BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF IDAHO POWER COMPANY FOR AUTHORITY TO INCREASE ITS RATES AND CHARGES FOR ELECTRIC SERVICE TO ELECTRIC CUSTOMERS IN THE STATE OF IDAHO.	)))))))	CASE NO. IPC-E-03-13

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

GREGORY W. SAID

Q. Please state your name and business address.

A. My name is Gregory W. Said and my business address is 1221 West Idaho Street, Boise, Idaho.

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

A. I am employed by Idaho Power Company as the Manager of Revenue Requirement in the Pricing and Regulatory Services Department.

Q. Please describe your educational background.

A. In May of 1975, I received a Bachelor of Science Degree with honors from Boise State University. In 1999, I attended the Public Utility Executives Course at the University of Idaho.

Q. Please describe your work experience with Idaho Power Company.

A. I became employed by Idaho Power Company in 1980 as an analyst in the Resource Planning Department. In 1985, the Company applied for a general revenue requirement increase. I was the Company witness addressing power supply expenses.

In August of 1989, after nine years in the Resource Planning Department, I was offered and I accepted a position in the Company's Rate Department. With the Company's application for a temporary rate increase in 1992, my responsibilities as a witness were expanded. While I continued to be the Company witness concerning power supply expenses, I also sponsored the Company's rate computations and proposed tariff schedules in that case.

Because of my combined Resource Planning and Rate Department experience, I was asked to design a Power Cost Adjustment (PCA) which would impact customers' rates based upon changes in the Company's net power supply expenses. I presented my recommendations to the Idaho Public Utilities Commission in 1992 at which time the Commission established the PCA as an annual adjustment to the Company's rates. I have sponsored the Company's annual PCA adjustment in each of the years 1996 through 2003.

In 1996, I was promoted to Director of Revenue Requirement. At year-end 2002, I was promoted to the senior management level of the Company.

Q. What topics will you discuss in your testimony in this proceeding?

A. I will discuss changes in loads and resources since the Company's last general rate case and the impact of those changes on the Company's power supply expenses. I will sponsor the exhibits that provide the basis for determining the Company's normalized net power supply expenses for ratemaking purposes. I will also discuss how the new normalized power supply expenses impact future PCA computations until the Company's next general rate case.

Q. Please describe the change in the Company's system loads since the last general rate case, IPC-E-94-5.

A. The Company's 1993 annual normalized system load used in the IPC-E-94-5 case was 14.5 million megawatt-hours (MWh). The Company's 2003 annual normalized system load used in this case is 14.1 million MWh. The annual system load served today is approximately the same as it was ten years ago.

Q. Over the last ten years, what changes in loads combined to result in a 2003 annual system load that is so similar to the 1993 annual system load?

A. While there has been load growth within most customer classes, the Company has also experienced load decline in a couple of distinct areas. Ten years ago, FMC was Idaho Power's single largest customer with a load of 1.7 million MWh per year. FMC, which later became known as Astaris, discontinued operation leaving only a small residual industrial load being served as a Schedule 19 customer. Idaho Power also had some FERC jurisdictional contract loads amounting to approximately 1.4 million MWh that were intended to be served by surplus resources that existed at that time, but were scheduled for discontinuance as the Company's state jurisdictional loads grew to match generation capability. As planned, those FERC jurisdictional contracts have reached their conclusion. The

3.1 million megawatt-hour reduction in annual system loads have been replaced by 2.7 million MWh of load growth within other customer classes.

Q. Has the monthly shape of the annual load changed in the last ten years?

A. Yes. The FMC contract as well as the concluded FERC contracts that existed ten years ago provided the Company with relatively consistent monthly loads that were somewhat flat throughout the year. The FMC load had an interruptible component. Load growth within the various customer classes has tended to be much more seasonal and dependent upon weather. As a result of the loss of relatively flat loads and the addition of non-interruptible seasonal loads, the Company's Integrated Resource Plan now shows the need for summer peaking resources (June, July, and August) and winter peaking resources (November and December).

Q. Please define the term "power supply expenses" as the Company and the Commission have used the term historically.

A. The Company and the Commission have used the term "power supply expenses" to refer to the sum of fuel expenses (FERC accounts 501 and 547) and purchased power expenses (FERC account 555) excluding PURPA qualifying facilities (QF) expenses minus surplus sales revenues (FERC account 447). For ratemaking purposes, QF expenses have been quantified separately from other power supply expenses and are treated as fixed inputs to power supply modeling rather than variable outputs.

