - 1 PM 2: 4:

IDAHO PUBLIC UTILITIES COMMISSION LITTES COMMISSION CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

AVERA, DI TESTIMONY

DCF MODEL

NON-UTILITY PROXY GROUP

		(a)	(-)	4 .\	(-)	(4)	4.5	4.5		
		(a)	(a)	(b)	(c)	(d)	(e)	(e)	(e)	(e)
	C	Dividend		Growth			****	ost of Equi		
1	Company 3M Company	Yield	V Line	IBES	Zacks	br+sv	V Line	IBES	Zacks	br+sv
2	Abbott Labs.	2.39% 3.67%	7.0%	11.9%	11.3%	12.9%	9.4%	14.3%	13.7%	15.3%
3	Alberto-Culver	3.67% 1.02%	10.0% 15.0%	8.9% 9.4%	9.0% 12.5%	15.0%	13.7%	12.6%	12.7%	18.7%
4	AT&T Inc.	6.09%	5.5%	9.4% 5.7%		8.4%	16.0%	10.4%	13.5%	9.4%
5	Automatic Data Proc.	2.93%	3.5% 8.0%		7.0% 10.8%	5.4% 9.5%	11.6%	11.8%	13.1%	11.5%
6	Bard (C.R.)	0.77%	9.5%	10.6% 10.9%			10.9%	13.5% 11.7%	13.7% 12.6%	12.4% 18.9%
7	Baxter Int'l Inc.	2.45%	10.0%	9.6%	11.8% 9.3%	18.1% 15.5%	10.3% 12.5%	12.1%	11.8%	17.9%
8	Becton, Dickinson	1.97%	9.5%	9.6%	10.8%	9.0%		11.9%		
. 9	Bristol-Myers Squibb	5.11%	8.5%	1.8%	2.0%	9.0% 5.7%	11.5% 13.6%	6.9%	12.8% 7.1%	11.0% 10.8%
10	Brown-Forman 'B'	1.90%	7.5%	10.9%	13.0%	10.6%	9.4%	12.8%	14.9%	12.5%
11	Chubb Corp.	2.55%	2.5%	8.7%	9.8%	8.0%	5.1%	11.3%	12.4%	10.5%
12	Church & Dwight	0.97%	12.0%	11.8%	12.0%	10.3%	13.0%	12.8%	13.0%	11.3%
13	Coca-Cola	2.80%	9.5%	8.7%	9.0%	9.9%	12.3%	11.5%	11.8%	12.7%
14	Colgate-Palmolive	2.76%	11.0%	9.3%	9.2%	18.1%	13.8%	12.1%	12.0%	20.8%
15	Commerce Bancshs.	2.22%	7.0%	7.0%	7.0%	7.9%	9.2%	9.2%	9.2%	10.1%
16	ConAgra Foods	3.92%	10.5%	7.7%	8.0%	7.9 % 8.1%	14.4%	11.6%	11.9%	12.0%
17	Costco Wholesale	1.24%	7.5%	13.3%	12.9%	8.2%	8.7%	14.5%	14.1%	9.5%
18	Cullen/Frost Bankers	2.96%	4.5%	8.5%	8.0%	5.7%	7.5%	11.5%	11.0%	9.5% 8.6%
19	CVS Caremark Corp.	1.42%	9.5%	10.1%	12.0%	7.8%	10.9%	11.5%	13.4%	9.2%
20	Ecolab Inc.	1.41%	12.0%	13.2%	13.2%	19.6%	13.4%	14.6%	14.6%	21.0%
21	Exxon Mobil Corp.	2.26%	6.0%	12.1%	8.4%	13.5%	8.3%	14.6%	10.7%	15.7%
22	Gen'i Mills	3.02%	9.5%	7.7%	8.0%	9.3%	12.5%	10.7%	11.0%	12.3%
23	Heinz (H.J.)	3.85%	6.5%	7.0%	8.0%	13.9%	10.4%	10.7%	11.9%	17.8%
24	Hormel Foods	2.01%	10.5%	10.0%	9.3%	10.7%	12.5%	12.0%	11.3%	12.7%
25	Int'l Business Mach.	1.77%	13.0%	11.5%	9.3%	20.4%	14.8%	13.3%	11.1%	22.2%
26	Johnson & Johnson	3.44%	4.5%	6.0%	5.8%	10.8%	7.9%	9.4%	9.2%	14.2%
27	Kellogg	3.14%	9.5%	8.6%	9.0%	9.7%	12.6%	11.7%	12.1%	12.9%
28	Kimberly-Clark	4.09%	6.5%	7.5%	8.7%	18.6%	10.6%	11.6%	12.1%	22.7%
29	Kraft Foods	3.71%	8.0%	8.4%	8.0%	10.7%	11.7%	12.1%	11.7%	14.4%
30	Lilly (Eli)	5.64%	-2.5%	-6.4%	-5.3%	8.4%	3.1%	-0.8%	0.3%	14.0%
31	Lockheed Martin	3.78%	10.0%	8.1%	6.8%	20.3%	13.8%	11.9%	10.6%	24.1%
32	McCormick & Co.	2.24%	8.5%	9.6%	9.5%	13.3%	10.7%	11.8%	11.7%	15.6%
33	McDonald's Corp.	3.25%	9.5%	9.8%	9.3%	10.7%	12.8%	13.1%	12.6%	13.9%
34	McKesson Corp.	0.98%	10.0%	14.2%	11.0%	11.7%	11.0%	15.2%	12.0%	12.7%
35	Medtronic, Inc.	2.47%	7.5%	8.8%	8.4%	11.7%	10.0%	11.3%	10.9%	14.1%
36	Microsoft Corp.	2.26%	12.5%	11.3%	11.7%	15.3%	14.8%	13.6%	14.0%	17.5%
37	NIKE, Inc. 'B'	1.49%	9.5%	10.9%	12.5%	12.2%	11.0%	12.4%	14.0%	13.7%
38	Northrop Grumman	2.82%	12.5%	11.0%	11.1%	7.9%	15.3%	13.8%	13.9%	10.7%
39	PepsiCo, Inc.	2.91%	11.0%	8.9%	9.5%	14.5%	13.9%	11.8%	12.4%	17.4%
40	Pfizer, Inc.	4.50%	5.0%	2.8%	3.5%	7.0%	9.5%	7.3%	8.0%	11.5%
41	Procter & Gamble	3.01%	8.0%	8.9%	9.2%	7.2%	11.0%	11.9%	12.2%	10.3%
42	Raytheon Co.	3.02%	10.0%	8.0%	10.0%	8.6%	13.0%	11.0%	13.0%	11.6%
43	Stryker Corp.	1.26%	12.5%	10.9%	11.4%	13.6%	13.8%	12.2%	12.7%	14.9%
44	Sysco Corp.	3.47%	8.0%	10.0%	9.7%	14.2%	11.5%	13.5%	13.2%	17.6%
45	TIX Companies	1.28%	13.5%	14.5%	14.4%	11.1%	14.8%	15.8%	15.7%	12.4%
46	United Parcel Serv.	2.59%	9.0%	11.7%	11.5%	17.9%	11.6%	14.3%	14.1%	20.5%
47	Verizon Communic.	5.63%	4.0%	6.2%	14.9%	5.7%	9.6%	11.8%	20.5%	11.3%
48	Walgreen Co.	1.68%	11.5%	13.4%	13.0%	8.4%	13.2%	15.1%	14.7%	10.1%
49	Wal-Mart Stores	2.16%	10.0%	10.7%	11.3%	9.9%	12.2%	12.9%	13.5%	12.1%
50	Waste Management	3.52%	5.5%	9.6%	11.0%	5.2%	9.0%	13.1%	14.5%	8.7%
	Average (f)						11.9%	12.4%	12.5%	12.1%
	-									

