

DEC - 6 2004

Boise, Idaho

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE)	
APPLICATION OF IDAHO POWER)	
COMPANY FOR AUTHORITY TO)	CASE NO. IPC-E-04-
REVISE THE ENERGY EFFICIENCY)	29
RIDER, TARIFF SCHEDULE 91)	
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IDAHO POWER COMPANY
 DIRECT TESTIMONY
 OF
 TIMOTHY E. TATUM

December 2004

1 Q. Please state your name and business address.

2 A. My name is Timothy E. Tatum and my business
3 address is 1221 West Idaho Street, Boise, Idaho.

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

6 A. I am employed by Idaho Power Company ("the
7 Company") as a Pricing Analyst in the Pricing and Regulatory
8 Services Department.

9 Q. Please describe your educational background.

10 A. In May of 2001, I received a Bachelor of
11 Business Administration degree in Economics from Boise State
12 University. I am currently a graduate student at Boise State
13 University and plan to earn a Master of Business
14 Administration degree in May 2005.

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

17 A. I became employed by Idaho Power Company in
18 1996 as a Customer Service Representative in the Company's
19 Customer Service Center. Over the first two years I handled
20 customer phone calls and other customer-related
21 transactions. In 1999, I began working in the Customer
22 Account Management Center where I was responsible for
23 customer account maintenance in the area of billing and
24 metering.

25 In June of 2003, after seven years in

1 customer service, I began working as an Economic Analyst on
2 the Energy Efficiency Team. As an Economic Analyst, I
3 maintained proper accounting for Demand-Side Management
4 ("DSM") expenditures, prepared and reported DSM program
5 accounting and activity to management and various external
6 stakeholders, conducted cost-benefit analysis of DSM
7 programs, and provided DSM analysis support for the
8 Company's 2004 Integrated Resource Plan ("IRP").

9 In August of 2004, I accepted a position as a
10 Pricing Analyst in Pricing and Regulatory Services. As a
11 Pricing Analyst, I have continued to work in the area of DSM
12 by providing program analysis and regulatory guidance.

13 Q. What is the scope of your testimony?

14 A. My testimony will describe the DSM programs
15 and costs for which the Company is requesting recovery
16 through the Energy Efficiency Rider ("Rider").

17 A. Have you prepared any exhibits as part of
18 your testimony?

19 Q. Yes. I have prepared the following exhibits:

Exhibit	Description
Exhibit 5	Estimated DSM program expenses 2005 - 2009.
Exhibit 6	DSM program development and analysis methods used in the 2004 IRP process.
Exhibit 7	DSM program descriptions for the programs analyzed during the 2004 IRP process.

Exhibit 8 Figure 13 and Figure 14.
Figure 13 is a fixed cost comparison of the supply-side and demand-side resources analyzed in the IRP. Figure 14 is a fixed and variable cost comparison of the supply-side and demand-side resources analyzed in the IRP.

Exhibit 9 Resource portfolio comparison report showing the net power supply benefit for portfolios containing each IRP DSM program compared against a baseline portfolio, referred to as P-Zero. Also, Total Resource Cost for each program is presented along with a ratio of benefits to costs.

Exhibit 10 Table showing the estimated energy and demand savings for each DSM program included in the IRP. This table reflects any changes made to the estimates since the IRP process was completed.

Exhibit 11 Northwest Energy Efficiency Alliance contract for 2005-2009.

1 Q. Please categorize the DSM related costs that
2 Idaho Power Company is seeking to recover through the Rider.

3 A. The costs for the DSM programs and efforts
4 the Company plans to implement beginning in 2005 can be
5 segmented into five main cost categories: 1) 2004 IRP-
6 identified DSM programs, 2) other customer focused DSM
7 programs and projects, 3) funding for the Company's
8 participation in the Northwest Energy Efficiency Alliance

1 ("the Alliance"), 4) DSM research and studies, and 5) DSM
2 departmental administration.

3 Q. Has the Company reviewed its planned DSM
4 programs and efforts with the Energy Efficiency Advisory
5 Group ("EEAG")?

6 A. Yes. The Company has reviewed its planned
7 DSM programs and efforts, including the costs associated
8 with each effort, with the EEAG.