Q. How would you expect power supply expenses to be affected by the changes in loads, as you have described, that resulted in approximately the same annual load, but with seasonal shifts in loads and higher peak hour requirements?

A. I would expect power supply expenses to rise as a result of the seasonal and peak hour load shifts that the Company has experienced over the last ten years. Additional loads during the peak hours of the summer season will need to be served by higher cost resources.

Q. How have market prices of energy changed in the last ten years?

A. Market prices for energy are generally higher than market prices ten years ago. In the IPC-E-94-5 case it was assumed that the highest monthly market price that the Company might encounter would be $27 per MWh, which is equivalent to 27 mills per kilowatt-hour (kWh) or 2.7 cents per kWh. Ignoring the run-up in market prices that occurred in the 2000-2001 time period, the Company has routinely seen market prices in the $40 to $50 per MWh price range during the last two drought years. It has been quite some time since the Company and the region experienced high water conditions, but if high water was to occur, I would expect that market prices would be significantly lower than the $40 to $50 per MWh range, but not as low as the $7 to $17 per MWh range expected to accompany high water conditions ten years ago.

Q. What affect on power supply expenses would you envision as a result of the upward movement in the market price for energy?

A. As I have mentioned, I believe that a relationship between hydro conditions and the market price of energy still exists. When the Company and the region have abundant water, higher cost generating plants are not required to satisfy Company or regional loads. The marginal resource at such times is likely a low cost coal unit or even on occasion hydro generation. As a result, the market price for energy will fall to the incremental cost of the marginal resource. Conversely, when the region is in a drought condition, as is the current situation, higher cost coal units and gas-fired units will be the marginal resources influencing market prices.

As a result of the supply and demand relationship, the Company will continue to encounter higher market prices when both the Company and the region are resource deficient and conversely will encounter lower market prices when both the Company and the region have abundant resources. Power supply expenses are reduced by higher valued market sales, but are increased by higher valued market purchases. I would expect overall upward pressure on power supply expenses as a result of an upward trend in market prices especially when considering the seasonal and peak period load shifts that I discussed earlier.

Q. How have the fuel costs of the Company's coal-fired resources changed over the last ten years?

A. My response to this question includes known and measurable changes to fuel costs, which I will discuss later in my testimony. Including known and measurable adjustments, the fuel cost for the Bridger units has increased at an annual average rate of 1.0 percent per year over the last ten years from $11.51 per MWh to $12.75 per MWh. The fuel cost for the Boardman plant has increased at an annual average rate of 0.5 percent per year over the last ten years from $12.59 per MWh to $13.25 per MWh. Due to the renegotiation and replacement of coal contracts for the Valmy plant, the fuel cost for the Valmy units has decreased by 31 percent from $21.19 per MWh in 1993 to $14.7 per MWh in the test year 2003.

Q. Due to the changes in the fuel costs of the Company's coal-fired resources, what effect would you expect to see with regard to power supply expenses?

A. With only modest increases in the fuel costs for Bridger and Boardman and significant decreases in the fuel cost for Valmy, I would expect some downward movement in the Company's power supply expenses. Lower per unit fuel costs at Valmy will reduce the fuel expense at Valmy when it is dispatched to serve system loads, but also will provide for more frequent opportunities to sell Valmy surpluses into the market. Both of these impacts serve to reduce net power supply expenses.

Q. Are there any resource additions that have occurred in the last ten years that would reduce power supply expenses?

A. Yes. The addition of any resource has the effect of reducing power supply expenses. This results because of economic dispatch principals. If additional resources can be dispatched at costs lower than alternatives, then dispatch of the new resources occurs thus reducing power supply expenses. If the additional resource cannot be dispatched at costs lower than alternatives, no additional power supply expense occurs. In the last ten years, the Company has added the Danskin gas-fired plant, located at the Evander Andrews complex near Mountain Home, Idaho and has also received energy from additional PURPA QF projects. In 2004, the Company will acquire additional generation from the PPL Montana Power Purchase Agreement (PPA) and from a new QF project called the Tiber Montana LLC (Tiber) project. The costs of QF projects have not historically been included in "power supply expenses" and thus power supply expenses are reduced by new QF projects as they reduce the need for resources that are reflected in power supply expenses.