⁽a) www.valueline.com (retrieved Jan. 28, 2011).

⁽b) Thomson Reuters Company in Context Report (Jan. 28, 2011).
(c) www.zacks.com (retrieved Jan. 31, 2011).

 ⁽d) See Exhibit No. 5.

 (e) Sum of dividend yield and respective growth rate.

 (f) Excludes highlighted figures.

BEFORE THE

2011 JUN - 1 PM 2: 43

IDAHO PUBLIC UTILITIES COMMISSION CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

AVERA, DI TESTIMONY

BR+SV GROWTH RATE

NON-UTILITY PROXY GROUP

		(a)	(a)	(a)			(b)	(c)		(d)	(e)		
	Company	EDC	- 2014 -	DYDC			Adjust.			"s			
1	3M Company	EPS \$7.60	DPS #2.10	BVPS	_b_		Factor	Adj. r	_ <u>br</u>		_ <u>v</u> _	sv	br + sv
2	Abbott Labs.	\$5.70	\$3.10 \$2.18	\$40.05 \$22.05	59.2%	19.0%	1.0818	20.5%	12.2%	0.0106	0.6731	0.71%	12.9%
3	Alberto-Culver	\$2.35	\$0.55	\$22.05 \$17.85	61.8%	25.9%	1.0384	26.8%	16.6%	(0.0197)	0.7900	-1.56%	15.0%
4	AT&T Inc.	\$3.25	\$2.00		76.6%	13.2%	1.0315	13.6%	10.4%	(0.0330)	0.6033	-1.99%	8.4%
5	Automatic Data Proc.			\$24.05	38.5%	13.5%	1.0327	14.0%	5.4%	(0,0001)	0.4656	-0.01%	5.4%
6	Bard (C.R.)	\$3.45	\$1.60	\$22.95	53.6%	15.0%	1.0786	16.2%	8.7%	0.0111	0.7039	0.78%	9.5%
7		\$7.75	\$0.85	\$31.45	89.0%	24.6%	1.0255	25.3%	22.5%	(0.0564)	0.7754	-4.37%	18.1%
8	Baxter Int'l Inc.	\$5.85	\$1.50	\$22.90	74.4%	25.5%	1.0560	27.0%	20.1%	(0.0633)	0.7224	-4.57%	15.5%
9	Becton, Dickinson	\$7.65	\$2.20	\$34.10	71.2%	22.4%	1.0306	23.1%	16.5%	(0.1030)	0.7216	-7.43%	9.0%
10	Bristol-Myers Squibb	\$2.35	\$1.54	\$11.65	34.5%	20.2%	1.0263	20.7%	7.1%	(0.0212)	0.6671	-1.42%	5.7%
	Brown-Forman 'B'	\$4.50	\$1.48	\$20.40	67.1%	22.1%	1.0372	22.9%	15.4%	(0.0640)	0.7368	-4.71%	10.6%
11	Chubb Corp.	\$7.00	\$1.60	\$64.85	77.1%	10.8%	1.0184	11.0%	8.5%	(0.0319)	0.1632	-0.52%	8.0%
12	Church & Dwight	\$5.80	\$1.00	\$39.25	82.8%	14.8%	1.0465	15.5%	12.8%	(0.0414)	0.6075	-2.52%	10.3%
13	Coca-Cola	\$4.95	\$2.48	\$18.20	49.9%	27.2%	1.0479	28.5%	14.2%	(0.0526)	0.8267	-4.34%	9.9%
14	Colgate-Palmolive	\$7.20	\$3.20	\$13.25	55.6%	54.3%	1.0671	58.0%	32.2%	(0.1557)	0.9086	-14.15%	18.1%
15	Commerce Bancshs.	\$3.35	\$1.15	\$32.10	65.7%	10.4%	1.0480	10.9%	7.2%	0.0240	0.2867	0.69%	7.9%
16	ConAgra Foods	\$2.35	\$1.00	\$15.00	57.4%	15.7%	1.0288	16.1%	9.3%	(0.0217)	0.5385	-1.17%	8.1%
17	Costco Wholesale	\$4.20	\$0.95	\$33.50	77.4%	12.5%	1.0315	12.9%	10.0%	(0.0301)	0.5939	-1.79%	8.2%
18	Cullen/Frost Bankers	\$4.35	\$2.10	\$44.00	51.7%	9.9%	1.0382	10.3%	5.3%	0.0132	0.2667	0.35%	5.7%
19	CVS Caremark Corp.	\$4.00	\$0.56	\$38.15	86.0%	10.5%	1.0268	10.8%	9.3%	(0.0395)	0.3642	-1.44%	7.8%
20	Ecolab Inc.	\$3.60	\$0.85	\$14.45	76.4%	24.9%	1.0530	26.2%	20.0%	(0.0056)	0.7592	-0.43%	19.6%
21	Exxon Mobil Corp.	\$9.35	\$2.05	\$45.50	78.1%	20.5%	1.0546	21.7%	16.9%	(0.0578)	0.5956	-3.44%	13.5%
22	Gen'l Mills	\$3.15	\$1.36	\$11.95	56.8%	26.4%	1.0318	27.2%	15.5%	(0.0809)	0.7610	-6.16%	9.3%
