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IDAHO PUBLIC
UTILITIES COMMISSION

October 23, 2008

VIA OVERNIGHT SERVICE

Ms. Jean Jewell
Commission Secretary
Idaho Public Utilities Commission
P.O. Box 83720
Boise, ID 83720-0074
RE: Case No. IPC-E-08-10

Dear Ms. Jewell:

Enclosed please find:

- (1) an original and 10 copies of the Direct Testimony and Exhibits of Matthew I. Kahal on behalf of the United States Department of Energy in the above-captioned proceeding;
- (2) an additional copy of each of these items, that I request be date-stamped and returned in the enclosed postage paid envelope;
- (3) a disk upon which each of these items is set out in computer searchable form.

If you have any questions concerning this filing, please contact me at (202) 586-3409.

Sincerely yours,

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CERTIFICATE OF SERVICE - IDAHO PUC CASE NO. IPC-E-08-10

I hereby certify that I have , this 23th day of October, 2008, served or caused to be served a true and correct copy of the attached Testimony and Exhibits of Matthew I Kahal on Behalf of the United States Department of Energy upon each of the parties listed below, by: (1) placing the same in the United States Mail, addressed to the street address set out below, and (2) transmitting the same electronically to the email address set out below.

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IDAHO PUBLIC
UTILITIES COMMISSION

STATE OF IDAHO
BEFORE THE
PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION)
OF IDAHO POWER COMPANY FOR)
AUTHORITY TO INCREASE ITS RATES)
AND CHARGES FOR ELECTRIC)
SERVICE)

CASE NO. IPC-E-08-10

DIRECT TESTIMONY OF
MATTHEW I. KAHAL

ON BEHALF OF THE
U.S. DEPARTMENT OF ENERGY

OCTOBER 24, 2008

EXETER

ASSOCIATES, INC.

5565 Sterrett Place

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Columbia, Maryland 20904

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1 **I. QUALIFICATIONS**

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A. My name is Matthew I. Kahal. I am employed as an independent consultant
4 retained in this matter by the firm of Exeter Associates, Inc. My business address
5 is 5565 Sterrett Place, Suite 310, Columbia, Maryland 21044.

6 Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND.

7 A. I hold B.A. and M.A. degrees in economics from the University of Maryland and
8 have completed all course work and qualifying examination requirements for the
9 Ph.D. degree in economics. My areas of academic concentration included
10 industrial organization, economic development and econometrics.

11 Q. WHAT IS YOUR PROFESSIONAL BACKGROUND?

12 A. I have been employed in the area of energy, utility and telecommunications
13 consulting for the past 30 years working on a wide range of topics. Most of my
14 work has focused on electric utility integrated planning, plant licensing,
15 environmental issues, mergers and financial issues. I was a co-founder of Exeter
16 Associates, and from 1981 to 2001 I was employed at Exeter Associates as a
17 Senior Economist and Principal. During that time, I took the lead role at Exeter in
18 performing cost of capital and financial studies. In recent years, the focus of much
19 of my professional work has shifted to electric utility restructuring and
20 competition.

21 Prior to entering consulting, I served on the Economics Department
22 faculties at the University of Maryland (College Park) and Montgomery College
23 teaching courses on economic principles, development economics and business.

24 Q. HAVE YOU PREVIOUSLY TESTIFIED AS AN EXPERT WITNESS
25 BEFORE UTILITY REGULATORY COMMISSIONS?

1 A. Yes. I have testified before approximately two-dozen state and federal utility
2 commissions in more than 300 separate regulatory cases. My testimony has
3 addressed a variety of subjects including fair rate of return, resource planning,
4 financial assessments, load forecasting, competitive restructuring, rate design,
5 purchase power contracts, merger economics and other regulatory policy issues.
6 These cases have involved electric, gas, water and telephone utilities. In 1989,
7 I testified before the U.S. House of Representatives, Committee on Ways and
8 Means, on proposed federal tax legislation affecting utilities.

9 Q. WHAT PROFESSIONAL ACTIVITIES HAVE YOU ENGAGED IN
10 SINCE LEAVING EXETER AS A PRINCIPAL IN 2001?

11 A. Since 2001, I have worked on a variety of consulting assignments pertaining to
12 electric restructuring, purchase power contracts, environmental controls, cost of
13 capital and other regulatory issues. Current and recent clients include the U. S.
14 Department of Justice, U. S. Air Force, U. S. Department of Energy, the Federal
15 Energy Regulatory Commission, Connecticut Attorney General, Pennsylvania
16 Office of Consumer Advocate, New Jersey Division of Counsel, Rhode Island
17 Division of Public Utilities, Louisiana Public Service Commission, Arkansas
18 Public Service Commission, Maryland Department of Natural Resources and
19 Energy Administration, and Maine Office of the Public Advocate.

20 Q. HAVE YOU PREVIOUSLY TESTIFIED IN MATTERS BEFORE THIS
21 COMMISSION?

22 A. Yes. I have testified on cost of capital before the Idaho Public Utilities
23 Commission on previous occasions, including Idaho Power Company's ("IPC"
24 or "the Company") base rate case in 1994 (IPC-E-94-5) and in last year's case
25 (IPC-E-07-8).

II. OVERVIEW

1 **A. Summary of Recommendations**

2 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
3 PROCEEDING?

4 A. I have been asked by the U.S. Department of Energy (“DOE”) to develop a
5 recommendation concerning the fair rate of return on the jurisdictional electric
6 utility rate base of Idaho Power Company (“IPC” or “the Company”). IPC is the
7 electric utility subsidiary of IdaCorp, Inc., and it accounts for the vast majority of
8 IdaCorp’s invested capital and operations. My work in this case includes both a
9 review of the Company’s proposal concerning rate of return and the preparation
10 of an independent study of the cost of common equity.

11 Q. WHAT IS THE COMPANY’S RATE OF RETURN PROPOSAL IN
12 THIS CASE?

13 A. As presented on Exhibit 27 sponsored by Mr. Steven Keen, the Company
14 proposes an overall rate of return of 8.55 percent, based on the projected
15 capitalization and debt costs at December 31, 2008. The capital structure
16 proposed in this case includes 50.7 percent common equity and 49.3 percent long-
17 term debt, with no preferred stock or short-term debt included in the capital
18 structure. In developing the requested overall rate of return Mr. Keen selects a
19 return on common equity of 11.25 percent. IPC’s outside cost of capital witness,
20 Dr. William Avera, recommends a return on common equity range of 10.8 to
21 11.8 percent.

22 Q. WHAT IS MR. KEEN’S APPROACH TO CAPITAL STRUCTURE?

23 A. IPC is a wholly-owned subsidiary of IdaCorp, Inc., a utility holding company, and
24 is principally engaged in electric utility retail operations in Idaho, with a small

1 amount of retail utility operations in Oregon. Mr. Keen bases the ratemaking
2 capital structure on the projected Idaho Power Company capital structure at
3 December 31, 2008. As of this date, IPC expects to have no preferred stock
4 outstanding, and Mr. Keen includes the effects of expected long-term debt
5 issuances.

6 Mr. Keen also provides an estimate of the actual embedded cost of debt,
7 inclusive of the prospective cost rates for the Company's variable rate debt and its
8 projected new debt issuances. This produces an embedded cost of debt of
9 5.927 percent.

10 Q. HOW DOES MR. KEEN'S RATE OF RETURN REQUEST COMPARE
11 WITH THE REQUEST IN LAST YEAR'S RATE CASE (CASE NO.
12 IPC-E-07-08)?

13 A. In last year's case, Mr. Keen also proposed a projected "50/50" capital structure
14 and a projected year-end cost of debt. However, in this case he has lowered the
15 requested return on common equity from 11.5 percent to 11.25 percent. In
16 addition, the cost of debt in this case has risen from 5.59 percent to 5.93 percent.
17 The lower return on equity request follows the reduction in the range
18 recommended by Dr. Avera, as compared to his testimony last year.

19 Q. WHAT IS YOUR RECOMMENDATION AT THIS TIME ON RATE OF
20 RETURN?

21 A. As presented on my Exhibit No. 601, at this time I am recommending a return on
22 the IPC jurisdictional rate base of 8.18 percent, which includes a 10.5 percent
23 return on common equity. The 10.5 percent figure is at the high end of my range
24 of evidence. Depending on the Commission's treatment of certain ratemaking

1 policy issues (such as the Power Clause Adjustment) raised by the Company as
2 major risk factors, the Commission should consider a range of 10.25 to 10.5.

3 The 10.5 percent upper end figure is based primarily upon discounted cash
4 flow (DCF) evidence using a proxy group of electric utility companies operating
5 in the West Region of the U.S. I also present DCF evidence using a subset of Dr.
6 Avera's proxy companies, i.e., those non-West Region companies in his group
7 that operate as integrated, fully-regulated utilities. In addition, I have reviewed
8 and considered Dr. Avera's evidence using the Capital Asset Pricing Model
9 (CAPM), although I find the CAPM to be much less useful than the DCF studies.
10 Finally, I compare my DCF results to "comparable earnings" evidence, although
11 this is not a market cost of equity estimation method. The results of a comparable
12 earnings analysis, while not the basis of my position in this case, do not support a
13 result exceeding 10.5 percent. The 10.5 percent is somewhat higher than my DCF
14 midpoint results, providing IPC with a premium over the "baseline" proxy group
15 cost of equity estimate. As mentioned above and discussed in Section V of my
16 testimony, the 10.5 percent is an upper end recommendation before consideration
17 of certain proposed regulatory policy changes.

18 In formulating my overall rate of return recommendation, I have accepted
19 the Company's proposed December 31, 2008 capital structure and embedded cost
20 of debt, subject to possible updating. This capital structure is nearly identical to
21 that used in last year's case and provides IPC with a slightly thicker equity ratio
22 than approved by the Commission in the 2004 rate case. These percentages
23 appear to be consistent with IPC's financial objectives.

