

1 Q. Please state your name and address for the
2 record.

3 A. My name is Terri Carlock. My business address
4 is 472 West Washington Street, Boise, Idaho.

5 Q. By whom are you employed and in what capacity?

6 A. I am the Deputy Administrator of the Utilities
7 Division at the Idaho Public Utilities Commission. I am
8 responsible for the Accounting/Audit Section and
9 coordinating Staff's policy positions with Randy Lobb.

10 Q. Please outline your educational background and
11 experience.

12 A. I graduated from Boise State University in
13 1980, with B.B.A. Degrees in Accounting and Finance. I
14 have attended various regulatory, accounting, rate of
15 return, economics, finance, and ratings programs. I
16 chaired the National Association of Regulatory Utilities
17 Commissioners (NARUC) Staff Subcommittee on Economics and
18 Finance for more than 3 years. Under this subcommittee,
19 I also chaired the Ad Hoc Committee on Diversification.
20 I am currently the Vice-Chair of the NARUC Staff
21 Subcommittee on Accounting and Finance. I have been a
22 presenter for the Institute of Public Utilities at
23 Michigan State University and for many other conferences.
24 Since joining the Commission Staff in May 1980, I have
25 participated in audits, performed financial analysis on

1 various companies, and have presented testimony before
2 this Commission on numerous occasions.

3 Q. What is the purpose of your testimony in this
4 proceeding?

5 A. The purpose of my testimony is to discuss
6 policy positions including the review of Staff positions
7 in this case. I present the Staff's recommendation
8 related to the return on equity for Idaho Power Company
9 to be used in the revenue requirement.

10 Q. Please summarize your testimony.

11 A. Portions of my testimony are policy related
12 and do not have specific recommendations directly
13 impacting the revenue requirement. In my testimony, I
14 recommend a return on common equity for Idaho Power in
15 the range of 9.5% - 10.5% with a point estimate of
16 10.25%. The recommended overall weighted cost of capital
17 is in the range of 7.499% - 7.985% with a point estimate
18 of 7.864% to be applied to the rate base for the test
19 year.

20 Q. Have you reviewed the testimony and exhibits of
21 Idaho Power witnesses Avera and Steven Keen associated
22 with the return components?

23 A. Yes. Much of the theoretical approach used by
24 witnesses Avera and Steven Keen in their testimonies and
25 exhibits is generally the same as I have used. My

1 judgment in some areas of application results in
2 different outcomes.

3 Q. What legal standards have been established for
4 determining a fair and reasonable rate of return?

5 A. The legal test of a fair rate of return for a
6 utility company was established in the *Bluefield Water*
7 *Works* decision of the United States Supreme Court and is
8 repeated specifically in *Hope Natural Gas*.

9 In *Bluefield Water Works and Improvement Co. v.*
10 *West Virginia Public Service Commission*, 262 U.S. 679,
11 692, 43 S.Ct. 675, 67 L.Ed. 1176 (1923), the Supreme
12 Court stated:

13 A public utility is entitled to such rates as
14 will permit it to earn a return on the value
15 of the property which it employs for the
16 convenience of the public equal to that
17 generally being made at the same time and in
18 the same general part of the country on
19 investments in other business undertakings
20 which are attended by corresponding risks and
21 uncertainties; but it has no constitutional
22 right to profits such as are realized or
23 anticipated in highly profitable enterprises
24 or speculative ventures. The return should
25 be reasonably sufficient to assure confidence
in the financial soundness of the utility and
should be adequate, under efficient and
economical management, to maintain and
support its credit and enable it to raise the
money necessary for the proper discharge of
its public duties. A rate of return may be
reasonable at one time and become too high or
too low by changes affecting opportunities
for investment, the money market and business
conditions generally.

1 The Court stated in *FPC v. Hope Natural Gas Company*, 320
2 U.S. 591, 603, 64 S.Ct. 281, 88 L.Ed. 333 (1944):

3 From the investor or company point of view it
4 is important that there be enough revenue not
5 only for operating expenses but also for the
6 capital costs of the business. These include
7 service on the debt and dividends on the
8 stock.

9 ... By that standard the return to the equity
10 owner should be commensurate with returns on
11 investments in other enterprises having
12 corresponding risks. That return, moreover,
13 should be sufficient to assure confidence in
14 the financial integrity of the enterprise, so
15 as to maintain its credit and to attract
16 capital. (Citations omitted.)