9 Q. Are you familiar with the DSM programs
10 included in the Company's 2004 IRP?

11 A. Yes. I assisted in the design and analysis
12 of each DSM program included in the Company's 2004 IRP.

13 Q. Please describe the DSM programs included in
14 the IRP.

15 A. Six DSM programs were selected through the
16 IRP working group process to be included in the final
17 resource portfolio. Four of the six programs are designed to
18 address both summer demand reduction and energy efficiency
19 improvements. The two remaining programs are demand
20 response programs that are designed to reduce the Company's
21 summer peak. The six programs are identified as the
22 Residential Efficiency (New Construction) Program, the
23 Commercial Efficiency (New Construction) Program, the
24 Industrial Efficiency Program, the Irrigation Efficiency
25 Program, the Residential Air Conditioner Cycling Program,

1 and the Irrigation Peak Clipping Program.

2 Q. What costs categories are included in the DSM
3 program costs?

4 A. DSM program costs refer to the cost to the
5 utility to operate a DSM program. These costs include
6 administrative costs, marketing and advertising costs,
7 programmatic capital costs, programmatic operation and
8 maintenance costs, monitoring and evaluation costs, and
9 incentive and rebate costs.

10 Q. What are the costs associated with the DSM
11 Programs included in the 2004 IRP?

12 A. The average annual cost associated with the
13 implementation and operation of the DSM programs included in
14 the 2004 IRP is expected to be approximately \$8.8 million
15 over the five-year period 2005-2009. Exhibit 5 details the
16 annual cost projections associated with each individual DSM
17 program included in the 2004 IRP.

18 Q. Were all of the 2004 IRP DSM programs
19 determined to be cost-effective?

20 A. Yes.

21 Q. Please describe the method used to determine
22 the cost-effectiveness of the DSM programs included in the
23 Company's 2004 IRP.

24 A. The DSM programs were analyzed to estimate
25 cost-effectiveness using a two-step process. The first step

1 consisted of a pre-screening of potential DSM programs using
2 the methods described in the Electric Power Research
3 Institute ("EPRI") End-Use Tag Manual and The California
4 Standard Practices Manual: Economic Analysis of Demand-side
5 Programs and Projects. The pre-screening analysis compared
6 estimated program costs and hourly load impacts to an hourly
7 set of alternative costs. The alternative costs represented
8 both heavy and light load market purchase estimates as well
9 as gas-fired peaker generation costs. This set of
10 alternative costs was used as a pre-screen in order to
11 represent the value of summer peaking resources when
12 designing potential DSM resource options. This pre-
13 screening analysis, referred to as the static analysis,
14 eliminates any DSM options that have a benefit/cost ratio
15 less than 1.0 from further consideration. Exhibit 6, pages 1
16 through 8, describes in detail the static analysis used to
17 screen DSM programs as part of the IRP evaluation process.
18 Exhibit 6 is from the Demand-Side Resource Data section in
19 2004 IRP Technical Appendix.

20 Q. What is meant by "benefit/cost" ratio?

21 A. A benefit/cost ratio is the value derived by
22 dividing the discounted stream of program benefits by the
23 discounted stream of program costs. A benefit/cost ratio
24 greater than 1.0 indicates that the program is cost-
25 effective. During the static analysis, benefit/cost ratios

1 were calculated from both the Total Resource Cost ("TRC")
2 and Utility Cost ("UC") test perspectives for each DSM
3 program. EPRI defines the Total Resource Cost test as a
4 measure of the total net resource expenditures of a DSM
5 program from the point of view of the utility and its
6 customers as a whole. Costs include changes in supply costs,
7 utility costs, and participant costs. Transfer payments
8 between customers and the utility, such as monetary
9 incentives for program participation, are ignored. EPRI
10 defines the Utility Cost test as a measure of the total
11 costs to the utility to implement a DSM program. Exhibit 6,
12 pages 2 through 4, describes these two tests in further
13 detail. The Residential Efficiency (New Construction)
14 Program, the Commercial Efficiency (New Construction)
15 Program, the Industrial Efficiency Program, and the
16 Irrigation Efficiency Program were screened for cost-
17 effectiveness using the TRC test perspective. The
18 Residential Air Conditioner Cycling Program and the
19 Irrigation Peak Clipping Program were screened for cost-
20 effectiveness using the UC test perspective.