Q. Have you supervised the preparation of power supply modeling to reflect the changes in test year characteristics that you have described in your testimony?

A. Yes. Under my supervision and at my request, two power supply simulations representative of the test year 2003 under a variety of water conditions were prepared. The first simulation is for the test year 2003 prior to known and measurable power supply adjustments. This simulation reflects the load changes, market price changes, fuel cost changes and resource changes that have occurred in the last ten years since the last test year 1993. The second simulation modifies the first simulation of the test year to reflect known and measurable power supply adjustments that I will describe later in my testimony. As has been the case in the past, the power supply modeling results reflect the average power supply expenses associated with multiple hydro conditions that are representative of the possible circumstances the Company might encounter. This year the analyses include water conditions corresponding to years 1928 through 2003. The average of the expenses related to each of the 76 water conditions represents the normalization of power supply expenses.

Q. Have you supervised the development of an exhibit showing the results of the power supply expense normalization for test year 2003 prior to any known and measurable power supply adjustments?

A. Yes. Exhibit 32 shows the results of the power supply expense normalization prior to known and measurable power supply adjustments. Page 1 of Exhibit 32 shows the summary results containing the 76-year average power supply generation sources and expenses. Pages 2 through 77 contain results for each of the 76 individual water conditions 1928 through 2003.

Q. Please summarize the sources and disposition of energy as shown on page 1 of Exhibit 32.

A. From the summary information contained on page 1 of Exhibit 32 it can be seen that for the test year 2003, hydro generation supplies 8.8 million MWh while thermal generation supplies 6.7 million MWh (Bridger 5.0, Boardman 0.4, Valmy 1.3) from Company-owned generation resources. Danskin, as a peaking plant, operates intermittently, but offers significant contribution at important times when resources and purchases are inadequate to serve peak loads. Purchases of power come from three sources: market purchases, contract purchases other than QF and QF purchases. QF purchases are assumed at fixed normalized levels amounting to 783,635 MWh. Because the fixed QF purchases are fixed inputs to power supply modeling, they are not shown on the variable output summary, however, when combined with the market and other contract purchases, total purchases amount to 1.1 million MWh. As a result, hydro generation contributes approximately 53 percent (8.8 / 16.6) of the generation mix, thermal generation contributes approximately 40 percent (6.7 / 16.6) and purchases contribute approximately 7 percent (1.1 / 16.6). Of the over 16.6 million MWh consumed, 14.1 million MWh are utilized for system loads while over 2.5 million MWh are sold as surplus.

Q. Please describe the expense and revenue information associated with the normalized operation that you have described as shown in Exhibit 32.

A. Exhibit 32 contains variable expense and revenue information limited to FERC accounts 501, Fuel (coal); 547, Fuel (gas); 555, Purchased Power; and 447, Sales for Resale. Hydro generation has no assumed fuel expense. Coal expenses of $89.9 million are comprised of Bridger at $63.7 million, Valmy at $20.8 million and Boardman at $5.4 million. Gas expenses amount to $3.2

million. Purchased power expenses not including QF amount to $10.6 million while surplus sales amount to $54.1 million. Altogether, net power supply expenses amount to $49.6 million (89.9 + 3.2 + 10.6 - 54.1).

Q. How do these power supply expenses compare to the 1993 normalized amounts approved by the Commission at the conclusion of the IPC-E-94-5 case.

A. Fuel expenses (entirely coal related) for the 1993 normalized test year were $61.5 million. Purchased power not including QF was $11.0 million and surplus sales were at a $24.5 million level. The Company had no gas fuel expenses in 1993. Net power supply expenses were $48 million (61.5 + 11 - 24.5). While normalized surplus sales revenues have increased by $29.6 million (54.1 - 24.5), fuel costs have also increased by $31.6 million (89.9 + 3.2 - 61.5). While market prices have increased, reliance on purchases has decreased, resulting in little change to non-QF purchased power expenses. The net change in normalized power supply expenses before known and measurable adjustments is only a $1.9 million increase from 10 years ago.