23	Heinz (H.J.)	\$4.10	\$2.32	\$14.65	43.4%	28.0%	1.0908	30.5%	13.3%	0.0085	0.7830	0.66%	13.9%
24	Hormel Foods	\$2.10	\$0.70	\$13.55	66.7%	15.5%	1.0527	16.3%	10.9%	(0.0025)	0.6387	-0.16%	10.7%
25	Int'l Business Mach.	\$18.00	\$3.60	\$48.75	80.0%	36.9%	1.0856	40.1%	32.1%	(0.1501)	0.7759	-11.65%	20.4%
26	Johnson & Johnson	\$5.85	\$2.65	\$27.60	54.7%	21.2%	1.0378	22.0%	12.0%	(0.0185)	0.6846	-1.26%	10.8%
27	Kellogg	\$5.10	\$1.88	\$9.95	63.1%	51.3%	1.0352	53.1%	33.5%	(0.2690)	0.8829	-23.75%	9.7%
28	Kimberly-Clark	\$6.25	\$2.75	\$15.55	56.0%	40.2%	1.0140	40.8%	22.8%	(0.0506)	0.8363	-4.24%	18.6%
29	Kraft Foods	\$3.00	\$1.40	\$24.00	53.3%	12.5%	1.0480	13.1%	7.0%	0.0716	0.5200	3.72%	10.7%
30	Lilly (Eli)	\$3.40	\$2.20	\$15.60	35.3%	21.8%	1.0636	23.2%	8.2%	0.0032	0.6716	0.21%	8.4%
31	Lockheed Martin	\$13.25	\$3.50	\$31.25	73.6%	42.4%	1.0882	46.1%	34.0%	(0.1663)	0.8188	-13.62%	20.3%
32	McCormick & Co.	\$3.50	\$1.36	\$18.95	61.1%	18.5%	1.0649	19.7%	12.0%	0.0178	0.7293	1.30%	13.3%
33	McDonald's Corp.	\$6.05	\$3.00	\$19.00	50.4%	31.8%	1.0303	32.8%	16.5%	(0.0734)	0.8000	-5.87%	10.7%
34	McKesson Corp.	\$6.80	\$0.72	\$46.65	89.4%	14.6%	1.0421	15.2%	13.6%	(0.0380)	0.4957	-1.88%	11.7%
35	Medtronic, Inc.	\$4.50	\$1.18	\$25.95	73.8%	17.3%	1.0597	18.4%	13.6%	(0.0326)	0.5848	-1.91%	11.7%
36	Microsoft Corp.	\$3.35	\$0.96	\$10.75	71.3%	31.2%	1.0763	33.5%	23.9%	(0.1104)	0.7850	-8.66%	15.3%
37	NIKE, Inc. 'B'	\$5.65	\$1.50	\$34.60	73.5%	16.3%	1.0643	17.4%	12.8%	(0.0085)	0.6358	-0.54%	12.2%
38	Northrop Grumman	\$10.25	\$2.50	\$68.00	75.6%	15.1%	1.0293	15.5%	11.7%	(0.0783)	0.4868	-3.81%	7.9%
39	PepsiCo, Inc.	\$6.40	\$2.34	\$24.00	63.4%	26.7%	1.0724	28.6%	18.1%	(0.0449)	0.8118	-3.64%	14.5%
40	Pfizer, Inc.	\$2.05	\$1.16	\$13.00	43.4%	15.8%	1.0154	16.0%	7.0%	-	0.5273	0.00%	7.0%
41	Procter & Gamble	\$5.25	\$2.18	\$29.45	58.5%	17.8%	1.0230	18.2%	10.7%	(0.0495)	0.6900	-3.41%	7.2%
42	Raytheon Co.	\$7.20	\$2.00	\$38.65	72.2%	18.6%	1.0231	19.1%	13.8%	(0.0870)	0.5932	-5.16%	8.6%
43	Stryker Corp.	\$5.35	\$0.84	\$32.75	84.3%	16.3%	1.0660	17.4%	14.7%	(0.0144)	0.7213	-1.04%	13.6%
44	Sysco Corp.	\$2.75	\$1.10	\$10.10	60.0%	27.2%	1.0502	28.6%	17.2%	(0.0385)	0.7756	-2.98%	14.2%
45	TJX Companies	\$4.80	\$0.80	\$12.75	83.3%	37.6%	1.0374	39.1%	32.5%	(0.2565)	0.8355	-21.43%	11.1%
46	United Parcel Serv.	\$5.50	\$2.20	\$19.30	60.0%	28.5%	1.0912	31.1%	18.7%	(0.0090)	0.8245	-0.75%	17.9%
47	Verizon Communic.	\$3.05	\$1.96	\$18.95	35.7%	16.1%	1.0250	16.5%	5.9%	(0.0032)	0.6555	-0.21%	5.7%
48	Walgreen Co.	\$3.65	\$1.00	\$21.15		17.3%	1.0252	17.7%	12.8%	(0.0684)	0.6475	-4.43%	8.4%
49	Wal-Mart Stores	\$6.05	\$1.75	\$23.40	71.1%	25.9%	1.0072	26.0%	18.5%	(0.1157)	0.7400	-8.56%	9.9%
50	Waste Management	\$2.90	\$1.60	\$15.30	44.8%	19.0%	1.0079	19.1%	8.6%	(0.0515)	0.6600	-3.40%	5.2%
										. ,			