17 The Supreme Court decisions in *Bluefield Water*
18 *Works* and *Hope Natural Gas* have been affirmed in *In re*
19 *Permian Basin Area Rate Case*, 390 U.S. 747, 88 S.Ct 1344,
20 20 L.Ed 2d 312 (1968), and *Duquesne Light Co. v. Barasch*,
21 488 U. S. 299, 109 S.Ct. 609, 102 L.Ed.2d. 646 (1989).

22 The Idaho Supreme Court has also adopted the principles
23 established in *Bluefield Water Works* and *Hope Natural*
24 *Gas*. See *In re Mountain States Tel. & Tel. Co.* 76 Idaho
25 474, 284 P.2d 681 (1955); *General Telephone Co. v. IPUC*,
109 Idaho 942, 712 P.2d 643 1986); *Hayden Pines Water*
Company v. IPUC, 122 ID 356, 834 P.2d 873 (1992).

As a result of these United States and Idaho
Supreme Court decisions, three standards have evolved for
determining a fair and reasonable rate of return:

(1) The Financial Integrity or Credit Maintenance

1 Standard; (2) the Capital Attraction Standard; and,
2 (3) The Comparable Earnings Standard. If the Comparable
3 Earnings Standard is met, the Financial Integrity or
4 Credit Maintenance Standard and the Capital Attraction
5 Standard will also be met, as they are an integral part
6 of the Comparable Earnings Standard.

7 Q. Have you considered these standards in your
8 recommendation?

9 A. Yes. These criteria have been seriously
10 considered in the analysis upon which my recommendations
11 are based. It is also important to recognize that the
12 fair rate of return that allows the utility company to
13 maintain its financial integrity and to attract capital
14 is established assuming efficient and economic
15 management, as specified by the Supreme Court in
16 *Bluefield Water Works*.

17 Q. Please summarize the parent/subsidiary
18 relationships for Idaho Power Company.

19 A. Idaho Power's common stock is not traded.
20 Idaho Power Company is a wholly owned subsidiary of
21 IDACORP. Due to this parent/subsidiary relationship
22 there is no direct equity market data available for
23 utility operations at Idaho Power. However, the utility
24 operations now represent the major operations within
25 IDACORP, making the market information representative of

1 Idaho Power's operations.

2 Q. What approach have you used to determine the
3 cost of equity for Idaho Power?

4 A. I have primarily evaluated two methods: the
5 Discounted Cash Flow (DCF) method and the Comparable
6 Earnings method.

7 Q. Please explain the Comparable Earnings method
8 and how the cost of equity is determined using this
9 approach.

10 A. The Comparable Earnings method for determining
11 the cost of equity is based upon the premise that a given
12 investment should earn its opportunity costs. In
13 competitive markets, if the return earned by a firm is
14 not equal to the return being earned on other investments
15 of similar risk, the flow of funds will be toward those
16 investments earning the higher returns. Therefore, for a
17 utility to be competitive in the financial markets, it
18 should be allowed to earn a return on equity equal to the
19 average return earned by other firms of similar risk.
20 The Comparable Earnings approach is supported by the
21 *Bluefield Water Works* and *Hope Natural Gas* decisions as a
22 basis for determining those average returns.

23 Industrial returns tend to fluctuate with
24 business cycles, increasing as the economy improves and
25 decreasing as the economy declines. Utility returns are

1 not as sensitive to fluctuations in the business cycle
2 because the demand for utility services generally tends
3 to be more stable and predictable. However, returns have
4 fluctuated since 2000 when prices in the electricity
5 markets dramatically increased. Electricity prices have
6 not seen the dramatic spikes lately so earnings are more
7 stable.

8 Q. Please evaluate interest rate trends.

9 A. The prime interest rate has decreased from
10 8.25% to the current rate of 7.5%. The federal funds
11 rate and other rates have also decreased this year.

12 Q. Please provide the current index levels for the
13 Dow Jones Industrial Average and the Dow Jones Utility
14 Average.

15 A. The Dow Jones Industrial Average (DJIA) closed
16 at 13,444.96 on December 5, 2007. The DJIA all-time high
17 of 14,164.53 was reached on October 9, 2007. The Dow
18 Jones Utility Average on December 5, 2007 closed at
19 550.13, a 52-week high.