Q. Please describe the types of "known and measurable" power supply adjustments that you recommend in this proceeding.

A. I propose two types of known and measurable adjustments to normalized power supply expense computations; (1) changes in purchased power contracts and (2) changes in fuel costs. These adjustments have not only a direct impact on specific expenses, but also have indirect impacts on the Company's market purchase expenses and market sales revenues.

Q. Please describe your proposed changes to purchased power contracts that will have a known and measurable impact on the power supply expenses of the Company.

A. I propose the inclusion of two power purchase contracts that will become effective in 2004 as new rates are implemented. The first contract, as I mentioned earlier in my testimony, is a PURPA QF contract with Tiber Montana LLC for the acquisition of 29,144 MWh at a cost of $1.2 million. First deliveries of power from Tiber are scheduled for May 2004. The second contract, also mentioned earlier in my testimony, is a PPA with PPL Montana for the purchase of 99,360 MWh at a cost of $4.4 million. The first delivery of power from PPL Montana is scheduled for June 2004. This Commission has approved both of these contracts.

Q. Please describe your proposed changes to fuel costs that will have a known and measurable impact on power supply expenses.

A. I have been informed by employees in the

Company's Power Supply Department that certain minor known and measurable changes in coal prices will occur in 2004 as a result of contract provisions, train lease agreements and depreciation. A change of greater significance results from the expiration of a long-term coal contract at Valmy. For two plants, Boardman and Valmy the known and measurable adjustments result in lower per unit fuel costs. Boardman fuel costs drop from $13.66 per MWh to $13.25 per MWh. Valmy fuel will drop from $16.2 per MWh to $14.7 per MWh. At Bridger, the fuel cost rises slightly from $12.65 per MWh to $12.75 per kWh.

Q. Have you supervised the development of an exhibit showing the results of the power supply expense normalization when the known and measurable power supply adjustments are included?

A. Yes. Exhibit 33 shows the results of the power supply expense normalization once the known and measurable power supply adjustments have been included. Page 1 of Exhibit 33 shows the summary output containing the 76-year average power supply generation sources and expenses. The following pages 2 through 77 show the individual water conditions 1928 through 2003 output as those water conditions would impact the test year 2003.

Q. Have you supervised the development of an exhibit to quantify the extent to which the normalized power supply expenses change as a result of including the known and measurable adjustments you have proposed?

A. Yes. Exhibit 34 details the changes in both normalized power supply expenses that exclude QF expenses and also the change in QF expenses that result from known and measurable adjustments. Net power supply expenses decrease by $1.9 million as a result of changes to fuel costs and additional power purchase contracts. QF expenses increase by $1.2 million as a result of inclusion of the Tiber contract.

Q. How do base level PCA expenses differ from test year power supply expenses?

A. Base level PCA expenses differ from test year power supply expenses in two ways. First, base level PCA expenses include QF expenses. Second, base level PCA expenses are determined for an April through March time frame rather than a calendar year. April represents the beginning of the runoff period that provides the basis for the PCA projection.

Q. What are the 2003 test year normalized QF expenses including the Tiber project?

A. Including the Tiber project, 2003 test year normalized QF expenses amount to $46.4 million.

Q. How do 2003 test year normalized QF expenses compare to 1993 test year QF expenses?

A. The 2003 test year normalized QF expenses of $46.4 million are $12.1 million greater than the $34.1 million 1993 test year normalized QF expenses. However, the $46.4 million value is $1.2 million less than the value used in the current PCA projection formula.

Q. What is the base level of PCA expenses for test year 2003?

A. As I stated earlier in my testimony, the base level of PCA expenses is the sum of the normalized power supply expenses and normalized QF expenses. In this case, normalized power supply expenses amount to $47.7 million and normalized QF expenses amount to $46.4 million. The sum, $94.1 million, represents the new base PCA expense level.

Q. Have you directed the preparation of an exhibit that shows the derivation of the appropriate new PCA regression formula to be used for projecting the next year's PCA expenses?

A. Yes, I directed the preparation of Exhibit 35 to show the derivation of the new PCA regression formula.

Q. Please describe Exhibit 35.

A. Exhibit 35 consists of six columns at the top of the page. Column one shows the number of the observation from 1 to 75. Column 2 contains the PCA year corresponding to each observation; observation 1 is 1928, observation 2 is 1929, and so on through observation 75, which is 2002.