24 Q. WHAT RATE OF RETURN DID THE COMMISSION APPROVE IN
25 THE LAST FULLY-LITIGATED RATE CASE?

1 A. In IPC's last fully-litigated case, decided in 2004 (Case No. IPC-E-03-13, May
2 25, 2004), the Commission set the Company's rate of return on equity (ROE) at
3 10.25 percent, in conjunction with a common equity ratio of 46 percent. In that
4 rate order, the Commission concluded that the authorized 10.25 percent return on
5 equity appropriately reflected the Company's business risks. The Commission's
6 return on equity quantification in that Order relied primarily on DCF and
7 comparable earnings evidence. (Order, page 38) Since that case, the Company's
8 rate case filings have been resolved by settlement agreement without an explicit
9 cost of equity ruling,

10 Q. WHAT RETURN ON EQUITY DID YOU RECOMMEND IN THE
11 YEAR'S RATE CASE FOR IPC?

12 A. In last year's case, I recommended 10.25 percent, consistent with the
13 Commission's ruling in the 2004 rate case. This recommendation was fully
14 supported by the cost of capital evidence at that time. Although the cost of capital
15 data in this case have not changed substantially, I believe that the difficulties in
16 financial markets (along with IPC's financial position) may warrant a moderately
17 higher return than I recommend in last year's case. At the same time, the
18 Commission should consider possible regulatory changes that mitigate the
19 Company's risk.

20 Q. WHAT IS THE ASSESSMENT OF IPC BY THE RATING AGENCIES?

21 A. As summarized in Mr. Keen's testimony, all three major credit rating agencies
22 rate IPC medium to high triple B, low single A, with the low single A applicable
23 only to the Company's secured debt. The recent reports from the three major
24 credit rating agencies (Standard & Poors, Moody's and FitchRatings) were
25 provided as part of Mr. Keen's and Dr. Avera's workpapers, and all three

1 organizations provide generally similar business risk assessments. For example,
2 FitchRatings notes as “Key Credit Strengths” the PCA recovery mechanism,
3 IPC’s favorable rates and strong growth prospects. (July 9, 2007) Standard &
4 Poors identifies the Company’s strengths as being “a strong power cost
5 adjustment (PCA) mechanism,” supportive regulation, low-cost generation and
6 the absence of unregulated business. (February 1, 2008) Moody’s refers to IPC’s
7 “generally low business risk profile”, reasonably supportive regulatory treatment
8 and the Company’s low costs of supply as positive for ratings. (June 4, 2008)

9 Similarly, each of the three credit rating agencies mentions the same
10 negative factors. The principal rating concerns include IPC’s large construction
11 program (including the risks of rate disallowances), the risk of adverse hydrologic
12 conditions and weak near-term financial metrics. S&P lowered its IdaCorp and
13 IPC credit ratings by one notch in January 2008 (though it changed its outlook
14 from “negative” to “stable”) due primarily to the perceived weakening credit of
15 metrics.

16 Q. WHAT DO YOU CONCLUDE?

17 A. Based on my review of the information submitted in this case, including the
18 recent credit rating reports, I conclude that IPC is an approximately average risk
19 electric utility. Thus, the West Region group of vertically-integrated electric
20 companies provide a generally reasonable risk proxy for IPC.

1 **B. Capital Cost Trends**

2 Q. HAVE YOU REVIEWED THE TRENDS IN MARKET CAPITAL
3 COSTS OVER THE PAST DECADE?

4 A. Yes. My Exhibit No. 602 shows capital cost indicators on an annual basis since
5 1992 and on a monthly basis during January 2002 to September 2008. The
6 indicators include inflation (as measured by the annual change in the Consumer
7 Price Index), short-term Treasury yields, ten-year Treasury yields and single A-
8 rated long-term utility bond yields (per Moody's).

9 This schedule shows that despite year-to-year fluctuations there has been a
10 downward trend in capital costs over this time period, at least for long-term
11 securities. Short-term interest rates tend to be governed by Federal Reserve
12 Board (Fed) policy, and up until about a year ago the Fed had been "tightening"
13 (i.e., raising short-term rates) in response to a strengthening U.S. economy. In
14 response to a slowing U.S. economy and distress in the housing market the Fed
15 has reversed this trend and has reduced short-term interest rates. As measured by
16 utility bond yields, it appears that capital costs "bottomed out" in mid-2005, with
17 single A utility bond yields reaching a low point in the mid 5 percent range.
18 Long-term interest rates remained relatively low through most of 2006 (i.e., long-
19 term utility bond yields at approximately 6 percent), and this has continued since
20 then. Long-term rates can move from month-to-month but the underlying trend
21 has been relatively stable. Single A utility bond yields generally have remained in
22 the 6.0 to 6.5 percent range, with Ten-Year Treasury yields moving downward in
23 2008 to the 3.7 to 4.0 percent range. The precipitous decline this year in Treasury
24 security yields reflects weakness in the U.S. economy and the "flight to quality"
25 effect which takes hold during periods of economic distress.

1 In recent months, financial markets distress and equity market volatility
2 has increased drastically, with credit markets beginning in late September
3 freezing up. This is a serious economic crisis that has required historical remedial
4 action by U.S. and foreign governments. As of this writing, it is difficult to
5 predict when normal conditions, reflecting underlying business fundamentals, will
6 return to financial markets.

7 Q. ACCORDING TO EXHIBIT NO. 602, THERE WAS AN UPWARD
8 MOVEMENT IN INFLATION. IN THE PAST YEAR. WHAT
9 ACCOUNTS FOR THIS CHANGE?

10 A. The upward movement in inflation has been in response to price spikes for energy
11 and, to some degree, increased food prices. However, the underlying “core”
12 inflation (excluding the volatile fuel and food sectors) remains relatively stable.
13 For example, the long-term “consensus” forecast of the GDP Deflator (*Blue Chip*
14 *Economic Indicators*, October 10, 2008) is 2.1 to 2.2 percent annually. The
15 favorable “core” inflation outlook is based on strong productivity growth in the
16 U.S. economy, the expansion of global competition which tends to hold down
17 increases in U.S. product prices and Fed monetary policy that over time
18 emphasizes inflation control.

19 Q. YOUR EXHIBIT NO. 602 PROVIDES DATA ON LONG-TERM
20 INTEREST RATES. IS THIS INDICATIVE OF COMMON EQUITY
21 COST RATES?

22 A. At least in a general sense, I believe it is. The forces over time that lead to lower
23 yields on long-term debt also favorably affect the cost of equity, although I would
24 acknowledge that equity and debt cost rates do not necessarily move together in

1 lock step. The favorable trends over time in long-term debt cost rates are also
2 likely to affect IPC's equity cost rate for providing electric service.

3 There is another force at work that further contributes to a reduced cost
4 rate for equity -- federal tax policy. In mid-2003, Congress enacted legislation
5 granting favorable income tax treatment for dividend payments and capital gains.
6 (Legislation extending this favorable tax treatment was enacted by Congress last
7 year.) Lower taxes on returns to equity investments mean that investors are
8 willing (or should be willing) to accept lower returns for holding common stocks
9 (such as those of electric and other utilities), particularly as compared with bonds,
10 which do not enjoy this benefit. The DCF method, which uses relatively current
11 market data, can fully capture this effect. Other methods, such as historical risk
12 premium method (as used by Dr. Avera), may not be able to do so.

13 Q. AT THIS TIME, THE U. S. AND GLOBAL FINANCIAL MARKETS
14 HAVE BEEN SEVERELY DISTRESSED, DESCRIBED BY MANY
15 OBSERVERS AS A "CRISIS." HAVE YOU DIRECTLY
16 INCORPORATED THIS CRISIS INTO YOUR RECOMMENDATION?

17 A. No, I have not. My cost of equity evidence is based on market data from the six
18 months ending September 2008, largely a period of financial weakness and stress
19 but not financial crisis. The purpose of this proceeding is to set permanent rates
20 for IPC, and it would not be proper to set fair rate of return based on financial
21 crisis conditions, which likely will be temporary. Moreover, the standard models
22 (such as DCF and CAPM) normally employed for estimating the utility cost of
23 capital cannot meaningfully be applied to crisis conditions.

1 **C. Cost of Equity Summary**

2 Q. HOW DID DR. AVERA OBTAIN HIS RECOMMENDED COST OF
3 EQUITY RANGE?

4 A. Dr. Avera emphasized two cost of capital methodologies, the DCF and the
5 CAPM, and he also employed comparable earnings evidence, a method which
6 does not directly measure the cost of equity. He reports the following results:
7

Dr. Avera's ROE Summary	
1. DCF	11.0 - 12.6%
2. CAPM	10.2 - 11.9%
3. Comparable Earnings	11.1%
4. Flotation Cost Adder	0.0%

Source: Avera, page 73

8

9 Dr. Avera concludes that this evidence supports a “bare bones” cost of
10 equity range of 10.8 to 11.8 percent based on these methods. While he does not
11 propose a specific allowance for flotation expense, he suggests this potential cost
12 should be considered in selecting an allowed return on equity within this range.

13 Q. WHAT ARE YOUR COST OF EQUITY RESULTS?

14 As mentioned earlier, my recommendation (before considering the need
15 for an IPC risk premium) is based primarily on the DCF evidence. I have applied
16 the DCF model to a broad proxy group of West Region electric utility companies.
17 This group is very similar to the proxy group used by Dr. Avera in the 2004 rate
18 case and in a 2006 IPC rate case before the Federal Energy Regulatory
19 Commission (“FERC”), as indicated in response to DOE I-19. My full group
20 DCF analysis produces a range of 9.9 to 10.4 percent with a midpoint of 10.2

1 percent. Using a subset of that group (i.e., excluding California electric and two
2 other companies), the range becomes 9.6 to 10.6 percent, with a midpoint of about
3 10.1 percent. Dr. Avera's own DCF evidence, based on a subset of his industry
4 group, i.e., just those integrated electric utilities operating in "non-restructured"
5 states, supports a DCF estimate in the range of about 9 to 11 percent, with a 10.5
6 percent midpoint. These three DCF studies are summarized on my Exhibit No.
7 604, pages 1 and 2, and on Exhibit No. 605.

8 I also present evidence on comparable earnings as additional background
9 information for the Commission. The recent historical and projected earned
10 returns for the proxy electric companies are generally in the 9 to 10 percent range,
11 on average, or somewhat higher.

12 Considering this cost of capital evidence, I believe a reasonable range for
13 the "baseline" cost of equity would be about 10.0 to 10.5 percent, with the best
14 evidence supporting returns toward the midpoint or lower end of this range.
15 Hence, my recommendation of 10.5 percent (before consideration of possible
16 risk-mitigating regulatory changes) is consistent with this baseline evidence plus a
17 small return premium to recognize the stressed financial environment and
18 concerns of credit rating agencies.