BR+SV GROWTH RATE

NON-UTILITY PROXY GROUP

		(a)	(a)	(f)	(a)	(a)		(g)	(a)	(a)	(f)
			nmon Equi			14 Price –			Comr	non Share	s
	Company	2009	2014	Chg.	<u>High</u>	Low	Avg.	M/B	<u>2009</u>	<u>2014</u>	Growth
1	3M Company	\$12,764	\$28,975	17.8%	\$135.00	\$110.00	\$122.50	3.059	710.60	723.00	0.35%
2	Abbott Labs.	\$22,856	\$33,550	8.0%	\$115.00	\$95.00	\$105.00	4.762	1,551.90	1,520.00	-0.41%
3	Alberto-Culver	\$1,197	\$1,640	6.5%	\$50.00	\$40.00	\$45.00	2.521	98.26	92.00	-1.31%
4	AT&T Inc.	\$102,339	\$141,895	6.8%	\$50.00	\$40.00	\$45.00	1.871	5,901.90	5,900.00	-0.01%
5	Automatic Data Proc.	\$5,323	\$11,700	17.1%	\$85.00	\$70.00	\$77.50	3.377	501.70	510.00	0.33%
6	Bard (C.R.)	\$2,194	\$2,830	5.2%	\$155.00	\$125.00	\$140.00	4.452	95.92	90.00	-1.27%
7	Baxter Int'l Inc.	\$7,191	\$12,600	11.9%	\$90.00	\$75.00	\$82.50	3.603	600.97	550.00	-1.76%
8	Becton, Dickinson	\$5,143	\$6,985	6.3%	\$135.00	\$110.00	\$122.50	3.592	237.08	205.00	-2.87%
9	Bristol-Myers Squibb	\$14,785	\$19,230	5.4%	\$40.00	\$30.00	\$35.00	3.004	1,709.50	1,650.00	-0.71%
10	Brown-Forman 'B'	\$1,895	\$2,750	7.7%	\$85.00	\$70.00	\$77.50	3.799	146.96	135.00	-1.68%
11	Chubb Corp.	\$15,634	\$18,800	3.8%	\$85.00	\$70.00	\$77.50	1.195	332.01	290.00	-2.67%
12	Church & Dwight	\$1,602	\$2,550	9.7%	\$110.00	\$90.00	\$100.00	2.548	70.55	65.00	-1.63%
13	Coca-Cola	\$24,799	\$40,035	10.1%	\$115.00	\$95.00	\$105.00	5.769	2,303.00	2,200.00	-0.91%
14	Colgate-Palmolive	\$3,116	\$6,100	14.4%	\$160.00	\$130.00	\$145.00	10.943	494.17	460.00	-1.42%
15	Commerce Bancshs.	\$1,886	\$3,050	10.1%	\$50.00	\$40.00	\$45.00	1.402	87.26	95.00	1.71%
16	ConAgra Foods	\$4,721	\$6,300	5.9%	\$35.00	\$30.00	\$32.50	2.167	441.66	420.00	-1.00%
17	Costco Wholesale	\$10,018	\$13,725	6.5%	\$90.00	\$75.00	\$82.50	2.463	435.97	410.00	-1.22%
18	Cullen/Frost Bankers	\$1,894	\$2,775	7.9%	\$65.00	\$55.00	\$60.00	1.364	60.04	63.00	0.97%
19	CVS Caremark Corp.	\$35,768	\$46,750	5.5%	\$65.00	\$55.00	\$60.00	1.573	1,391.00	1,225.00	-2.51%
20	Ecolab Inc.	\$2,001	\$3,400	11.2%	\$65.00	\$55.00	\$60.00	4.152	236.60	235.00	-0.14%
21	Exxon Mobil Corp.	\$110,569	\$191,000	11.6%	\$125.00	\$100.00	\$112.50	2.473	4,727.00	4,200.00	-2.34%
22	Gen'l Mills	\$5,175	\$7,115	6.6%	\$55.00	\$45.00	\$50.00	4.184	656.00	595.00	-1.93%
23	Heinz (H.J.)	\$1,891	\$4,700	20.0%	\$75.00	\$60.00	\$67.50	4.608	318.06	321.00	0.18%
24	Hormel Foods	\$2,124	\$3,600	11.1%	\$40.00	\$35.00	\$37.50	2.768	267.19	266.00	-0.09%
25	Int'l Business Mach.	\$22,755	\$53,650	18.7%	\$240.00	\$195.00	\$217.50	4.462	1,305.30	1,100.00	-3.36%
26	Johnson & Johnson	\$50,588	\$73,850	7.9%	\$95.00	\$80.00	\$87.50	3.170	2,754.30	2,675.00	-0.58%
27	Kellogg	\$2,272	\$3,230	7.3%	\$95.00	\$75.00	\$85.00	8.543	381.38	325.00	-3.15%