Because the PCA year is for months April through March of the following year, there are only 75 observations instead of the 76 conditions represented in Exhibit 33. Column 3 contains the April through July runoff for each of the observation years 1928 through 2002. Column 4 contains the natural logarithm of the runoff value contained in Column 3. Column 5 contains the observed April through March annual power supply expense based upon data from Exhibit 33, but reflecting PCA totals rather than calendar year totals. Finally, Column 6 contains the regression predicted value of April through March annual power supply expenses.

To the right of the columns are summary output of certain regression statistics (such as r-square) and formula coefficients.

Q. Please describe the new PCA regression formula based upon Exhibit 35.

A. The basic PCA formula takes the following form: Annual PCA expense = C1 - C2 * ln (Brownlee runoff) + C3. The values of C1, C2 and C3 are constant with the only variable being Brownlee runoff. The equation without C3 is used to predict net power supply expenses and is the direct result of the regression analysis contained in Exhibit 35. The constant C1 represents the prediction of annual net power supply expense that would occur if there was zero April through July Brownlee runoff. The value of C1 is

$1,140,615,325. In reality, the lowest April through July Brownlee runoff contained in the observations is 1.97 million acre-feet which occurred in the 1992 observation.

Because the regression provides a linear fit of a non-linear transformation, the value of C2 is somewhat difficult to explain. Observed Brownlee runoff data in acre-feet is first transformed by the natural logarithm function. For each unit increase in the natural logarithm of the Brownlee runoff data the projection of annual power supply expenses will be reduced by C2, which is $70,685,112. The average natural logarithm of Brownlee runoff values, based upon the observations contained in Exhibit 35, is 15.46. This value corresponds to a runoff of approximately 5.2 million acre-feet (e ^ 15.46 = 5,178,365 million acre-feet). With a runoff of 5.2 million acre-feet and a natural logarithm of 15.46, the projected net power supply expenses would be $47,823,493 ($1,140,615,325 - $70,685,112 * 15.46). An increase of 1 to the natural logarithm would result if the runoff was approximately 14.1 million acre-feet (ln(14,076,256) equals 16.46 which equals 15.46 + 1). With a runoff of 14,076,266 million acre-feet, the net power supply expenses would be $70,685,112 less than $47,823,493 making the projection of power supply expenses a negative $22,861,619 ($1,140,615,325 - $70,685,112 * 16.46).

The natural logarithms of observed Brownlee runoff ranged from 14.49 (1992 runoff) to 16.35 (1984 runoff). The difference, 1.86 (16.35 - 14.49), multiplied by $70,685,112 equals approximately $131.5 million, which represents the change in projected power supply expenses from the highest water case (1984) to the lowest water case (1992).

The value of C3 is $46,413,000, the normalized expense for QF. Because the normalized expense for QF is quantified separately from net power supply expenses it is added to net power supply expenses to determined the PCA expenses.

Q. What is the new PCA regression equation with values inserted for the constants?

A. The new PCA regression equation is:

Annual PCA expense = $1,140,615,325
- $70,685,112 * ln (Brownlee runoff)
+ $46,413,000.

Q. In the past, has the PCA regression equation also contained a constant related to FMC, later Astaris, second block revenues?

A. Yes, FMC second block revenues were previously treated as separately identified revenue that, like surplus sales, reduced net PCA expenses. The FMC constant is no longer appropriate due to the cancellation of the FMC contract.

Q. How does the range in projected power supply expenses from high condition to low condition resulting from this regression equation compare to the range of projected power supply expenses in the previous regression equation?

A. The predictions of power supply expenses based upon the regression observations contained in the previous regression analysis ranged from minus $9.9 million (1984) to $112.4 million (1992), a range of $122.3 million.

Q. Do you recommend any additional PCA computational changes with the establishment of the new PCA regression formula?

A. Yes. There are three PCA computational factors that need to be updated as a result of the current review of power supply expenses. First, for PCA projection calculations, a new normalized base PCA rate can be determined. Second, a new Idaho jurisdictional percentage can be determined. Third a new expense adjustment rate to be applied to load growth or decline can be determined.