19 Q. HAVE YOU INCLUDED AN ADJUSTMENT FOR COMMON STOCK
20 ISSUANCE COSTS?

21 A. No, I have not done so since there is no indication in discovery responses of any
22 current or near-term plans by IdaCorp to conduct a public issuance of common
23 stock. The last such public issuance occurred in 2004. Notably, Dr. Avera also
24 presents no evidence for a flotation adjustment adder, nor does he calculate such

1 an adder. Consequently, there is no basis for suggesting such costs somehow are
2 being “left out” of the cost of capital determination.
3

4 **D. Testimony Organization**

5 Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

6 A. Section III presents my DCF evidence based on the application of that model to
7 the West Region electric utilities. Section IV is my reply to Dr. Avera’s cost of
8 equity evidence. In presenting that reply I discuss his DCF evidence, Capital
9 Asset Pricing Model (CAPM) studies and his comparable earnings data. In
10 Section IV, I present alternative comparable earnings information. Finally,
11 Section V presents a summary of my conclusions and recommendations.

III. COST OF COMMON EQUITY

1 **A. Using the DCF Model**

2 Q. WHAT STANDARD ARE YOU USING TO DEVELOP YOUR
3 RETURN ON EQUITY RECOMMENDATION?

4 A. As a general matter, the ratemaking process is designed to provide the utility an
5 opportunity to recover its prudently-incurred costs of providing utility service to
6 its customers, including the reasonable costs of financing its used and useful
7 investment. Consistent with this “cost-based” approach, the fair and appropriate
8 return on equity award for a utility is its cost of equity. The utility’s cost of equity
9 is the return required by investors (i.e., the “market return”) to acquire or hold that
10 Company’s common stock. A return award greater than the market return would
11 be excessive and would overcharge customers for utility service. Similarly, an
12 insufficient return could unduly weaken the utility and impair incentives to invest.

13 Although the *concept* of the cost of equity may be precisely stated, its
14 quantification poses challenges to regulators. The market cost of equity, unlike
15 certain other utility costs, cannot be directly observed (i.e., investors do not
16 directly, unambiguously state their return requirements), and it therefore must be
17 estimated using analytic techniques. The DCF model is one such technique
18 familiar to analysts and this Commission and was relied upon in IPC’s last fully-
19 litigated rate case, in 2004.

20 Q. IS THE COST OF EQUITY A FAIR RETURN AWARD FOR THE
21 UTILITY AND CUSTOMERS?

22 A. Generally speaking, I believe it is. A return award commensurate with the cost of
23 equity generally provides fair and reasonable compensation to utility investors
24 and normally should allow efficient utility management to successfully finance its

1 operations on reasonable terms. Certainly, this has been the case for IPC based on
2 the 10.25 percent equity return granted by the Commission in its rate case in
3 2004. Setting the return on equity equal to a reasonable estimate of the cost of
4 equity also is fair to ratepayers.

5 I recognize that there can be exceptions to this general rule. For example,
6 in some instances, utilities have sought rate of return adders as a reward for
7 asserted good management performance. In this case, the Company is seeking a
8 return on equity that approximates the midpoint of Dr. Avera's 10.8 to 11.8
9 percent cost of equity range. Mr. Keen further justifies the 11.25 percent request
10 (an increase of 100 basis points compared to the 10.25 percent previously
11 awarded) on a range of business risks that IPC currently faces.

12 Q. WHAT DETERMINES A COMPANY'S COST OF EQUITY?

13 A. It should be understood that the cost of equity is essentially a market price, and as
14 such, it is ultimately determined by the forces of supply and demand operating in
15 financial markets. In that regard, there are two key factors that determine this
16 price. First, a company's cost of equity is determined by the fundamental
17 conditions in capital markets (e.g., outlook for inflation, monetary policy, changes
18 in investor behavior, investor asset preferences, etc.). The second factor (or set of
19 factors) is the business and financial risks encountered by the utility in question.
20 For example, the fact that a utility company effectively operates as a regulated
21 monopoly, dedicated to providing an essential service (in this case electric utility
22 service), typically would imply low business risk and therefore a relatively low
23 cost of equity, as compared to most unregulated companies operating in
24 competitive markets.

1 Q. DOES DR. AVERA INCORPORATE THESE PRINCIPLES?

2 A. In general, he attempts to incorporate these principles in conducting his DCF and
3 CAPM analyses. However, I disagree with his recommendation of a return on
4 equity range substantially higher than that granted by the Commission in 2004.
5 Moreover, I question whether his “risk premium” analyses (i.e., his CAPM
6 studies) reliably measure the cost of equity, and I also question his use of
7 unregulated companies as being appropriate “risk proxies” for the fully-regulated
8 IPC. The use of unregulated companies as a proxy group for a utility is a non-
9 standard approach.

10 Q. WHAT METHODS ARE YOU USING IN THIS CASE?

11 A. I employ the DCF method applied to proxy groups of electric utility companies to
12 obtain a “baseline” cost of equity, and I also consider comparable earnings
13 evidence. However, for reasons discussed in my testimony, I emphasize the DCF
14 model results in formulating my recommendation. It has been my experience that
15 most utility regulatory commissions (federal and state) heavily emphasize the use
16 of the DCF model to determine the cost of equity when setting the fair return.
17 While I do not rely on the CAPM to develop my recommendation, the next
18 section of my testimony provides a discussion of this method and Dr. Avera’s
19 application of it. The comparable earnings method can provide perspective, but it
20 is not a cost of equity method.

21 Q. PLEASE DESCRIBE THE DCF MODEL.

22 A. As mentioned, this model has been widely used in the regulatory community,
23 including by this Commission. Its widespread acceptance is due to the fact that
24 the model is market-based and is derived from standard and accepted
25 economic/financial theory. The model is transparent and readily understandable.

1 transparently revealed. Consequently, the model cannot be applied to IPC, which
2 is a wholly-owned subsidiary of IdaCorp, and therefore, a market proxy is needed.
3 In theory, IdaCorp could serve as that market proxy, and I include IdaCorp as one
4 of my 13 West Region proxy companies.

5 In any case, I believe that an appropriately selected proxy group
6 (preferably one reasonable in size) is likely to be more reliable than a single
7 company study. This is because there is “noise” or fluctuations in stock price (or
8 other) data that cannot always be readily accounted for in a simple DCF study.
9 The use of an appropriate proxy group helps to allow such “data anomalies” to
10 cancel out in the averaging process.

11 For the same reason, I prefer to use market data that are relatively current
12 but averaged over a period of several months (i.e., six months rather than purely
13 relying upon “spot” market data). It is important to recall that this is not an
14 academic exercise but involves the setting of “permanent” utility rates that are
15 likely to be in effect for several years. The practice of averaging market data over
16 a period of several months can add stability to the results. Dr. Avera, by
17 comparison, appears to favor “spot” market data (i.e., as of May 2008) and has
18 not indicated any plans to provide an update.

19
20 **DCF Study Using the West Region Group of Electric Utility Companies**

21 Q. HOW DID YOU SELECT YOUR PROXY GROUP IN THIS CASE?

22 A. I have applied the DCF model to a group of 13 companies listed in the *Value Line*
23 *Investment Survey* as being West Region Electric Utilities. This is the same
24 general approach as taken by Dr. Avera in the 2004 rate case and more recently
25 for IPC in a FERC case in 2006. He employed in the 2006 FERC case 11 West

1 Region companies, and 10 of his 11 proxy companies are part of my proxy group.
2 I initially include all of the West Region electrics that are listed in Value Line
3 except for three companies that have dividend anomalies that make application of
4 the DCF problematic. Sierra Pacific Resources only recently began paying a
5 dividend, and it is currently at a very minimal level. El Paso Electric does not pay
6 a dividend, and PNM Resources cut its dividend within the last three months. As
7 a second proxy group, I have eliminated five West Region electrics from my list
8 of 13 companies. Specifically, I eliminate all three California utilities, since
9 California is a restructured state; MDU Resources, since it is rated "1" for Safety
10 by Value Line and has unusual growth characteristics; and UniSource since its
11 DCF characteristics are unusually low. This second or "restricted group" includes
12 eight West Region electric companies.

13 I provide a listing of these 13 companies on Exhibit No. 603, along with
14 certain risk indicators (i.e., Value Line Safety Rating, common equity ratio, beta
15 and financial strength rating). The "beta" measure is explained further later in
16 Section IV of my testimony. My exhibit shows the average values for these risk
17 indicators using both the full 13-company group and the restricted 8-company
18 group. The averages for the two proxy groups appear to be very similar, with the
19 13-company group having a slightly stronger Safety Rating. In general, IdaCorp
20 appears to have risk attributes generally similar to the averages of both groups,
21 with perhaps slightly greater risk. Unfortunately, these risk indicators are not
22 published by Value Line for IPC since it is not a publicly-traded company.

23 Q. HAVE EITHER YOU OR DR. AVERA PROPOSED AN
24 ADJUSTMENT TO THE COST OF EQUITY FOR ANY RISK
25 DIFFERENCE BETWEEN THE PROXY COMPANIES AND IPC?

1 A. No. Dr. Avera adopts a cost of equity range of 10.8 to 11.8 percent, and
2 Mr. Keen selects 11.25 percent which is close to the midpoint of that range.
3 While Mr. Keen discusses risk issues, he does not quantify or propose a specific
4 cost of equity adjustment. I also do not propose a discrete risk adjustment relative
5 to my proxy group DCF results, although my 10.5 percent recommendation is
6 toward the upper end of my DCF range.

7 Q. HOW HAVE YOU APPLIED THE DCF MODEL TO THIS GROUP?

8 A. I have elected to use a six-month time period to measure the dividend yield
9 component (Do/Po) of the DCF formula. Using the Standard & Poor's *Stock*
10 *Guide*, I compiled the month-ending dividend yields for the six months ending
11 September 2008, the most recent data available to me as of this time. The
12 dividend yields are month-ending, and since the October 2008 edition of the *Stock*
13 *Guide* is not yet available, I have used Yahoo Finance as the data source for my
14 September 2008 yields (i.e., as of September 30, 2008).

15 I show these dividend yield data on page 3 of Exhibit No. 604 for each
16 proxy company, April through September 2008. Over this six-month period,
17 the 13-company group average dividend yields were relatively stable ranging
18 from a high of 3.88 percent in June to a low of 3.62 percent in April 2008,
19 averaging 3.73 percent for the full six months. This indicates a slight upward
20 trend over this recent six-month period.