21 Q. Why were the programs that are designed to
22 address energy efficiency improvements screened for cost-
23 effectiveness based upon the TRC test results?

24 A. Each energy efficiency program requires a
25 participating customer to pay a portion of the installed

1 cost of the energy efficiency measure(s) encouraged by the
2 program. The TRC test perspective considers the participant
3 costs as a portion of the resource costs analyzed by the
4 test. This is important because the participant cost in
5 most cases is a significant portion of the total program
6 cost and must be included in the analysis in order to fully
7 quantify the cost to customers and the utility as a whole.

8 Q. Why were the demand response programs
9 screened for cost-effectiveness based upon the UC test
10 results?

11 A. The demand response programs included in the
12 2004 IRP do not require the participating customer to pay a
13 portion of the measure cost; rather the utility provides the
14 program equipment and a monetary incentive for participation
15 in the program. The TRC test, by definition, ignores
16 transfer payments between the utility and program
17 participants. Since a large portion of the program costs
18 associated with the demand response programs are the
19 incentive payments provided to customers, eliminating them
20 from the test results in an ineffective screening mechanism
21 for demand response programs. The UC test perspective
22 includes all costs to the utility including incentive
23 payments. The UC test provides a full analysis of all costs
24 incurred by the utility to implement a demand response
25 resource making it the most effective screening test for

1 demand response programs.

2 Q. What was the second step in the analysis
3 process?

4 A. The second step of the analysis estimated the
5 hourly impacts to net power supply costs resulting from each
6 DSM program through the use of a dynamic simulation model.
7 The dynamic simulation model yielded a projected increase or
8 decrease in net power supply costs resulting from each
9 program over a 30-year planning period. The present value
10 of the impact to net power supply costs was the program
11 benefit. For each DSM program analyzed, a ratio of the
12 present value Total Resource Costs to program benefit was
13 calculated. Each option was ranked based upon its
14 benefit/cost ratio. The options with the highest
15 benefit/cost ratios over 1.0 were included in the final
16 resource portfolio.

17 Q. Please describe the purpose of the
18 Residential Efficiency (New Construction) program.

19 A. The Residential Efficiency (New Construction)
20 program is designed to provide lost opportunity peak demand
21 and energy savings in new residential homes by incorporating
22 energy efficiency measures during the design and
23 construction phases. For many energy efficiency measures,
24 the only time to incorporate them into a building is at the
25 time of initial construction. This program will be

1 patterned after the Company's existing Energy Star Homes
2 Northwest program, which partners with regional and state
3 organizations. Direct incentives will be provided to
4 builders and possibly homebuyers. Incentives will be based
5 on kilowatt or kilowatt-hour savings. Exhibit 7, page 5
6 describes this program in detail. Exhibit 7 is from the
7 Demand-Side Resource Data section in 2004 IRP Technical
8 Appendix.

9 Q. Who is eligible to participate in this
10 program?

11 A. Builders and homeowners planning to build a
12 single-family residential home within the Company's Idaho
13 service territory will be eligible to participate in the
14 program.

15 Q. You stated that all of the DSM programs
16 included in the Company's 2004 IRP were determined to be
17 cost-effective through the dynamic simulation analysis.
18 Please share the results of the cost-effectiveness analysis
19 results for the Residential Efficiency (New Construction)
20 program.

21 A. The 30-year nominally levelized TRC of the
22 Residential Efficiency (New Construction) program is \$0.058
23 per kilowatt-hour. In comparison to other demand-side and
24 supply-side resources selected by the IRP analysis, this
25 program is shown to be a low cost resource, as can be seen

1 from Figure 14 included in Exhibit 8. Exhibit 8 can also be
2 found on page 50 of the 2004 IRP. The dynamic simulation
3 analysis yielded a Total Resource Cost benefit/cost ratio of
4 2.53. Exhibit 9 shows how this program, compared to the
5 other DSM programs analyzed in the IRP, ranked in terms of
6 the Total Resource Cost, the net power supply benefit, and
7 the benefit/cost ratios. Exhibit 9 is from the Portfolio
8 Analysis - Results and Supporting Documentation section in
9 the 2004 IRP Technical Appendix.

10 Q. You have referred to a 30-year nominally
11 levelized TRC. What is meant by nominally levelized TRC?

12 A. Nominally levelized TRC is defined as the
13 present value of total resource costs of the resource over
14 the life of the program divided by the discounted stream of
15 energy or demand savings.