28	Kimberly-Clark	\$5,406	\$6,220	2.8%	\$105.00	\$85.00	\$95.00	6.109	417.00	400.00	-0.83%
29	Kraft Foods	\$25,972	\$42,000	10.1%	\$55.00	\$45.00	\$50.00	2.083	1,477.90	1,750.00	3.44%
30	Lilly (Eli)	\$9,524	\$18,000	13.6%	\$50.00	\$45.00	\$47.50	3.045	1,149.00	1,155.00	0.10%
31	Lockheed Martin	\$4,129	\$10,000	19.4%	\$190.00	\$155.00	\$172.50	5.520	372.90	320.00	-3.01%
32	McCormick & Co.	\$1,335	\$2,555	13.9%	\$75.00	\$65.00	\$70.00	3.694	131.80	135.00	0.48%
33	McDonald's Corp.	\$14,034	\$19,000	6.2%	\$105.00	\$85.00	\$95.00	5.000	1,076.70	1,000.00	-1.47%
34	McKesson Corp.	\$7,532	\$11,480	8.8%	\$100.00	\$85.00	\$92.50	1.983	271.00	246.00	-1.92%
35	Medtronic, Inc.	\$14,629	\$26,600	12.7%	\$70.00	\$55.00	\$62.50	2.408	1,097.30	1,025.00	-1.35%
36	Microsoft Corp.	\$39,558	\$85,000	16.5%	\$55.00	\$45.00	\$50.00	4.651	8,908.00	7,900.00	-2.37%
37	NIKE, Inc. 'B'	\$8,693	\$16,550	13.7%	\$105.00	\$85.00	\$95.00	2.746	485.50	478.00	-0.31%
38	Northrop Grumman	\$12,687	\$17,000	6.0%	\$145.00	\$120.00	\$132.50	1.949	306.87	250.00	-4.02% -0.84%
39	PepsiCo, Inc.	\$17,442	\$36,015	15.6%	\$140.00	\$115.00	\$127.50	5.313	1,565.00	1,500.00	0.00%
40	Pfizer, Inc.	\$90,014	\$105,000	3.1%	\$30.00	\$25.00	\$27.50	2.115	8,070.00	8,070.00	
41	Procter & Gamble	\$63,099	\$79,455	4.7%	\$105.00	\$85.00	\$95.00	3.226	2,917.00	2,700.00	-1.53%
42	Raytheon Co.	\$9,827	\$12,375	4.7%	\$105.00	\$85.00	\$95.00	2.458	383.20	320.00	-3.54% 0.40%
43	Stryker Corp.	\$6,595	\$12,775	14.1%	\$130.00	\$105.00	\$117.50	3.588	397.90	390.00 565.00	-0.40% -0.86%
44	Sysco Corp.	\$3,450	\$5,700 #4,200	10.6%	\$50.00	\$40.00	\$45.00 \$77.50	4.455	590.03	330.00	-0.00% -4.22%
45	TJX Companies	\$2,889	\$4,200	7.8%	\$85.00	\$70.00	\$77.50	6.078 5.699	409.39 992.85	985.00	-4.22% -0.16%
46	United Parcel Serv.	\$7,630	\$19,035	20.1%	\$120.00	\$100.00	\$110.00	2.902	2,835.70	2,820.00	-0.11%
47	Verizon Communic.	\$41,600	\$53,439	5.1%	\$60.00	\$50.00	\$55.00 \$60.00	2.837	2,835.70 988.56	875.00	-0.11 % -2.41%
48	Walgreen Co.	\$14,376	\$18,500	5.2%	\$65.00	\$55.00	\$90.00	3.846	3,786.00	3,250.00	-2.41 %
49	Wal-Mart Stores	\$70,749	\$76,025	1.4%	\$100.00	\$80.00	\$45.00	2.941	486.12	445.00	-3.01 % -1.75%
50	Waste Management	\$6,285	\$6,800	1.6%	\$50.00	\$40.00	\$45.00	2.741	400.12	445.00	-1.75/0

⁽a) www.valueline.com (retrieved Jan. 28, 2011).

⁽b) Computed using the formula 2*(1+5-Yr. Change in Equity)/(2+5 Yr. Change in Equity).

⁽c) Product of year-end "r" for 2014 and Adjustment Factor.

⁽d) Product of change in common shares outstanding and M/B Ratio.

⁽e) Computed as 1 - B/M Ratio.

⁽f) Five-year rate of change.

⁽g) Average of High and Low expected market prices divided by 2013-15 BVPS.