21 For DCF purposes and at this time, I am using a proxy group six-month
22 average dividend yield of 3.73 percent.

23 Q. IS 3.73 PERCENT YOUR FINAL DIVIDEND YIELD?

24 A. Not quite. Strictly speaking, the dividend yield used in the model should be the
25 value the investor expects over the next 12 months. Using the standard "half

1 year” growth rate adjustment technique, the DCF adjusted yield becomes 3.9
2 percent. This is based on assuming that half of a year of growth is 3.0 percent
3 (i.e., a full year growth is about 6.0 percent).

4 Q. DOES DR. AVERA EMPLOY THE SAME GROWTH RATE
5 ADJUSTMENT?

6 A. It appears that he indirectly uses a similar approach that would produce about the
7 same end result as my dividend adjustment. As best I can determine, he employs
8 Value Line’s estimate of the per share dividend over the next 12 months. For a
9 group of companies, this would be roughly analogous to using the “0.5g”
10 adjustment factor.

11 Q. HOW HAVE YOU DEVELOPED YOUR GROWTH RATE
12 COMPONENT?

13 A. Unlike the dividend yield, the investor growth rate cannot be directly observed
14 but instead must be inferred through a review of available evidence. The growth
15 rate in question is the long-run dividend per share growth rate, but analysts
16 frequently use projected earnings growth as a proxy for (long-term) dividend
17 growth. This is because in the long-run earnings are the ultimate source of
18 dividend payments to shareholders, and this is likely to be particularly true for a
19 large group of companies.

20 One possible approach is to examine historical growth as a guide to
21 investor expected future growth, for example the recent five-year or ten-year
22 growth in earnings, dividends and book value per share. However, my experience
23 in recent years with utilities has been that these historic measures have been very
24 volatile and are not reliable as long-run prospective measures. This may be due in
25 part to extensive corporate restructuring in the energy industry. I note that

1 Dr. Avera also chooses to rely primarily on prospective rather than historical
2 growth measures. The DCF growth rate should be prospective, and one useful
3 source of information on prospective growth is the published projections of
4 earnings per share (typically five years) prepared by securities analysts.

5 Dr. Avera places primary weight on this information (along with his calculations
6 of earnings retention growth), using earnings growth rates published by Value
7 Line, IBES and Zacks, and I agree that this type of evidence warrants substantial
8 emphasis.

9 Q. PLEASE DESCRIBE YOUR EVIDENCE.

10 A. Exhibit No. 604, page 4 of 5, presents four well-known sources of projected
11 earnings growth rates. Three of these four sources -- First Call, Zacks and
12 CNNMoney.com -- provide averages from securities analyst surveys conducted
13 by or for these organizations (typically reporting the median value). The fourth,
14 Value Line, is that organization's own estimates. Value Line publishes its own
15 projections using annual average earnings per share for a three-year historic base
16 period of 2005-2007 to a forecast period of 2011-2013.

17 As this exhibit shows, the growth rates vary somewhat among the four
18 sources, both for individual companies and for the group averages. These group
19 averages are 6.33 percent for CNN, 7.83 percent for First Call, 6.89 percent for
20 Zacks and 4.85 percent for Value Line. In this case, I have calculated the average
21 of these four sources, or about 6.2 percent, as a reasonable measure of expected
22 growth, and a range of 6.0 to 6.5 percent.

23 Q. IS THERE ANY OTHER EVIDENCE THAT SHOULD BE
24 CONSIDERED?

1 A. Yes. There are a number of reasons why investor expectations of long-run
2 dividend growth could differ from the limited, five-year earnings projections from
3 securities analysts. Consequently, while securities analyst estimates should be
4 considered and given substantial weight, these growth rates should be subject to a
5 reasonableness test and corroboration, to the extent feasible.

6 On Exhibit No. 604, page 5 of 5, I have compiled three other measures of
7 growth published by Value Line, i.e., growth rates of dividends and book value
8 per share and long-run retained earnings growth. (Retained earnings growth
9 reflects the growth over time one would expect from the reinvestment of retained
10 earnings, i.e., earnings not paid out as dividends. It is one of the growth sources
11 considered by Dr. Avera.) As shown on this Exhibit, these growth measures tend
12 to be similar to or less than analyst growth projections shown on page 4 of the
13 Exhibit. Dividend growth averages 5.33 percent, book value growth averages
14 5.00 percent, and earnings retention growth averages 4.54 percent. Notably, each
15 of these alternative measures of growth falls below the 6.0 to 6.5 percent range
16 cited above. This suggests that the growth rate range based on earnings
17 projections surveys I have calculated for DCF purposes may be conservatively
18 high.

19 Q. WHAT IS YOUR DCF CONCLUSION?

20 A. I summarize my DCF analysis on page 1 of Exhibit No. 604. The adjusted
21 dividend yield for the six months ending September 2008 is 3.9 percent for this
22 group. Published earnings growth rate projections would support a long-run
23 growth rate in the range of about 6.0 to 6.5 percent, as explained above.
24 Summing the adjusted yield and growth rate range produces a total return of 9.9
25 percent to 10.4 percent, and a midpoint result of 10.15 percent.

1 Q. WHY DO YOU NOT INCLUDE AN ADJUSTMENT FOR FLOTATION
2 COSTS?

3 A. If a utility issues new common stock through public offering, it will likely incur
4 flotation expenses, principally underwriting fees. This is potentially a recoverable
5 expense, and one way of providing recovery is through a rate of return adder.
6 Dr. Avera proposed an adder of 0.2 percent in last year's case, but does not
7 include any adjustment in this current case. Instead, he suggests that this should
8 be a consideration in selecting a final authorized return. However, he presents no
9 data showing that these costs actually have been incurred.

10 Given this lack of evidence and company data responses indicating that
11 there are no material flotation costs, this should not be a factor in setting the
12 authorized return.

13 Q. DOES YOUR DCF STUDY TAKE INTO ACCOUNT THE CURRENT
14 FINANCIAL CRISIS?

15 A. No, not directly. It is based on market conditions during the second and third
16 calendar quarters of 2008, which I believe is appropriate for rate setting in this
17 case. This was a period of elevated stress and volatility but was largely prior to
18 the severe financial crisis that emerged in recent weeks. I discuss this issue later
19 in the "Conclusions" section of my testimony.
20

21 C. **DCF Study Using the Restricted Proxy Group**

22 Q. WHAT IS THE PURPOSE OF YOUR RESTRICTED PROXY GROUP
23 STUDY?

24 A. I have eliminated five proxy companies in order to obtain a proxy group that is
25 more representative of IPC than the 13-company proxy group. I have done so by
26 eliminating the three California companies (PG&E, Edison International and

1 Sempra) since they operate in a very different regulatory environment than the
2 rest of the West Region. I also eliminated two companies (MDU and UniSource)
3 that appear to be “outliers” in terms of the DCF growth rate results, with MDU
4 being unusually high and UniSource being unusually low. Moreover, MDU
5 differs from other West Region companies begin rated “1” for Safety by Value
6 Line. This leaves a restricted West Region electric proxy group of eight
7 companies.

8 Q. HOW HAVE YOU CONDUCTED YOUR DCF STUDY FOR THIS
9 GROUP?

10 A. I have conducted my DCF analysis for the restricted group in the same manner as
11 my DCF analysis for the full, 13-company group. I present the data used in
12 restricted group analysis on DOE Exhibit No. 604. On pages 3, 4 and 5 of that
13 exhibit, the restricted proxy group averages are shown in the row below the full
14 group averages. Page 2 of that Exhibit presents the DCF summary.

15 For the six months ending September 2008, the group dividend yield
16 averages 4.33 percent, which translates into an adjusted yield of 4.6 percent.
17 Based on the evidence on pages 4 and 5 of that Exhibit, a reasonable growth range
18 would be 5.0 to 6.0 percent, somewhat less than the growth rate range for the full
19 group. Combining the adjusted yield plus the range of growth produces a total
20 return range of 9.6 to 10.6 percent, and a midpoint of 10.1 percent. Again, no
21 adjustment is needed for flotation expense.

22 Q. HOW DID YOU DEVELOP THE 5.0 TO 6.0 PERCENT GROWTH
23 RATE RANGE?

24 A. Page 4 of Exhibit No. 604 shows the published earnings growth rates from my
25 four sources – Value Line, CNN, Zacks and First Call. The four sources average

1 to 5.78 percent for the restricted proxy group, with First Call being an “outlier” of
2 7.19 percent. This appears to be due primarily to one anomalous data point –
3 a 14.8 percent growth rate for Hawaiian Electric. (Similarly, Value Line has an
4 anomalously low growth rate for one company, Pinnacle West.)

5 Page 5 of this Exhibit provides Value Line growth measures other than
6 earnings for the restricted proxy growth – dividends, book value and earnings
7 retention. Each of these growth measures for the group is in the 3 to 4 percent per
8 year range.

9 Consideration of all of this information, but emphasizing published
10 earnings growth projections, supports a DCF growth rate range of 5.0 to
11 6.0 percent at this time.

12
13 **D. Dr. Avera’s DCF Estimates**

14 Q. HOW DID DR. AVERA ESTIMATE THE COST OF EQUITY USING
15 THE DCF MODEL?

16 A. Dr. Avera employed an application of the standard DCF model to two proxy
17 groups of companies. The first analysis group uses a proxy group of 27 electric
18 utility companies in conjunction with four DCF growth measures. Three of the
19 growth measures are analyst projections of the growth in earnings per share
20 (published by IBES, Zacks and Value Line), and the fourth is Dr. Avera’s own
21 calculations of growth from retained earnings (derived using Value Line data).
22 The DCF calculations employ market data as of May 2008, and four sources of
23 growth produce DCF estimates for the 27-company group of 11.7 percent,
24 11.6 percent, 11.1 percent and 9.5 percent. The average of the four measures

1 produces an estimated investor return of about 11.0 percent, which is somewhat
2 above the upper end of my own DCF range.

3 Dr. Avera's second DCF study does not employ utility companies at all,
4 but instead uses a group of unregulated companies. Not surprisingly, the non-
5 utility study produces dramatically higher DCF results -- 12.3 percent,
6 12.8 percent, 12.5 percent and 12.7 percent using the four growth rate measures,
7 averaging 12.6 percent. This is roughly a 15 percent cost of equity increase over
8 his utility study DCF results.