20 Q. Please explain the risk differentials between
21 industrials and utilities.

22 A. Risk is a degree of uncertainty relative to a
23 company. The lower risk level associated with utilities
24 is attributable to many factors even though the
25 difference is not as great as it used to be. Utilities

1 continue to have limited competition for distribution of
2 utility services within the certificated area. With
3 limited competition for regulated services, there is less
4 chance of losses related to pricing practices, marketing
5 strategy and advertising policies. The competitive risks
6 for some electric utilities and the industry as a whole
7 have changed with increasing non-utility generation,
8 deregulation in some states, open transmission access,
9 and changes in electricity markets. However, competitive
10 risks are limited for Idaho Power utility operations.
11 The demand for utility services is relatively stable and
12 certain or increasing compared to that of unregulated
13 firms and even other utility industries.

14 Competitive risks continue to be lower for
15 Idaho Power than for many other electric companies
16 primarily because of the low-cost source of power, the
17 low retail rates compared to national averages, the Power
18 Cost Adjustment (PCA), and the Fixed Cost Adjustment
19 (FCA). The risk differential between Idaho Power and
20 other electric utilities is based on the resource mix and
21 the cost of those resources. All resource mixes have
22 risks specific to resources chosen. The demand for
23 electric utility services of Idaho Power is increasing at
24 predictable rates. This low demand risk is partially due
25 to the low-cost power and the customer mix of the power

1 users.

2 Under regulation, utilities are generally
3 allowed to recover through rates, reasonable, prudent and
4 justifiable cost expenditures related to regulated
5 services. Unregulated firms have no such assurance.
6 Utilities in general are sheltered by regulation for
7 reasonable cost recovery risks, making the average
8 utility less risky than the average unregulated
9 industrial firm.

10 Considering all of these comparisons, I believe
11 a reasonable return on equity attributed to Idaho Power
12 is 10.0% - 11.0% under the Comparable Earnings method.

13 Q. You indicated that the Discounted Cash Flow
14 method is utilized in your analysis. Please explain this
15 method.

16 A. The Discounted Cash Flow (DCF) method is based
17 upon the theory that (1) stocks are bought for the income
18 they provide (i.e., both dividends and/or gains from the
19 sale of the stock), and (2) the market price of stocks
20 equals the discounted value of all future incomes. The
21 discount rate, or cost of equity, equates the present
22 value of the stream of income to the current market price
23 of the stock. The formula to accomplish this goal is:

24
$$P_0 = PV = \frac{D_1}{(1+k_s)^1} + \frac{D_2}{(1+k_s)^2} + \dots + \frac{D_N}{(1+k_s)^N} + \frac{P_N}{(1+k_s)^N}$$

25

- 1 P_o = Current Price
2 D = Dividend
3 k_s = Capitalization Rate, Discount Rate, or Required
4 Rate of Return
5 N = Latest Year Considered

6 The pattern of the future income stream is the
7 key factor that must be estimated in this approach. Some
8 simplifying assumptions for ratemaking purposes can be
9 made without sacrificing the validity of the results.
10 Two such assumptions are: (1) dividends per share grow
11 at a constant rate in perpetuity and (2) prices track
12 earnings. These assumptions lead to the simplified DCF
13 formula, where the required return is the dividend yield
14 plus the growth rate (g):

$$15 \quad k_s = \frac{D}{P_o} + g$$

16
17 Q. Have you factored flotation costs in with your
18 cost of capital analysis?

19 A. Yes, I have considered direct flotation costs
20 in my analysis by increasing the dividend yield component
21 of the DCF analysis. Because only direct costs should be
22 considered, I have used a 2% flotation factor. I have
23 therefore adjusted the DCF formula to include the direct
24 flotation costs as "df".
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$$k_s = \left[\frac{D}{P_0} (1 + df) \right] + g$$

Q. What is your estimate of the current cost of capital for Idaho Power using the Discounted Cash Flow method?

A. The current cost of equity capital for Idaho Power, using the Discounted Cash Flow method with comparable companies is between 7.7% - 11.7%. Due to ongoing capital requirements, I believe a dividend yield of 4.2% with an average growth rate of 5.2% is reasonable and representative resulting in a DCF return on equity of 9.4% for utility comparable companies. The Discounted Cash Flow for Idaho Power using Value Line information for IDACORP is 7.1% with a dividend yield of 3.77% with an average growth rate of 3.3%

Q. How is the growth rate (g) determined?

A. The growth rate is the factor that requires the most extensive analysis in the DCF method. It is important that the growth rate used in the model be consistent with the dividend yield so that investor expectations are accurately reflected and the growth rate is not too large or too small.