16 Q. Has the design and/or program goals of the
17 Residential Efficiency (New Construction) program changed
18 significantly from the program analyzed through the IRP
19 process.

20 A. No. However, a slight change to the
21 projected program costs has been made in the first program
22 year. In order to meet the expected level of program
23 participation, the Company plans to increase marketing
24 efforts in the Treasure Valley, Twin Falls and Pocatello
25 markets. This change will result in an increase to first

1 year program costs, compared to the costs included in the
2 IRP, of approximately \$42,000. Exhibit 6, column 11 details
3 the projected costs for the program through 2009.

4 Q. Please describe the purpose of the Commercial
5 Efficiency (New Construction) program.

6 A. The Commercial Efficiency (New Construction)
7 program is designed to provide lost opportunity peak demand
8 and energy savings n new commercial buildings by
9 incorporating energy efficiency measures during the design
10 and construction phases. Like the Residential Efficiency
11 (New Construction) program, this program identifies for
12 implementation measures, which can be achieved only during
13 the construction process. Financial incentives and
14 education will be the primary methods used to encourage
15 program participation. Incentives will be based on kW or
16 kWh savings. Exhibit 7, page 3 describes this program in
17 detail.

18 Q. Who is eligible to participate in this
19 program?

20 A. This program will be available to new
21 commercial building owners/developers and
22 architects/engineers. The program will be available to
23 customers planning to take service under Schedules 7, 9, and
24 qualified commercial customers taking service under
25 Schedule 19.

1 Q. Please share the results of the cost-
2 effectiveness analysis results for the Commercial Efficiency
3 (New Construction) program.

4 A. The 30-year nominally levelized total
5 resource cost of the Commercial Efficiency (New
6 Construction) program is \$0.068 per kilowatt-hour. In
7 comparison to other demand-side and supply-side resources
8 selected by the IRP analysis, this program is shown to be a
9 low cost resource, as can be seen from Figure 14 included on
10 Exhibit 8. The dynamic simulation analysis yielded Total
11 Resource Cost benefit/cost ratio of 3.84. Exhibit 9 shows
12 how this program ranked compared to the other DSM programs
13 analyzed in the IRP process in terms of its Total Resource
14 Cost, net power supply benefit, and benefit/cost ratios.

15 Q. Has the design and/or program goals of the
16 Commercial Efficiency (New Construction) program changed
17 significantly from the program analyzed through the IRP
18 process.

19 A. No.

20 Q. Please describe the purpose of the Industrial
21 Efficiency program.

22 A. The Industrial Efficiency program is designed
23 to reduce peak demand and energy of large industrial and
24 commercial customers. Idaho Power will provide direct
25 incentives and assist with audit costs. Incentives will be

1 based on kW or kWh savings. This program is simply an
2 expanded version of the Company's current Industrial
3 Efficiency program. Exhibit 7, page 2 describes this
4 program in detail.

5 Q. Who is eligible to participate in this
6 program?

7 A. The program will be available to all new and
8 existing customers taking service under Schedules 09 and 19
9 with a basic load capacity of 500 kW or greater. Special
10 contract customers will also eligible.

11 Q. Please share the results of the cost-
12 effectiveness analysis results for the Industrial Efficiency
13 program.

14 A. The 30-year nominally levelized total
15 resource cost of the Industrial Efficiency program is \$0.032
16 per kilowatt-hour. In comparison to other demand-side and
17 supply-side resources selected by the IRP analysis, this
18 program is shown in Exhibit 8, Figure 14 to be a low cost
19 resource. The dynamic simulation analysis yielded a Total
20 Resource Cost benefit/cost ratio of 3.25. Exhibit 9 shows
21 how this program ranked compared to the other DSM programs
22 analyzed in the IRP in terms of its Total Resource Cost, net
23 power supply benefit, and benefit/cost ratios.

24 Q. Has the design and/or program goals of the
25 Industrial Efficiency program changed significantly from the

1 program analyzed through the IRP process?

2 A. Yes. The program marketing and administrative
3 costs over the first year are expected to be lower than
4 those included in the IRP analysis due to the program
5 awareness generated under the Company's current Industrial
6 Efficiency program. Exhibit 5 details the projected cost
7 streams associated with this program. In addition, as a
8 result of meetings held with customers and Commission Staff,
9 several changes, which are detailed by Ms. Brilz in her
10 testimony, are proposed for the program.