9 Q. ARE DR. AVERA'S DCF RESULTS REASONABLE?

10 A. His electric utility study is only moderately above the upper end of my DCF
11 results and in that sense might seem to be a plausible estimate at least for this
12 proxy group. However, his study of non-utility companies produces a completely
13 unrealistic estimate of IPC's cost of equity, and Dr. Avera has no convincing
14 explanation for the enormous difference in the results of his two studies. Since he
15 ultimately recommends a range of 10.8 to 11.8 percent, it appears that he is
16 putting no weight on his non-utility DCF study in formulating his
17 recommendation. I believe that his non-utility study has little to do with IPC's
18 actual cost of equity and is not reasonable for use in this case.

19 I have concerns regarding the comparability of the 27 companies in his
20 electric company proxy group as well. This is because a number of his proxy
21 group electric companies operate in competitively restructured states, and some of
22 the companies have substantial non-utility operations. The most appropriate risk
23 proxies for IPC would be electric utility companies that are fully or predominantly
24 regulated utility and vertically-integrated, such as the 13 companies in my West
25 Region proxy group.

1 Q. WHICH UTILITY COMPANIES SHOULD BE ELIMINATED FROM
2 HIS PROXY GROUP?

3 A. Companies in Dr. Avera's group operating mostly in restructured states and/or
4 with substantial unregulated operations would include:

- 5 • Allegheny Energy (Pennsylvania, Maryland)
- 6 • CenterPoint Energy (Texas)
- 7 • CMS Energy (Michigan)
- 8 • DPL, Inc. (Ohio)
- 9 • DTE Energy Co. (Michigan)
- 10 • Northeast Utilities (New England)
- 11 • PEPCO Holdings (Maryland, D.C., Delaware)
- 12 • PPL Corp. (Pennsylvania)
- 13 • Public Service Enterprise Group (New Jersey)
- 14 • PG&E Corp. (California)
- 15 • UIL Holdings (Connecticut)

16 I believe these companies are less useful and appropriate as proxies for
17 IPC than his other electric utility companies.

18 Q. HOW WOULD THE REMOVAL OF THE COMPANIES IN
19 RESTRUCTURED STATES AFFECT HIS DCF RESULTS?

20 A. On my Exhibit No. 605, I reproduce Dr. Avera's electric utility DCF calculations
21 using his four growth rate measures but removing the companies from the
22 restructured states and their non-utility operations. I have also excluded the West
23 Region companies in his group since those companies are already included in my
24 DCF study. As Exhibit No. 605 shows, a DCF study of the fully regulated and
25 vertically-integrated utility subset, provides a return range (using his four growth

1 measures) of about 9.0 to 11.2 percent, averaging 10.5 percent. This corresponds
2 to the upper end of my own DCF study results and is well below his full 27-
3 company average of 11.0 percent. Please note that these are Dr. Avera's own
4 DCF calculations but utilizing a more appropriate subset of his electric company
5 proxy group, rather than the full 27-company group.

6 Q. IS IT REASONABLE TO REMOVE THE COMPANIES FROM
7 RESTRUCTURED STATES?

8 A. Yes. I believe the integrated, fully-regulated companies are a more appropriate
9 risk proxy for IPC. In the 2004 case, the Commission recognized this distinction
10 noting that, "Idaho is not likely to have deregulation risks like those experienced
11 in other states". (Order, page 43, Case No. IPC-E-03-13) Clearly, those "other
12 states" would include California, the Northeast and Mid-Atlantic states, as
13 indicated above.

1 **IV. REVIEW OF DR. AVERA'S DCF, CAPM AND COMPARABLE EARNINGS**

2 **A. DCF Analysis**

3 Q. WHAT ARE YOUR OBJECTIONS TO DR. AVERA'S DCF
4 ANALYSIS?

5 A. Dr. Avera performs two DCF studies, one using a 27-company proxy group of
6 electric companies and a second that uses a large group of unregulated companies
7 operating in competitive markets. As previously discussed, he obtains vastly
8 different results for the two proxy groups – 11.0 percent for his electric company
9 group and 12.6 percent for the unregulated companies. In my opinion, the DCF
10 study for the unregulated companies has no value at all in determining the
11 *regulated* fair return in this case for IPC and therefore should be disregarded.

12 The DCF study for the electric group is more reasonable and closer to my
13 upper end results in this case. However, as noted earlier, even this analysis is
14 improperly burdened by the inclusion of electric companies operating in
15 restructured states, with some of these companies having substantial non-
16 regulated operations (e.g., Allegheny Energy, PPL Corporation, etc.), which adds
17 substantial risk. Removing the “restructured” companies would reduce the group
18 cost of equity to about 10.5 percent as I have shown on my Exhibit 605.

19 Q. DOES THE COMMISSION RELY ON DCF EVIDENCE?

20 A. Yes, in conjunction with the comparables earning method. In particular, the
21 Commission's Order in Case No. IPC-E-03-13 (page 38) states:

22
23 The Commission has relied primarily on the discounted cash flow
24 method (DCF) and the comparable earnings method in previous
25 cases, and we do so again in this case.

1 That Order further observes that IPC is not burdened by “deregulation risks” such
2 as those experienced in other states. (*Id.*, page 43)

3
4 **B. CAPM Results**

5 Q. WHAT RESULTS DOES DR. AVERA OBTAIN USING THE CAPM?

6 A. Dr. Avera uses two approaches to applying the CAPM and two proxy groups,
7 i.e., his electric company and unregulated utility company groups. The two
8 approaches involve estimating the market risk premium using (a) long-run
9 historical market returns on stocks versus bonds; and (b) a “prospective” estimate
10 of the return on a subset of the overall stock market (specifically, the expected
11 return on the dividend-paying stocks in the S&P 500). The two groups and
12 methods produce the following CAPM cost of equity estimates:

- 13 1. Utility/historical method – 10.8%
- 14 2. Non-utility/historical method – 10.2%
- 15 3. Utility/prospective method – 11.9%
- 16 4. Non-utility/prospective method – 11.2%

17 The four CAPM studies average to about 11.0 percent, but the electric company
18 cost of equity is found to be higher than the unregulated company cost. This is
19 counterintuitive and exactly the reverse of his DCF results.

20 Q. PLEASE DESCRIBE THE CAPM APPROACH USED BY DR. AVERA.

21 A. The CAPM is a form of the “risk premium” approach and is based on modern
22 portfolio theory. According to this model, the cost of equity (K_e) is equal to the
23 yield on a risk-free asset plus an equity risk premium multiplied by a firm’s
24 “beta” statistic. “Beta” is a firm-specific risk measure which is computed as the
25 movements in a company’s stock price (or market return) relative to

1 contemporaneous movements in the broadly defined stock market. According to
2 CAPM theory, this measures the investment risk that cannot be reduced or
3 eliminated through asset diversification (i.e., holding a broad portfolio of assets).
4 The overall market, by definition, has a beta of 1.0, and a company with lower
5 than average investment risk (e.g., a utility company) normally would have a beta
6 below 1.0. The “risk premium” is defined as the expected return on the overall
7 stock market minus the yield or return on a risk-free asset.

8 The CAPM formula is:

9 $K_e = R_f + \beta (R_m - R_f)$, where

10 K_e = the firm’s cost of equity;

11 R_m = the expected return on the overall market;

12 R_f = the yield on the risk free asset; and

13 β = the firm (or group of firms) risk measure.

14 Two of the three principal variables in the model are directly observable --
15 the yield on a risk-free asset (e.g., a Treasury security yield) and the beta. For
16 example, Value Line publishes estimated betas for each of the companies that it
17 covers. The greatest area of controversy, however, is in the measurement of the
18 expected stock market return (and therefore the equity risk premium), since that
19 variable cannot be directly observed.

20 While the beta itself also is technically “observable,” different investor
21 service publications or sources provide differing estimates of betas depending on
22 the calculation methods that they use. These beta differences can have large
23 impacts on the CAPM cost of equity results. In this case, Dr. Avera employs
24 Value Line published betas, and I have used Value Line betas as well in past

1 cases. However, I note that other sources have very different utility betas, which
2 could yield lower (or higher) results. I show an alternate source of betas, which
3 I compare with the Value Line betas, in this subsection of my testimony.

4 Q. HOW HAS DR. AVERA APPLIED THIS MODEL?

5 A. Dr. Avera uses a long-term Treasury yield as the risk-free return (i.e.,
6 4.6 percent), and the average beta for his electric proxy group is 0.88 (0.79 for the
7 non-utility group). His “historic” and “prospective” risk premium values are
8 7.1 percent and 8.3 percent, respectively.

9 These parameters yield the following CAPM calculations for his two
10 proxy groups:

11 $K_e = 4.6\% + 0.88 (7.1) = 11.2\%$ (utility/historical)

12 $K_e = 4.6\% + 0.88 (8.3) = 11.9\%$ (utility/prospective)

13 $K_e = 4.6\% + 0.79 (7.1) = 10.2\%$ (non-utility/historical)

14 $K_e = 4.6\% + 0.79 (8.3) = 11.2\%$ (non-utility/prospective)

15 Q. WHY DO YOU QUESTION THE VALUE LINE BETA ESTIMATES?

16 A. Dr. Avera considered only one source for the beta statistics, a critical parameter
17 for an application of the CAPM. This differs from his DCF study where he used
18 three public sources for the published earnings growth rates.

19 I have assembled growth rates from another source (YahooFinance.com),
20 and I compare them to the Value Line figures for my proxy group, as shown
21 below. For the full 13-company group, the betas (on average) are similar –
22 0.85 for Value Line versus 0.88 for Yahoo Finance. For the restricted proxy
23 group, the Yahoo Finance figures are slightly lower, 0.78 versus the Value Line
24 0.83. Based on current evidence, the differences in the published beta sources for
25 the two proxy groups do not seem large.

1 Based on this information, a reasonable range would be 0.78 to 0.88 for
2 beta. This takes into account both sources of beta and both the full and restricted
3 proxy groups.

Alternative Beta Estimates for the West Region Electrics		
	<u>Value Line</u>	<u>Yahoo Finance</u>
Avista	0.90	0.70
Black Hills	0.90	1.20
Edison Int.	0.90	0.95
Hawaiian	0.75	0.41
IdaCorp	0.90	0.68
MDU Resources	1.00	0.86
Pinnacle West	0.80	0.75
PG&E	0.85	0.93
Portland General	0.80	0.85
Puget Energy	0.80	0.85
Sempra	0.95	0.90
UniSource	0.75	1.64
Xcel	<u>0.80</u>	<u>0.76</u>
Full Group Average	0.85	0.88
Restricted Group Average	0.83	0.78

Source: *Value Line Investment Survey*, August 8, 2008, YahooFinance.com, September 2008.