BEFORE THE

2011 JUN - 1 PM 2: 43

IDAHO PUBLIC UTILITIES COMMISSION CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

AVERA, DI TESTIMONY

CAPM - CURRENT BOND YIELD

UTILITY PROXY GROUP

Market Rate of Return		
Dividend Yield (a)	2.3%	
Growth Rate (b)	10.5%	
Market Return (c)		12.8%
Less: Risk-Free Rate (d)		
Long-term Treasury Bond Yield		4.5%
Market Risk Premium (e)		8.3%
Utility Proxy Group Beta (f)		0.76
Utility Proxy Group Risk Premium (g)		6.3%
Plus: Risk-free Rate (d)		
Long-term Treasury Bond Yield		4.5%
Unadjusted CAPM (h)		10.8%
Size Adjustment (i)		1.01%
Implied Cost of Equity (j)		11.8%

- (a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (retrieved Jan. 28, 2011).
- (b) Weighted average of IBES earnings growth rates for the dividend paying firms in the S&P 500 (retrieved Feb. 23, 2011).
- (c) (a) + (b)
- (d) Average yield on 30-year Treasury bonds for April 2011 from the Federal Reserve Board at http://www.federalreserve.gov/releases/h15/data/Monthly/H15_TCMNOM_Y20.txt.
- (e) (c) (d).
- (f) www.valueline.com (retrieved Apr. 20, 2011).
- (g) (e) x (f).
- (h) (d) + (g).
- (i) Morningstar, "Ibbotson SBBI 2010 Valuation Yearbook," at Table C-1 (2010).
- (j) (h) + (i).

CAPM - CURRENT BOND YIELD

NON-UTILITY PROXY GROUP

Market Rate of Return		
Dividend Yield (a)	2.3%	
Growth Rate (b)	10.5%	
Market Return (c)		12.8%
Less: Risk-Free Rate (d)		
Long-term Treasury Bond Yield	_	4.5%
Market Risk Premium (e)		8.3%
Non-Utility Proxy Group Beta (f)		0.71
Utility Proxy Group Risk Premium (g)		5.9%
Plus: Risk-free Rate (d)		
Long-term Treasury Bond Yield	_	4.5%
Unadjusted CAPM (h)		10.4%
Size Adjustment (i)	<u>-(</u>	0.38%
Implied Cost of Equity (j)		10.0%

- (a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (retrieved Jan. 28, 2011).
- (b) Weighted average of IBES earnings growth rates for the dividend paying firms in the S&P 500 (retrieved Feb. 23, 2011).
- (c) (a) + (b)
- (d) Average yield on 30-year Treasury bonds for April 2011 from the Federal Reserve Board at http://www.federalreserve.gov/releases/h15/data/Monthly/H15_TCMNOM_Y20.txt.
- (e) (c) (d).
- (f) www.valueline.com (retrieved Jan. 28, 2011).
- (g) (e) x (f).
- (h) (d) + (g).
- (i) Morningstar, "Ibbotson SBBI 2010 Valuation Yearbook," at Table C-1 (2010).
- (j) (h) + (i).

BEFORE THE

2011 JUN -1 PM 2: 43

IDAHO PUBLIC UTILITIES COMMISSION CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

AVERA, DI TESTIMONY

CAPM - PROJECTED BOND YIELD

UTILITY PROXY GROUP

Market Rate of Return		
Dividend Yield (a)	2.3%	
Growth Rate (b)	10.5%	
Market Return (c)		12.8%
Less: Risk-Free Rate (d)		
Projected Long-term Treasury Bond Yield		5.3%
Market Risk Premium (e)		7.5%
Utility Proxy Group Beta (f)		0.76
Utility Proxy Group Risk Premium (g)		5.7%
Plus: Risk-free Rate (d)		
Projected Long-term Treasury Bond Yield		5.3%
Unadjusted CAPM (h)		11.0%
Size Adjustment (i)		1.01%
Implied Cost of Equity (j)		12.0%

- (a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (retrieved Jan. 28, 2011).
- (b) Weighted average of IBES earnings growth rates for the dividend paying firms in the S&P 500 (retrieved Feb. 23, 2011).
- (c) (a) + (b)
- (d) Average projected 30-year Treasury bond yield for 2012-2015 based on data from the Value Line Investment Survey, Forecast for the U.S. Economy (Feb. 25, 2011), IHS Global Insight, U.S. Economic Outlook at 19 (Feb. 2011), Blue Chip Financial Forecasts, Vol. 29, No. 12 (Dec. 1, 2010), as shown on Table WEA-1.
- (e) (c) (d).
- (f) www.valueline.com (retrieved Apr. 20, 2011).
- (g) (e) x (f).
- (h) (d) + (g).
- (i) Morningstar, "Ibbotson SBBI 2011 Valuation Yearbook," at Table C-1 (2011).
- (j) (h) + (i).

CAPM - PROJECTED BOND YIELD

NON-UTILITY PROXY GROUP

Market Rate of Return		
Dividend Yield (a)	2.3%	
Growth Rate (b)	10.5%	
Market Return (c)		12.8%
Less: Risk-Free Rate (d)		
Projected Long-term Treasury Bond Yield		5.3%
Market Risk Premium (e)		7.5%
Non-Utility Proxy Group Beta (f)		0.71
Utility Proxy Group Risk Premium (g)		5.3%
Plus: Risk-free Rate (d)		
Projected Long-term Treasury Bond Yield		5.3%
Unadjusted CAPM (h)		10.6%
Size Adjustment (i)		-0.38%
Implied Cost of Equity (j)		10.2%

- (a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (retrieved Jan. 28, 2011).
- (b) Weighted average of IBES earnings growth rates for the dividend paying firms in the S&P 500 (retrieved Feb. 23, 2011).
- (c) (a) + (b)
- (d) Average projected 30-year Treasury bond yield for 2012-2015 based on data from the Value Line Investment Survey, Forecast for the U.S. Economy (Feb. 25, 2011), IHS Global Insight, U.S. Economic Outlook at 19 (Feb. 2011), Blue Chip Financial Forecasts, Vol. 29, No. 12 (Dec. 1, 2010), as shown on Table WEA-1.
- (e) (c) (d).
- (f) www.valueline.com (retrieved Jan. 28, 2011).
- (g) (e) x (f).
- (h) (d) + (g).
- (i) Morningstar, "Ibbotson SBBI 2010 Valuation Yearbook," at Table C-1 (2010).
- (j) (h) + (i).