11 Q. Do the program design changes negatively
12 impact the cost-effectiveness of the program?

13 A. No. The decrease to the marketing and
14 administrative costs in the first program year come with no
15 projected decrease to energy savings and an increase in the
16 benefit/cost ratio.

17 Q. Please describe the purpose of the Irrigation
18 Efficiency program.

19 A. This program is designed to reduce peak
20 demand and energy of irrigation customers. Customers will
21 receive direct incentives for modifications to existing or
22 new irrigation systems. Incentives will be based on kW or
23 kWh savings. This program, like the Industrial Efficiency
24 program, is simply an expanded version of the Company's
25 current Irrigation Efficiency program. Exhibit 7, page 1

1 describes this program in detail.

2 Q. Who is eligible to participate in this
3 program?

4 A. The program will be available to all
5 agricultural customers taking service under Schedule 24.

6 Q. Please share the results of the cost-
7 effectiveness analysis results for the Irrigation Efficiency
8 program.

9 A. The 30-year nominally levelized total
10 resource cost of the Irrigation Efficiency program is \$0.051
11 per kilowatt-hour. In comparison to other demand-side and
12 supply-side resources selected by the IRP analysis, this
13 program is shown to be a low cost resource, as illustrated
14 in Figure 14 of Exhibit 8. The dynamic simulation analysis
15 yielded a Total Resource Cost benefit/cost ratio of 3.77.
16 Exhibit 9 shows how this program ranked compared to the
17 other DSM programs analyzed in the IRP in terms of its Total
18 Resource Cost, net power supply benefit, and benefit/cost
19 ratios.

20 Q. Has the design and/or program goals of the
21 Irrigation Efficiency program changed significantly from the
22 program analyzed through the IRP process.

23 A. Yes. While the overall program design has
24 not changed for this program, the demand and energy goals
25 have changed for each of the first five years of program

1 operation. Exhibit 10, pages 1 and 2 provide detail on the
2 new energy and demand targets for this program. Due to the
3 timing of the implementation of this program in 2005, the
4 level of participation in the first program year is
5 projected to be lower than the IRP estimates. The energy
6 savings is expected to be higher in the following years
7 reaching the IRP energy savings target for the program by
8 2009.

9 Q. Please describe the purpose of the Air
10 Conditioner Cycling program.

11 A. The AC Cycling Program is an optional,
12 supplemental service that will allow participating customers
13 an opportunity to voluntarily permit the Company to cycle
14 their central air conditioners with the use of a direct load
15 control device in exchange for a monthly monetary incentive.
16 This program is designed to be a continuation of the
17 Residential Air Conditioner Cycling Pilot Program operated
18 by the Company during the summers of 2003 and 2004. On
19 November 15, 2004, the Company filed an Application with the
20 Commission requesting authority to implement this program.

21 Q. Who is eligible to participate in this
22 program?

23 A. The AC Cycling Program will be a voluntary
24 program offered to residential customers taking service
25 under Schedule 1. The Program will be offered to customers

1 in Ada and Canyon counties and in Emmett where the Company
2 has installed Advanced Meter Reading ("AMR") capability.

3 Q. Please share the results of the cost-
4 effectiveness analysis results for the Air Conditioner
5 Cycling program.

6 A. The 30-year nominally levelized total
7 resource cost of the Air Conditioner Cycling program is
8 \$5.50 per peak kilowatt per month. In comparison to other
9 demand-side and supply-side resources selected by the IRP
10 analysis, this program is shown to be a low cost capacity
11 resource, as can be seen from Figure 13 on Exhibit 8. The
12 analysis yielded a Utility Cost benefit/cost ratio of 1.29
13 for this program over its 30-year life.

14 Q. Has the design and/or program goals of the
15 Air Conditioner Cycling program changed significantly from
16 the program analyzed through the IRP process.