4 Q. DO YOU FIND THE 7.1 TO 8.3 PERCENT RISK PREMIUM TO BE
5 REASONABLE?

6 A. No, I believe these risk premium values are too high. The “historical” 7.1 percent
7 is a 1926-2007 stock market arithmetic average risk premium, based on after-the-
8 fact market returns, compiled by Ibbotson Associates. However, Dr. Avera

1 overlooks a key limitation in that estimate (as a measure of today's risk premium)
2 that Dr. Ibbotson himself has emphasized. His recent research has concluded that
3 the 7.1 percent average historic value is biased upward by a rising price/earnings
4 ratio over the historic period, and the continuation of that trend would be
5 inconsistent with standard financial theory. He has corrected the historic data
6 removing this upward bias, obtaining a corrected historic (arithmetic average) risk
7 premium of 5.9 percent. (Roger G. Ibbotson and Peng Chen, "Stock Market
8 Returns in the Long Run: Participating in the Real Economy", *Financial Analyst*
9 *Journal*, 2003.)

10 Dr. Avera's "prospective" 8.3 percent risk premium itself is based on his
11 very questionable assumption that earnings on unregulated companies (i.e., the
12 dividend paying stocks in the S&P 500) will increase by 10.4 percent per year for
13 the long run. I believe that this is excessively optimistic as an overall average
14 expectation for the long-term rate of growth in corporate earnings. For example,
15 the Value Line *Selection and Opinion*, page 3975 (August 22, 2008), projects the
16 year-to-year growth rate in After-Tax Profits for 2009 to 2012 to range from
17 4.2 to 8.0 percent per year. *Blue Chip Economic Indicators* (October 10, 2008),
18 a survey of major forecasting organizations, publishes a "consensus" forecast that
19 U. S. pre-tax corporate profits (current \$) will grow by 5.5 percent annually for
20 2010-2014 and 5.0 percent annually for 2015-2019. In light of these prominent
21 economic forecasts, Dr. Avera's corporate earnings forecast growth rate of
22 10.4 percent (and resulting 8.3 percent risk premium) is implausibly high, as a
23 measure of a long-run growth rate.

24 Q. ARE YOU AWARE OF ANY OTHER EVIDENCE THAT WOULD
25 CHALLENGE THE 7.1 TO 8.5 PERCENT RISK PREMIUM RANGE?

1 A. Yes. The prominent textbook by Brealy, Myers and Allen (*Principles of*
2 *Corporate Finance*, 8th Edition, page 152) cites to survey data estimates of the
3 equity risk premiums. A 2001 Yale University survey study of financial
4 economists finds a 5.5 percent risk premium, and a 2003 Duke University study
5 of corporate Chief Financial Officers (“CFOs”) obtains a 3.8 percent risk
6 premium. While survey estimates are not necessarily precise measures, this is
7 “real world” information that challenges the reasonableness of Dr. Avera’s clearly
8 overstated equity risk premium range of 7.1 to 8.3 percent.

9 Q. ARE YOU SPONSORING A CAPM STUDY?

10 A. No, I am not sponsoring such a study as a basis for establishing IPC’s cost of
11 equity in this case for the reasons discussed above. It is also apparent that the
12 Commission has concerns about this method’s usefulness and in particular “the
13 measurement and proper use of Beta”. (Order No. 29505, page 38, May 25,
14 2004) However, as a comparison and check on Dr. Avera’s CAPM, I present a
15 CAPM calculation using: a risk-free rate of 4.5 percent (slightly lower than the
16 figure used by Dr. Avera, based on the most recent six months of yields for
17 20–year Treasury bonds), a beta of 0.83 (the midpoint of the Value Line and the
18 Yahoo Finance range of betas) and a 6.0 percent risk premium.

19
20
21

$$K_e = 4.5\% + 0.83 (6.0) = 9.5 \text{ percent}$$

22 While I do not advocate the use in this case of the CAPM method,
23 I believe the 9.5 percent result shown above for IPC should be compared with
24 Dr. Avera’s range of 10.2 to 11.9 percent. The 10.2 percent is within the range of
25 reasonableness but the 11.9 percent clearly is excessive.

1 Q. WHAT CAPM ESTIMATE WOULD YOU OBTAIN USING DR.
2 AVERA'S HISTORICAL MARKET RISK PREMIUM OF
3 7.1 PERCENT?

4 A. That risk premium value produces the following cost of equity estimate using the
5 CAPM:

6
$$K_e = 4.5\% + 0.83 (7.1) = 10.4 \text{ percent}$$

7 Again, while I do not recommend this analysis, this estimate is consistent with the
8 range of my DCF studies.

9

10 C. Comparable Earnings

11 Q. WHAT RESULTS DID DR. AVERA OBTAIN FROM HIS
12 COMPARABLE EARNINGS STUDY?

13 A. Dr. Avera focused on the Value Line projections of the earned return on equity
14 for his electric utility proxy group (11.1 percent). He also cites to the Value Line
15 estimated return on equity of 11.5 percent for 2008 and 13.5 percent for the
16 electric industry as a whole for the three to five-year forecast horizon. Based on
17 this information, he finds a comparable earnings estimate of 11.1 percent. (Avera,
18 page 73 and his Exhibit 25)

19 Q. DOES HIS COMPARABLE EARNINGS ANALYSIS PROVIDE A
20 MARKET COST OF EQUITY ESTIMATE?

21 A. No, and he does not appear to claim that it does. Rather, these are one
22 publication's (i.e., Value Line's) estimates of the *accounting* returns on book
23 equity that electric companies *might* earn in the future. It does not measure either
24 the return requirements or expectations for financial markets. One key reason

1 why that is so is because the electric utility companies have stock prices that
2 typically are at a premium to book value, a fact that Dr. Avera does not mention.

3 Q. WHY DOES THE MARKET-TO-BOOK RATIO MATTER?

4 A. Consider an electric utility with earnings per share of \$2.20 and a book value of
5 \$20. This would equal Dr. Avera's 11.0 percent accounting return on equity.
6 However, if the stock price is \$30, then the investor is really earning $\$2.2 / \$30 =$
7 7.3 percent on the market value of his investment. Put another way, the investor
8 is willing to pay \$30 per share for the stock and receive \$2.20 in current earnings.
9 The fact that the market value of the stock significantly exceeds book value
10 renders the usefulness of Dr. Avera's comparable earnings study highly
11 questionable.

12 Q. DO YOU HAVE ANY ALTERNATIVE CALCULATIONS OF
13 COMPARABLE EARNINGS?

14 A. Yes. As a comparison, I have compiled the historical (i.e., 2006 - 2008) and
15 projected (2011 - 2013) earned returns on equity, as published by Value Line, on
16 Exhibit No. 606 for my West Region electric group and for Dr. Avera's electric
17 group, i.e., the vertically-integrated (non-West Region) subset of that group.
18 (Please note that 2008 results are partly actual and partly projected.)

19 As shown on page 1, the West Region 13-company proxy group earned
20 return on equity ranges from about 9.2 percent to 10.4 percent, on average, for
21 both the historic and projected period. The earned returns for the 8-company
22 restricted proxy group are even lower, averaging about 8.5 percent. For
23 Dr. Avera's vertically-integrated companies, the results are similar. (Page 2 of
24 Exhibit No. 606) During the historical period, the group average return on equity

1 is about 9.6 percent but increases to 10.6 percent for the projected 2011 – 2013
2 time period.

3 If the two proxy groups on pages 1 and 2 of Exhibit No. 606 are
4 combined, the average earned returns on equity would generally fall in the 9 to
5 10 percent range.

6 Q. WHAT DO YOU CONCLUDE?

7 A. While not a market cost of equity method, the comparable earnings analysis
8 results are roughly consistent with or below my DCF evidence and help to support
9 a return on equity award in this case not to exceed 10.5 percent.

1 **V. CONCLUSIONS ON FAIR RATE OF RETURN**

2 Q. PLEASE SUMMARIZE THE CONCLUSIONS THAT YOU HAVE
3 REACHED CONCERNING THE COMPANY'S RATE OF RETURN
4 REQUEST.

5 A. IPC in this case is seeking an overall rate of return of 8.55 percent, based on a
6 projected year-end 2008 capital structure and embedded cost of debt and inclusive
7 of a return on common equity of 11.25 percent. The requested return on equity is
8 the approximate midpoint of Dr. Avera's study range of 10.8 to 11.8 percent.
9 IPC's 11.25 percent return on equity request is a reduction from last year's
10 request but is a very large increase over the 10.25 percent return on equity
11 awarded by the Commission in the 2004 rate case, an award accompanied by a
12 46 percent common equity ratio.

13 I find acceptable the Company's proposed capital structure and embedded
14 cost of debt. However, I do not agree with IPC's request and supporting evidence
15 to increase the return on common equity from 10.25 percent awarded in 2004 to
16 11.25 percent. IPC remains a financially sound, credit worthy utility with
17 recognized favorable business risk attributes. Most of the evidence presented by
18 Dr. Avera significantly overstates the IPC cost of equity and fair return.

19 Q. PLEASE SUMMARIZE YOUR SPECIFIC DISAGREEMENTS WITH
20 DR. AVERA.

21 A. Dr. Avera presents three types of studies: DCF, CAPM and comparable earnings.
22 My only significant disagreement with his DCF evidence is with his proxy
23 company selection. His non-utility DCF study obtained 12.6 percent, but
24 unregulated companies from other industries are not proper risk or business
25 proxies for IPC's Idaho monopoly utility operations. These unregulated

1 companies from other industries are fundamentally different from IPC. His
2 electric company DCF study is an improvement, but even that study is impaired
3 by its inclusion of several "restructured" companies. Some of those companies
4 have risk profiles and operating environments much different than IPC. His
5 subset of vertically-integrated (non-West Region) companies yields DCF results
6 averaging about 10.5 percent.

7 The CAPM significantly overstates the cost of equity by assuming a stock
8 market risk premium in approximately the 7 to 8 percent range, when a more
9 realistic estimate is 6 percent or less, and he selects a utility "beta" value of 0.88
10 based on a single source. In addition to these shortcomings, the Commission has
11 expressed concerns over the reliability and applicability to IPC of the CAPM as a
12 basis for determining the cost of capital.