I have used an expected growth rate of 3% - 4%. This expected growth rate was derived from an analysis of various historical and projected growth indicators,

1 including growth in earnings per share, growth in cash
2 dividends per share, growth in book value per share,
3 growth in cash flow and the sustainable growth.

4 Q. What capital structure has Staff used for Idaho
5 Power to determine the overall cost of capital?

6 A. Staff witness Donn English has prepared the
7 exhibits for the capital structure, debt cost utilized
8 and the overall rate of return. Staff utilized the
9 embedded capital structure at June 30, 2007 consisting of
10 51.437% debt and 48.563% common equity as shown on Staff
11 Exhibit No. 115, page 1. I agree with Mr. English's
12 recommendations in these areas.

13 Q. What are the costs related to the capital
14 structure for debt?

15 A. The cost of debt is discussed in detail by
16 Staff witness English and is shown as 5.612% on Staff
17 Exhibit No. 115, page 2.

18 Q. You indicated the cost of common equity range
19 for Idaho Power is 10.0% - 11.0% under the Comparable
20 Earnings method and 7.1% - 11.7% under the Discounted
21 Cash Flow method. What is the cost of common equity
22 capital you are recommending?

23 A. The fair and reasonable cost of common equity
24 capital I am recommending for Idaho Power is in the range
25 of 9.5% - 10.5%. Although any point within this range is

1 reasonable, the return on equity granted would not
2 normally be at either extreme of the fair and reasonable
3 range. I utilized a point estimate of 10.25% in
4 calculating the overall rate of return for the revenue
5 requirement.

6 Q. What is the basis for your point estimate being
7 10.25% when your range is 9.5% - 10.5%?

8 A. The 10.25% return on equity point estimate
9 utilized is based on a review of market data and
10 comparables, average risk characteristics for Idaho
11 Power, operating characteristics and the capital
12 structure.

13 Q. What is the overall weighted cost of capital
14 recommended for Idaho Power?

15 A. The overall weighted cost of capital
16 recommended by Staff is in the range of 7.499% - 7.985%.
17 For use in calculating the revenue requirement, a point
18 estimate consisting of a return on equity of 10.25% and a
19 resulting overall rate of return of 7.864% was utilized
20 as shown on Staff Exhibit No. 115, page 1.

21 Q. Have you reviewed all of the Staff
22 recommendations in this case?

23 A. Yes, I have and I believe all of the
24 recommended Staff adjustments are consistent with the
25 overall Staff policy.

1 Q. Please provide an overview of how the Staff's
2 case fits in with historical ratemaking practices.

3 A. The Staff's recommendations in this case expand
4 upon the historical ratemaking practices proposed by
5 Staff or adopted by this Commission. The basis of
6 Staff's recommendations continue to be based on auditable
7 data, plant that is used and useful, adjustments that are
8 known and measurable all to develop a revenue requirement
9 and rates that are fair, just and reasonable for the
10 Company and customers.

11 As expressed by other Staff witnesses, the
12 preferred test year is based on an historical period. A
13 test year based on actual data allows the Commission
14 Staff, and other parties, the best opportunity to
15 evaluate a utility's revenue requirement. Staff takes
16 its charge very seriously to recommend a revenue
17 requirement and rates that are fair, just and reasonable.

18 As part of the revenue requirement calculation, plant in
19 service must be used and useful and adjustments for
20 future changes must be known and measurable. While these
21 principles are very important it is also necessary for
22 utilities to be financially viable and have the ability
23 to attract capital at reasonable rates. This is the
24 balancing act that the Commission must provide. The
25 Company and customers intervening in a case may present a

1 fair case, but still has its own best interests to
2 preserve and protect.

3 The matching principle is another long
4 established, ratemaking concept where costs and revenues
5 must match. This applies to expenses and the return on
6 plant to serve customers. Proforma adjustments to an
7 historical test year, or any test year, must abide by
8 this matching principle for rates to be set that are
9 just, fair and reasonable for all customers and the
10 Company.

11 The Staff's proposed test year with its rate
12 base, expenses and revenues focuses on these concepts.
13 Plant in service is annualized for projects over \$2
14 million (system cost) placed in service during the test
15 year. This annualization includes plant in rate base as
16 if it were in service for the full year. Plant placed in
17 service beyond the test year ending June 30, 2007 has
18 been proformed into the results of operations to match
19 the in service date between July and December 31, 2007.
20 Although some projects are not yet in service at the time
21 of writing this testimony, the projects are under
22 construction and the costs have been included at a known
23 and measurable level. To match the rate base extended
24 beyond the average test year rate base, revenues must
25 also be adjusted. This matching has been accomplished by

1 utilizing the average revenues for 2007 to match the
2 average customer levels to be served by the annualized
3 and proformed plant. The major expense categories
4 associated with this plant level have also been adjusted
5 for matching and proforma purposes. Major expense
6 categories include power supply costs, labor costs based
7 on June 2007 employee levels and wages, and depreciation
8 expense.