BEFORE THE

2011 JUN - 1 PM 2: 43

IDAHO PUBLIC UTILITIES COMMISSION CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

AVERA, DI TESTIMONY

CURRENT BOND YIELDS

<u>Cu</u>	rrent Equity Risk Premium	
(a)	Avg. Yield over Study Period	9.01%
(b)	April 2011 Average Utility Bond Yield	<u>5.62%</u>
	Change in Bond Yield	-3.39%
(c)	Risk Premium/Interest Rate Relationship	<u>-0.4095</u>
	Adjustment to Average Risk Premium	1.39%
(a)	Average Risk Premium over Study Period	<u>3.36%</u>
	Adjusted Risk Premium	4.75%
<u>Im</u>	plied Cost of Equity	
(b)	April 2011 BBB Utility Bond Yield	5.98%
	Adjusted Equity Risk Premium	4.75%
	Risk Premium Cost of Equity	10.73%

- (a) Exhibit No. 8, page 3.
- (b) Moody's Investors Service, www.creditrends.com.
- (c) Exhibit No. 8, page 4.

PROJECTED BOND YIELDS

Current Equity Risk Premium	
(a) Avg. Yield over Study Period	9.01%
(b) Projected Avg. A/BBB Utility Bond Yield 2012-15	<u>6.93%</u>
Change in Bond Yield	-2.08%
(c) Risk Premium/Interest Rate Relationship	<u>-0.4095</u>
Adjustment to Average Risk Premium	0.85%
(a) Average Risk Premium over Study Period	<u>3.36%</u>
Adjusted Risk Premium	4.21%
Implied Cost of Equity	
	7.15%
(d) Projected BBB Utility Bond Yield 2012-15	•
Adjusted Equity Risk Premium	4.21%
Risk Premium Cost of Equity	11.37%

- (a) Exhibit No. 8, page 3.
- (b) Average of the implied yields on utility bonds rated "A" and "Baa" for 2012-15 based on data from IHS Global Insight, *U.S. Economic Outlook* at 19 (Feb. 2011), Energy Information Administration, *Annual Energy Outlook* 2011 Early Release (Dec. 16, 2010), and Moody's Investors Service at www.credittrends.com.
- (c) Exhibit No. 8, page 4.
- (d) Table WEA-3.

AUTHORIZED RETURNS

	(a)	(b)	
	Allowed	Average Utility	Risk
Year	ROE	Bond Yield	Premium
1974	13.10%	9.27%	3.83%
1975	13.20%	9.88%	3.32%
1976	13.10%	9.17%	3.93%
1977	13.30%	8.58%	4.72%
1978	13.20%	9.22%	3.98%
1979	13.50%	10.39%	3.11%
1980	14.23%	13.15%	1.08%
1981	15.22%	15.62%	-0.40%
1982	15.78%	15.33%	0.45%
1983	15.36%	13.31%	2.05%
1984	15.32%	14.03%	1.29%
1985	15.20%	12.29%	2.91%
1986	13.93%	9.46%	4.47%
1987	12.99%	9.98%	3.01%
1988	12.79%	10.45%	2.34%
1989	12.97%	9.66%	3.31%
1990	12.70%	9.76%	2.94%
1991	12.55%	9.21%	3.34%
1992	12.09%	8.57%	3.52%
1993	11.41%	7.56%	3.85%
1994	11.34%	8.30%	3.04%
1995	11.55%	7.91%	3.64%
1996	11.39%	7.74%	3.65%
1997	11.40%	7.63%	3.77%
1998	11.66%	7.00%	4.66%
1999	10.77%	7.55%	3.22%
2000	11.43%	8.09%	3,34%
2001	11.09%	7.72%	3.37%
2002	11.16%	7.53%	3.63%
2003	10.97%	6.61%	4.36%
2004	10.75%	6.20%	4.55%
2005	10.54%	5.67%	4.87%
2006	10.36%	6.08%	4.28%
2007	10.36%	6.11%	4.25%
2008	10.46%	6.65%	3.81%
2009	10.48%	6.28%	4.20%
2010	<u>10.34%</u>	<u>5.56%</u>	4.78%
Average	12.38%	9.01%	3.36%

⁽a) Major Rate Case Decisions, Regulatory Focus, Regulatory Research Associates; *UtilityScope Regulatory Service*, Argus.

⁽b) Moody's Investors Service.