Q. Have you supervised the development of an exhibit to determine the PCA computational factors you have just mentioned?

A. Yes, Exhibit 36 is a one-page exhibit detailing the appropriate computation of the PCA factors I have outlined.

Q. What is the first computation shown on Exhibit 36?

A. The first computation recaps the normalized PCA computation that I have discussed thoroughly in my testimony. The new normalized PCA expenses for 2003 test year amount to $94.1 million compared to the previous $73.1 million value for the 1993 test year.

Q. Please discuss the normalized Base PCA rate computation contained in Exhibit 36.

A. First, I would point out that in my opinion, the normalized Base PCA rate has been improperly determined in the past. While expenses are incurred based upon loads, they are recovered based upon sales. Historically, the normalized Base PCA rate of 0.5238 was determined by dividing the $73.1 million of normalized PCA expenses by the normalized system firm <u>load</u> value. My recommendation for the current computation of the normalized Base PCA rate is that the $94.1 million normalized PCA expenses be divided by the normalized system <u>sales</u> value of 12,863,484 MWh. The resulting PCA base rate is 0.7315 cents per kWh.

Q. Was a similar load/sales error previously corrected by the Commission?

A. Yes, PCA true-up rate computations were originally based upon Idaho jurisdictional firm <u>loads</u> rather than Idaho jurisdictional firm <u>sales</u> levels. In 1996, the Commission corrected that error in Order No. 26455.

Q. Please discuss the Idaho jurisdictional percentage computation contained in Exhibit 36.

A. The Idaho jurisdictional percentage is derived by dividing the Idaho jurisdictional firm load by the system firm load number. As I mentioned earlier in my testimony, the Company's FERC jurisdictional contract loads have been reduced by 1.4 million MWh while at the same time Idaho jurisdictional loads have grown. As a result, Idaho jurisdictional loads now represent 94.1 percent of the Company's total load.

Q. Please discuss the Expense Adjustment rate to be applied to load changes for PCA true-up computations.

A. When the PCA was established, the Commission recognized that load growth would provide additional revenue that would in part offset the corresponding additional power supply expenses incurred to serve the additional load. The revenues generated would be the result of rates designed to recover the full embedded costs of serving existing customers including generation costs, distribution costs, transmission costs and other costs of the Company. However, the true cost of serving additional customers is comprised of a blend of new marginal costs incurred to serve new customers and reduced embedded costs when existing facilities allow for additional customers at zero or low cost. The Commission determined that rates paid by new customers would cover all additional costs including $16.84

per MWh of PCA expenses that might occur to serve additional load. The $16.84 per MWh credit was computed by averaging the Boardman and Valmy fuel costs. Using the same computational method the new expense adjustment rate for load changes is $13.98 per MWh.

Q. Based upon your understanding of Mr. Keen's testimony in this proceeding, do you believe the $13.98 per MWh rate should be used as the new credit for load growth?

A. No. Mr. Keen pointed out that whether looking at generation, distribution, or transmission, the Company has little ability to serve additional customers without investment in new facilities. In my opinion, revenues derived from additional customers served at embedded rates will not be sufficient to recover both the incremental costs of required new facilities and an amount greater than the embedded cost of PCA expenses (the PCA base rate). I believe it would be more appropriate to have a load growth credit based upon the normalized PCA base rate of $7.30 per MWh (7.3 mills per kWh). That is the portion of customers' rates that it is contemplated will cover base PCA expenses. The remainder of customers' rates cover the other than PCA expenses that Mr. Keen has suggested will grow at a significant pace in the coming years.

Q. Do you have a non-computational recommendation with regard to the PCA?

A. Yes. Mr. Gale, Ms. Brilz and I have discussed Ms. Brilz' recommendations in this proceeding to create seasonal pricing that if accepted would create a seasonal rate change on June 1 of each year. If the PCA rate change date were to continue to occur on May 16 of each year, customers would see two rate changes within 16 days. If Ms. Brilz' seasonal pricing recommendations are approved, then in order to eliminate back-to-back rate changes, I recommend that the PCA recovery period be moved from a May 16 through May 15 period to a June 1 through May 31 time period. No other changes to PCA time frames would be required. PCA projection and true-up computations would still be based upon an April 1 through March 31 time frame and the Company would still file its PCA request by April 15 each year.

Q. Does that conclude your testimony?

A. Yes.