9 Q. Why are proforma adjustments reasonable and
10 necessary?

11 A. Proforma adjustments are necessary to reflect
12 changes going forward and to reduce regulatory lag.
13 Proforma adjustments are reasonable when they meet the
14 known and measurable principle and the matching
15 principle. The Staff proforma adjustments, as well as
16 the final recommended revenue requirement meet these
17 principles.

18 Q. How has Staff addressed regulatory lag?

19 A. As explained above and in the testimony of
20 other Staff witnesses, the annualizing and proforma
21 adjustments to rate base and expenses reflect the most
22 current information that is known and measurable. These
23 adjustments reduce regulatory lag without violating
24 established ratemaking principles. Regulatory lag is a
25 utility risk that has historically been considered when

1 establishing the authorized return on equity. The return
2 on equity proposed in this case continues to reflect risk
3 levels that, in Staff's opinion, cover any remaining
4 regulatory lag.

5 Q. Are there additional measures that could be
6 utilized to reduce regulatory lag?

7 A. Not in this case. The available information is
8 not adequate to make additional adjustments. Under other
9 circumstances, there may be additional adjustments that
10 would also be justifiable and reasonable. The need to
11 further reduce regulatory lag in this case is also not
12 adequately addressed in this case. One component needed
13 to adequately evaluate regulatory lag is the
14 quantification of harm caused from regulatory lag weighed
15 against the cost of any measures taken to reduce
16 regulatory lag.

17 Capital expenditure requirements in the future
18 may cause regulatory lag and financial pressure that
19 should be addressed. Therefore, in a future case, Staff
20 believes there may be future plant adjustment measures
21 that can be based on actual data that will meet the known
22 and measurable principle and the matching principle.
23 These possibilities will need to be more fully explored
24 with test year data that can be verified. The Idaho
25 Power fully forecasted 2007 test year in this case does

1 not meet that criterion.

2 Q. Please provide a short explanation of how the
3 role of rating agencies and ratings themselves fit into
4 the ratemaking process?

5 A. At the risk of being overly simplified, I will
6 provide a very short and limited view of this
7 interaction. The rating agencies service is very
8 important for investors and companies to assist in the
9 reasonable exchange of investment funds. These capital
10 investments may be in the form of debt or equity.
11 Investors rely on ratings to assess risk. It is this
12 risk assessment that provides the Company with the rating
13 that will be a critical piece of information to establish
14 its borrowing costs.

15 The relationship between the rating agencies
16 and Commissions is somewhat circular. Parties in cases
17 before the Commission utilize ratings and rating agency
18 reports to evaluate external views of the Company and
19 make recommendations to the Commission on the return on
20 equity. Rating agencies evaluate Commission orders to
21 determine how decisions impact earnings volatility.
22 Orders that provide rate or regulatory guarantees, or
23 establish mechanisms to adjust rates, reduce volatility
24 associated with that limited area. Orders that deny
25 recovery often increase volatility and risk.

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Commission decisions are a piece of the rating agency review and may impact ratings. If the Company is downgraded, borrowing costs and investor supplied capital costs increase resulting in increased costs to the Company and customers.

In this case, Staff's recommendations do not accept the Company's requested forecast test year, but they do expand on historical recovery approaches without violating regulatory principles. Therefore, Staff's recommendations reduce volatility but not as far as the Company might believe will occur with its request.

Q. Does this conclude your direct testimony in this proceeding?

A. Yes, it does.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 10TH DAY OF DECEMBER 2007, SERVED THE FOREGOING **DIRECT TESTIMONY OF TERRI CARLOCK**, IN CASE NO. IPC-E-07-8, BY MAILING A COPY THEREOF, POSTAGE PREPAID, TO THE FOLLOWING:

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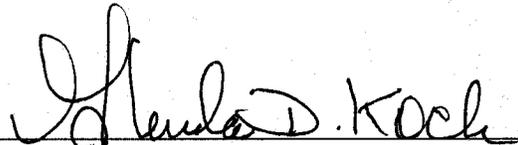
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