REGRESSION RESULTS

SUMMARY OUTPUT

Regression Stat	istics
Multiple R	0.9007749
R Square	0.8113955
Adjusted R Square	0.8060068
Standard Error	0.0052509
Observations	37

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.004151593	0.004152	150.5735	3.1021E-14
Residual	35	0.000965016	2.76E-05		
Total	36	0.005116609			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.0705528	0.003129538	22.54415	1.99E-22	0.06419946	0.07690607	0.064199459	0.076906074
X Variable 1	-0.409496	0.033371508	-12.2708	3.1E-14	-0.47724424	-0.34174854	-0.47724424	-0.34174854

BEFORE THE

2011 JUN -1 PM 2: 43

IDAHO PUBLIC UTILITIES COMMISSION CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

AVERA, DI TESTIMONY

COMPARABLE EARNINGS APPROACH

UTILITY PROXY GROUP

		(a)	(b)	(c)
		Expected Return	Adjustment	Adjusted Return
	Company	on Common Equity	Factor	on Common Equity
1	Ameren Corp.	7.0%	1.0188	7.1%
2	American Elec Pwr	10.5%	1.028674	10.8%
3	Avista Corp.	9.0%	1.01767	9.2%
4	Black Hills Corp.	8.0%	1.012476	8.1%
5	CenterPoint Energy	14.0%	1.025337	14.4%
6	Cleco Corp.	10.0%	1.026528	10.3%
7	CMS Energy	12.5%	1.030038	12.9%
8	Constellation Energy	7.0%	1.025032	7.2%
9	DTE Energy Co.	9.0%	1.020027	9.2%
10	Edison International	5.5%	1.019842	5.6%
11	Empire District Elec	10.5%	1.011911	10.6%
12	Great Plains Energy	8.0%	1.023109	8.2%
13	Hawaiian Elec.	10.5%	1.018344	10.7%
14	IDACORP, Inc.	8.5%	1.023006	8.7%
15	Integrys Energy Group	9.5%	1.014113	9.6%
16	ITC Holdings Corp.	15.5%	1.055318	16.4%
17	Otter Tail Corp.	8.5%	1.035333	8.8%
18	Pepco Holdings	7.0%	1.021046	7.1%
19	PG&E Corp.	12.0%	1.030584	12.4%
20	Pinnacle West Capital	8.5%	1.022676	8.7%
21	Portland General Elec.	8.5%	1.02908	8.7%
22	TECO Energy	13.0%	1.02892	13.4%
23	UIL Holdings	9.0%	1.081864	9.7%
24	Westar Energy	10.0%	1.020723	10.2%
25	Wisconsin Energy	13.0%	1.021472	13.3%
	Average (d)			10.4%

⁽a) The Value Line Investment Survey (Feb. 4, Feb. 25, & Mar. 25, 2011).

⁽b) Adjustment to convert year-end return to an average rate of return from Exhibit No. 3.

⁽c) (a) x (b).

⁽d) Excludes highlighted figures.

BEFORE THE

2011 JUN -1 PM 2: 43

IDAHO PUBLIC UTILITIES COMMISSION CASE NO. IPC-E-11-08

IDAHO POWER COMPANY

AVERA, DI TESTIMONY

CAPITAL STRUCTURE

UTILITY PROXY GROUP

		At Fiscal Year-End 2010 (a)			Value Line Projected (b)		
				Common			Common
	Company	Debt	Preferred	Equity	Debt	Other	Equity
1	Ameren Corp.	47.1%	0.0%	52.9%	46.0%	1.0%	53.0%
2	American Elec Pwr	55.1%	0.2%	44.7%	49.5%	0.0%	50.5%
3	Avista Corp.	47.4%	2.2%	50.4%	48.0%	0.0%	52.0%
4	Black Hills Corp.	52.0%	0.0%	48.0%	50.5%	0.0%	49.5%
5	CenterPoint Energy	74.7%	0.0%	25.3%	71.0%	0.0%	29.0%
6	Cleco Corp.	51.7%	0.0%	48.2%	44.5%	0.5%	55.0%
7	CMS Energy	71.7%	0.0%	28.3%	65.5%	0.5%	34.0%
8	Constellation Energy	34.7%	1.5%	63.8%	31.5%	1.0%	67.5%
9	DTE Energy Co.	49.9%	2.1%	48.0%	52.5%	0.0%	47.5%
10	Edison International	51.9%	3.8%	44.3%	52.0%	3.0%	45.0%
11	Empire District Elec	51.3%	0.0%	48.7%	48.0%	0.0%	52.0%
12	Great Plains Energy	54.0%	0.6%	45.4%	51.0%	0.5%	48.5%
13	Hawaiian Elec.	47.3%	1.2%	51.5%	47.0%	1.0%	52.0%
14	IDACORP, Inc.	51.2%	0.0%	48.8%	49.5%	0.0%	50.5%
15	Integrys Energy Group	47.6%	0.0%	52.4%	45.0%	1.0%	54.0%
16	ITC Holdings Corp.	69.1%	0.0%	30.9%	66.5%	0.0%	33.5%
17	Otter Tail Corp.	40.2%	1.4%	58.3%	39.0%	0.0%	61.0%
18	Pepco Holdings	46.6%	0.0%	53.4%	52.0%	0.0%	48.0%
19	PG&E Corp.	50.4%	1.1%	48.5%	45.0%	1.0%	54.0%
20	Pinnacle West Capital	49.3%	0.0%	50.7%	46.5%	0.0%	53.5%
21	Portland General Elec.	53.1%	0.0%	46.9%	50.0%	0.0%	50.0%
22	TECO Energy	59.4%	0.0%	40.6%	52.5%	0.0%	47.5%
23	UIL Holdings	60.7%	0.0%	39.2%	58.5%	0.0%	41.5%
24	Westar Energy	54.3%	0.4%	45.3%	54.0%	0.5%	45.5%
25	Wisconsin Energy	53.5%	0.4%	46.2%	51.5%	0.5%	48.0%
	Average	53.0%	0.6%	46.4%	50.7%	0.4%	48.9%

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

⁽b) The Value Line Investment Survey (Feb. 4, Feb. 25, & Mar. 25, 2011).