13 Finally, Dr. Avera obtains an 11.0 percent result based on Value Line
14 projections of accounting returns on common equity for his utility proxy group
15 (and the industry as a whole). This evidence is problematic and overstated for the
16 reason stated previously -- the utility group includes many companies that operate
17 in an unregulated environment in restructured states. Moreover, his calculations
18 ignore the fact that these companies sell at a large premium to book value.

19 Q. PLEASE SUMMARIZE YOUR OWN EVIDENCE ON COST OF
20 CAPITAL FOR IPC.

21 A. I recommend an overall return of 8.18 percent, which includes a 10.5 percent cost
22 of capital. I rely primarily on a DCF study of two groups of West Region electric
23 utilities, obtaining a range of 9.4 to 10.4 percent (9.9 to 10.4 percent and 9.6 to
24 10.6 percent for the two groups). Consistent with Dr. Avera, I have used the
25 standard, constant growth DCF model, recent stock market data and securities

1 analyst projections of earnings growth. My two West Region proxy groups are
2 reasonably comparable to IPC since all of these companies are vertically-
3 integrated electrics primarily operating under standard regulation. This is similar
4 to the proxy group previously used by Dr. Avera in the 2004 IPC rate case as well
5 as in a recent FERC IPC rate proceeding.

6 As a check and to respond to Dr. Avera, I have employed the comparable
7 earnings method, using my proxy group and the vertically-integrated portion of
8 Dr. Avera's proxy group. For these companies, the historical and projected
9 earned returns on equity display averages in the range of about 9.0 to
10 10.0 percent, or at most about 10.6 percent. The comparable earnings evidence
11 helps to support the reasonableness of my 10.5 percent recommendation in this
12 case.

13 Q. DOES YOUR RECOMMENDATION REFLECT THE EFFECTS ON THE
14 COST OF CAPITAL OF THE CURRENT FINANCIAL CRISIS?

15 A. No, it does not. As of this writing, the dimensions of this crisis are not fully
16 understood and cannot be captured by standard, equilibrium models such as the
17 DCF or CAPM. These conditions cannot form the basis for setting IPC's fair rate
18 of return and permanent retail rates. My analysis employs market data from the
19 most recent six months ending September 2008, a period of stress and enhanced
20 volatility but not severe financial disruption and crisis. Nonetheless, I believe it
21 appropriate to award IPC an equity return no higher than 10.5 percent, a figure
22 toward the upper end of my DCF range.

23 While my recommendation at this time is 10.5 percent, this is before
24 consideration of potential regulatory changes (discussed at length by Company
25 witnesses) that may have the effect of mitigating IPC's investment risk. Credit

1 rating agency reports also have discussed these regulatory issues. Such changes
2 could include allowing the use of a forecasted test year; changing (i.e., increasing)
3 the cost reconciliation percent (currently 90 percent) under the Power Cost
4 Adjustment (PCA) clause; and potential modifications to the Load Growth
5 Adjustment Rate (LGAR). It is my understanding that the Company, Staff and
6 certain parties are in the process of addressing the PCA and LGAR issues.
7 Depending on how these regulatory policy issues ultimately are resolved, the
8 Commission should consider a return on equity award in this case of 10.25 to 10.5
9 percent, with the 10.5 percent being an upper bound figure in this case.

10 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY

11 A. Yes, it does.

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IDAHO PUBLIC
UTILITIES COMMISSION

STATE OF IDAHO
BEFORE THE
PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION)
OF IDAHO POWER COMPANY FOR)
AUTHORITY TO INCREASE ITS RATES)
AND CHARGES FOR ELECTRIC)
SERVICE)

CASE NO. IPC-E-08-10

EXHIBITS ACCOMPANYING THE
DIRECT TESTIMONY OF
MATTHEW I. KAHAL

ON BEHALF OF THE
U.S. DEPARTMENT OF ENERGY

OCTOBER 24, 2008

EXETER

ASSOCIATES, INC.
5565 Sterrett Place
Suite 310
Columbia, Maryland 20904

IDAHO POWER COMPANY

Rate of Return Summary

(Forecasted Estimate for the Period Ending December 31, 2008)

<u>Capital Type</u>	<u>Percent of Total¹</u>	<u>Cost Rate¹</u>	<u>Weighted Cost</u>
Long-Term Debt	50.73%	5.92%	3.01%
Preferred Stock	0.00	0.00	0.00
Common Equity	<u>49.27</u>	<u>10.50²</u>	<u>5.17</u>
Total	100.00%	--	8.18%

¹ IPC Exhibit 27 of witness S. Keen.

² Schedule MIK-4, page 1 of 4.

IDAHO POWER COMPANY

Trends in Capital Costs

	<u>Annualized</u> <u>Inflation (CPI)</u>	<u>10-Year</u> <u>Treasury Yield</u>	<u>3-Month</u> <u>Treasury Yield</u>	<u>Single A</u> <u>Utility Yield</u>
1992	3.0%	7.0%	3.5%	8.7%
1993	3.0	5.9	3.0	7.6
1994	2.6	7.1	4.3	8.3
1995	2.8	6.6	5.5	7.9
1996	3.0	6.4	5.0	7.8
1997	2.3	6.4	5.1	7.6
1998	1.6	5.3	4.8	7.0
1999	2.2	5.7	4.7	7.6
2000	3.4	6.0	5.9	8.2
2001	2.9	5.0	3.5	7.8
2002	1.6	4.6	1.6	7.4
2003	1.9	4.1	1.0	6.6
2004	2.7	4.3	1.4	6.2
2005	3.4	4.3	3.0	5.6
2006	2.5	4.8	4.8	6.1
2007	2.8	4.6	4.5	6.3

IDAHO POWER COMPANY

Trends in Capital Costs (Continued)

	<u>Annualized Inflation</u> <u>(CPI)</u>	<u>10-Year</u> <u>Treasury Yield</u>	<u>3-Month</u> <u>Treasury Yield</u>	<u>Single A</u> <u>Utility Yield</u>
<u>2002</u>				
January	1.1%	5.0%	1.7%	7.7%
February	1.1	4.9	1.7	7.5
March	1.5	5.3	1.8	7.8
April	1.6	5.2	1.7	7.6
May	1.2	5.2	1.7	7.5
June	1.1	4.9	1.7	7.4
July	1.5	4.7	1.7	7.3
August	1.8	4.3	1.6	7.2
September	1.5	3.9	1.6	7.1
October	2.0	3.9	1.6	7.2
November	2.2	4.1	1.3	7.1
December	2.4	4.0	1.2	7.1
<u>2003</u>				
January	2.6%	4.1%	1.2%	7.1%
February	3.0	3.9	1.2	6.9
March	3.0	3.8	1.1	6.8
April	2.1	4.0	1.1	6.6
May	2.1	3.6	1.1	6.4
June	2.1	3.7	0.9	6.2
July	2.1	4.0	0.9	6.6
August	2.2	4.5	1.0	6.8
September	2.3	4.3	1.0	6.6
October	2.0	4.3	0.9	6.4
November	1.8	4.3	1.0	6.4
December	1.8	4.3	0.9	6.3
<u>2004</u>				
January	1.9%	4.2%	0.9%	6.2%
February	1.7	4.1	0.9	6.2
March	1.7	3.8	0.9	6.0
April	2.3	4.4	0.9	6.4
May	3.1	4.7	1.0	6.6
June	3.3	4.7	1.3	6.5
July	3.0	4.5	1.4	6.3
August	2.7	4.3	1.5	6.1
September	2.5	4.1	1.6	6.0
October	3.2	4.1	1.8	5.9
November	3.5	4.2	2.1	6.0
December	3.3	4.2	2.2	5.9

IDAHO POWER COMPANY

Trends in Capital Costs (Continued)

	<u>Annualized Inflation (CPI)</u>	<u>10-Year Treasury Yield</u>	<u>3-Month Treasury Yield</u>	<u>Single A Utility Yield</u>
<u>2005</u>				
January	3.0%	4.2%	2.4%	5.8%
February	3.0	4.2	2.6	5.6
March	3.1	4.5	2.8	5.8
April	3.5	4.3	2.8	5.6
May	2.8	4.1	2.9	5.5
June	2.5	4.0	3.0	5.4
July	3.2	4.2	3.3	5.5
August	3.6	4.3	3.5	5.5
September	4.7	4.2	3.5	5.5
October	4.3	4.5	3.8	5.8
November	3.5	4.5	4.0	5.9
December	3.4	4.5	4.0	5.8
<u>2006</u>				
January	4.0%	4.4%	4.3%	5.8%
February	3.6	4.6	4.5	5.8
March	3.4	4.7	4.6	6.0
April	3.5	5.0	4.7	6.3
May	4.2	5.1	4.8	6.4
June	4.3	5.1	4.9	6.4
July	4.1	5.1	5.1	6.4
August	3.8	4.9	5.1	6.2
September	2.1	4.7	4.9	6.0
October	3.5	4.7	5.1	6.0
November	2.5	4.6	5.1	5.8
December	2.5	4.6	5.0	5.8

IDAHO POWER COMPANY

Trends in Capital Costs (Continued)

	<u>Annualized Inflation (CPI)</u>	<u>10-Year Treasury</u>	<u>3-Month Treasury</u>	<u>Single A Utility Yield</u>
<u>2007</u>				
January	2.1%	4.8%	5.1%	6.0%
February	2.4	4.7	5.2	5.9
March	2.8	4.6	5.1	5.9
April	2.6	4.7	5.0	6.0
May	2.7	4.8	5.0	6.0
June	2.7	5.1	5.0	6.3
July	2.4	5.0	5.0	6.3
August	2.0	4.7	4.3	6.2
September	2.8	4.5	4.0	6.1
October	3.5	4.5	4.0	6.0
November	4.3	4.2	-3.4	6.0
<u>2008</u>				
January	4.3%	3.7%	2.8%	6.0%
February	4.0	3.7	2.2	6.2
March	4.0	3.5	1.3	6.2
April	3.9	3.7	1.3	6.3
May	4.2	3.9	1.8	6.3
June	5.0	4.1	1.9	6.4
July	5.6	4.0	1.7	6.4
August	5.4	3.9	1.8	6.4
September	4.9	3.7	1.2	--

Source: *Economic Report of the President, Mergent's Bond Record,
Federal Reserve Statistical Release, Consumer Price Index Summary.*

IDAHO POWER COMPANY

Value Line Risk Indicators for the Western Proxy Companies

	<u>Company</u>	<u>Safety Rating</u>	<u>Beta</u>	<u>2007 Common Equity Ratio*</u>	<u>Financial Strength</u>
(1)	Avista Corp.	3	0.90	59.0%	B+
(2)	Black Hills Corp	3	0.90	63.2	B+
(3)	Edison International	3	0.90	46.0	B++
(4)	Hawaii Electric Ind.	2	0.75	51.0	B++
(5)	IDACORP	3	0.90	51.1	B+
(6)	MDU Resources Group	1	1.00	68.4	A+
(7)	PG&E Corp.	2	0.85	50.4	B++
(8)	Pinnacle West	2	0.80	53.0	A
(9)	Portland General	2	0.80	50.1	B++
(10)	Puget Energy	3	0.80	48.5	B+
(11)	Sempra	2	0.95	63.7	A
(12)	UniSource	3	0.75	31.2	C++
(13)	Xcel Energy	<u>2</u>	<u>0.80</u>	<u>49.4</u>	<u>B++</u>
	Average	2.4	0.85	52.7%	--
	Average	2.5	0.83	53.2%	--
	(w/o MDU, Unisource, and the three California utilities.)				

Source: *Value Line Investment Survey*, August 8, 2008.

* Please note that the common equity ratios published by Value Line exclude short-term debt and the current portion of long-term debt.

IDAHO POWER COMPANY

DCF Summary for Full 13- Company West Region Proxy Group

(1) Dividend Yield (April-September 2008)	3.73%
(2) Adjusted Yield (3.73 x 1.03)	3.9
(3) DCF Growth Rate	6.0 - 6.5
(4) Flotation Adjustment	0.00
(5) Total Return	9.9 - 10.4
(6) Midpoint	10.15
Recommendation	10.50%

-
- (1) DCF Model: $K_e = (D_0/P_0) (1 + 0.5g) + g$, where
K_e = cost of equity
D₀ = current annualized dividend
P₀ = current share price
g = long-term dividend growth rate

IDAHO POWER COMPANY

DCF Summary for the Restricted West Region Proxy Group⁽¹⁾⁽²⁾

(1) Dividend Yield (April-September 2008)	4.33%
(2) Adjusted Yield (4.33 x 1.03)	4.6
(3) DCF Growth Rate	5.0 - 6.0
(4) Flotation Adjustment	0.00
(5) Total Return	9.6 - 10.6
(6) Midpoint	10.1
Recommendation	10.5%

-
- (1) DCF Model: $Ke = (Do/Po) (1 + 0.5g) + g$, where
Ke = cost of equity
Do = current annualized dividend
Po = current share price
g = long-term dividend growth rate
- (2) Excludes MDU, Unisource and the three California utilities
(Edison International, PG&E and Sempra)

IDAHO POWER COMPANY

**Proxy Group Dividend Yields
April - September 2008**

	<u>Company</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>Average</u>
(1)	Avista	3.2%	3.1%	3.1%	2.9%	3.2%	3.3%	3.13%
(2)	Black Hills	3.6	4.0	4.4	4.3	4.1	4.3	4.12
(3)	Edison Int.	2.3	2.3	2.4	2.5	2.7	3.0	2.53
(4)	Hawaiian	5.0	4.7	5.0	5.0	4.7	4.3	4.78
(5)	IdaCorp	3.7	3.9	4.2	4.0	4.0	3.9	3.95
(6)	MDU	2.0	1.8	1.7	1.8	1.9	2.2	1.90
(7)	PG&E Corp.	3.9	3.9	3.9	4.0	3.8	4.1	3.93
(8)	Pinnacle West	6.2	6.2	6.8	6.3	6.0	5.9	6.23
(9)	Portland Gen.	3.9	4.2	4.4	4.2	3.8	4.0	4.08
(10)	Puget Energy	3.7	3.6	4.2	3.6	3.6	3.8	3.75
(11)	Sempra	2.3	2.4	2.5	2.5	2.4	2.6	2.45
(12)	UniSource	3.1	2.8	3.1	3.1	3.0	3.1	3.03
(13)	Xcel	<u>4.4</u>	<u>4.5</u>	<u>4.7</u>	<u>4.7</u>	<u>4.6</u>	<u>4.6</u>	<u>4.58</u>
	Average	3.62%	3.65%	3.88%	3.76%	3.67%	3.77%	3.73%
	Average (w/o MDU, Unisource and the three California utilities)	4.20%	4.28%	4.60%	4.38%	4.25%	4.27%	4.33%

Source: Standard & Poors, *Stock Guide* (May-September 2008). September figures are from Yahoo Finance, September 30, 2007 (month-ending closing prices).

IDAHO POWER COMPANY

Analyst Projected Growth Rates Five-Year Earnings Per Share

	<u>Company</u>	<u>CNN</u>	<u>Zacks</u>	<u>First Call</u>	<u>Value Line</u>	<u>Average</u>
(1)	Avista	5%	5.0%	4.5%	9.0%	5.88%
(2)	Black Hills	7	6.5	7.0	1.0	5.38
(3)	Edison Int.	8	8.8	7.6	5.0	7.35
(4)	Hawaiian	3	4.2	14.8	7.5	7.38
(5)	IdaCorp	6	6.0	6.0	2.0	5.00
(6)	MDU	10	12.7	13.67	7.0	10.84
(7)	PG&E Corp.	8	7.7	7.4	5.0	7.03
(8)	Pinnacle West	4	6.7	4.5	(1)	3.55
(9)	Portland	7	6.5	8.0	7.0	7.13
(10)	Puget Energy	4	6.0	6.0	5.0	5.25
(11)	Sempra	7	7.0	7.8	6.0	6.95
(12)	UniSource	NA	NA	NA	2.0	2.00
(13)	Xcel	<u>7</u>	<u>5.6</u>	<u>6.7</u>	<u>7.5</u>	<u>6.70</u>
	Average	6.33%	6.89%	7.83%	4.85%	6.19%
	Average	5.38%	5.81%	7.19%	4.75%	5.78%
	(w/o MDU, Unisource and the California utilities)					

Sources: CNN Money.com, MSN Money.com (Zacks), Yahoo Finance.com
(First Call), *Value Line Investment Survey*, September 2008.

IDAHO POWER COMPANY

Value Line Growth Rate Indicators Five-Year Projections

<u>Company</u>	<u>Dividends Per Share</u>	<u>Book Value Per Share</u>	<u>20110-2013 Retained to Common Equity</u>
(1) Avista	12.5%	3.5%	3.0%
(2) Black Hills	3.0	7.0	2.5
(3) Edison Int.	7.0	9.0	7.0
(4) Hawaiian	1.0	2.5	4.0
(5) Idaho	0.0	2.0	3.5
(6) PG&E Corp.	9.0	5.5	5.0
(7) MDU	6.5	9.5	8.5
(8) Pinnacle West	2.0	2.0	2.0
(9) Portland	--	4.5	4.0
(10) Puget Energy	4.5	3.5	3.0
(11) Sempra	9.0	8.0	9.0
(12) UniSource	6.5	3.5	2.5
(13) Xcel	<u>3.0</u>	<u>4.5</u>	<u>5.0</u>
Average	5.33%	5.00%	4.54%
Average	3.71%	3.69%	3.38%
(w/o MDU, Unisource and the California utilities)			

Sources: *Value Line Investment Survey*, August 18, 2008.

IDAHO POWER COMPANY

Dr. Avera's DCF Estimates Based on Alternative Growth Rate Sources
(Integrated Utility Subsample)

<u>Company</u>	<u>IBES</u>	<u>V.L.</u>	<u>Zacks</u>	<u>br x sv</u>	<u>Average</u>
(1) American Elec. Power	10.6%	9.9%	9.3%	9.3%	9.8%
(2) Cleco Corp.	NA	11.1	13.1	8.0	10.7
(3) Empire District	12.1	16.1	NA	10.0	12.7
(4) NiSource	NA	10.1	8.1	NA	9.1
(5) Progress Energy	12.2	10.8	10.5	8.5	10.5
(6) TECO Energy	9.7	8.6	13.1	9.4	10.2
(7) Westar	10.4	NA	9.9	8.1	9.5
(8) Wisconsin Energy	<u>12.0</u>	<u>11.3</u>	<u>11.9</u>	<u>9.9</u>	<u>11.3</u>
Average	11.2%	11.1%	10.8%	9.0%	10.48%

Source: Dr. Avera Exhibit No. 17. Excludes utilities from restructured states and Western utilities.

IDAHO POWER COMPANY

Historical/Projected Earned Return on Equity West Region Electric Utility Companies

	<u>Company</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2011-2013</u>
(1)	Avista	8.0%	4.2%	8.0%	8.5%
(2)	Black Hills	9.4	10.3	5.5	7.0
(3)	Edison Int.	14.0	13.0	13.5	11.5
(4)	Hawaiian	9.9	7.2	7.0	11.5
(5)	IdahoCorp	8.9	6.8	7.5	7.5
(6)	MDU	14.8	12.8	13.5	12.0
(7)	PG&E	12.5	11.7	12.0	11.5
(8)	Pinnacle West	9.2	8.5	8.0	8.0
(9)	Portland	5.8	11.0	8.5	8.5
(10)	Puget Energy	7.9	7.3	7.5	8.5
(11)	Sempra	14.8	13.5	12.0	13.5
(12)	UniSource	10.6	8.5	7.5	7.5
(13)	Xcel	<u>9.7</u>	<u>9.1</u>	<u>10.0</u>	<u>11.0</u>
	Average	10.4%	9.5%	9.3%	9.7%
	Average (w/o MDU, UniSource and the California utilities)	8.6%	8.1%	7.8%	8.8%

Source: *Value Line Investment Survey*, August 8, 2008.

IDAHO POWER COMPANY

Historical/Projected Earned Return on Equity Eastern and Central Integrated Utility Companies

	<u>Company</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2011-2013</u>
(1)	American Electric	12.0%	11.4%	12.0%	12.0%
(2)	Cleco Corp.	8.3	7.8	9.5	11.0
(3)	Empire District	8.5	6.2	8.0	10.5
(4)	NiSource	6.3	6.1	7.0	8.0
(5)	Progress Energy	6.1	8.2	9.0	9.5
(6)	TECO Energy	14.1	13.2	8.5	13.0
(7)	Westar	10.7	9.2	9.0	8.5
(8)	Wisconsin	<u>10.8</u>	<u>10.9</u>	<u>10.5</u>	<u>12.0</u>
	Average	9.6%	9.1%	9.2%	10.6%

Sources: *Value Line Investment Survey*, August 29 and September 26, 2008.