17 A. Yes. The incentive payment amount per
18 customer per year has been increased from \$20, which was
19 included in the IRP analysis, to a proposed amount of \$21.
20 The program target participation ramp rate has also been
21 revised from that included in the IRP analysis. For the IRP
22 analysis, a ramp rate of 8,000 customers per year for five
23 years was assumed. For the current program design, a ramp
24 rate of 2,000 customers per year for the first two years,
25 increasing to 12,000 customers in the remaining three years,

1 has been assumed. Under both the IRP assumption and the
2 current program design, the program is intended to be fully
3 installed within five years.

4 Q. Do the program design changes you have
5 described affect the overall cost-effectiveness of the
6 program?

7 A. No. The evaluation of the Pilot Program
8 revealed that by operating the program on days with
9 temperatures above 95 degrees Fahrenheit, the Company could
10 expect to receive a 1.11 kilowatt load reduction per
11 participant. Based on the evaluation findings, the analysis
12 was updated to include a reduction of 1.11 kilowatts per
13 participant, rather than the 1.0 kilowatt assumed in the IRP
14 analysis. Overall, the adjustments to the 30-year program
15 design and analysis assumptions resulted in a Utility Cost
16 benefit/cost ratio of 1.42 for this program compared to a
17 ratio of 1.29 resulting from the IRP analysis, which
18 indicates that the program remains cost-effective.

19 Q. Please describe the purpose of the Irrigation
20 Peak Clipping program.

21 A. The Irrigation Peak Clipping program is
22 designed to provide a temporary reduction in demand by
23 turning off irrigation equipment with the use of a timer
24 during the summer months of June, July, and August.
25 Customers who participate in the program will receive a

1 monthly bill credit paid on the basis of their monthly
2 billing demand.

3 Q. Who is eligible to participate in this
4 program?

5 A. Agricultural irrigation customers taking
6 service under Schedule 24 with pumps over 100 horsepower
7 will be eligible to participate in this program.

8 Q. Please share the results of the cost-
9 effectiveness analysis results for the Irrigation Peak
10 Clipping program.

11 A. The 30-year nominally levelized Total
12 Resource Cost of the Irrigation Peak Clipping program is
13 \$4.22 per peak kilowatt per month. In comparison to other
14 demand-side and supply-side resources selected by the IRP
15 analysis, this program is shown to be a low cost capacity
16 resource, as is illustrated by Figure 13 in Exhibit 8. The
17 analysis yielded a 30-year program Utility Cost benefit/cost
18 ratio of 1.40 for this program.

19 Q. Has the design and/or program goals of the
20 Irrigation Peak Clipping program changed significantly from
21 the program analyzed through the IRP process.

22 A. Yes. During the summer of 2004, the Company
23 operated the Irrigation Peak Clipping Pilot Program. On
24 November 1, 2004, the Company filed an application with the
25 Commission requesting authorization to operate a full

1 Irrigation Peak Clipping program. The IRP analysis of the
2 Irrigation Peak Clipping program assumed each participant's
3 pump would be interrupted once a week during the summer
4 months of June, July, and August. The incentive payment per
5 kilowatt of monthly billing demand was set at \$1.75 per
6 month in the IRP analysis. Based on the Irrigation Peak
7 Clipping Pilot Program, the current program design has been
8 modified to provide customers the option to choose to be
9 interrupted one, two, or three times per week. The proposed
10 incentives included in the Company's November 1 filing are
11 \$2.01 per kilowatt of billing demand for customers selecting
12 to be interrupted once per week, \$ \$2.51 per kilowatt for
13 customers selecting to be interrupted twice per week, and
14 \$2.76 per kilowatt for customers selecting to be interrupted
15 three times per week.

16 Q. Is the cost-effectiveness of the modified
17 program substantially different from the program analyzed
18 through the IRP process?

19 A. No. The Irrigation Peak Clipping program, as
20 currently designed, is shown to be cost-effective using the
21 same analysis methods used in the IRP analysis. The inputs
22 for the updated analysis were modified based upon the
23 results of the Irrigation Peak Clipping Pilot program
24 evaluation findings. The findings revealed that the actual
25 average load reduction per participant was approximately 50%

1 of the customer's monthly billing demand, instead of the 80%
2 assumed in the IRP analysis. The evaluation findings along
3 with the program design changes were incorporated into the
4 updated analysis, which produced a Utility Cost benefit/cost
5 ratio of 1.36, only a small change from the ratio of 1.40,
6 which resulted from the IRP analysis. The relatively small
7 change in the benefit/cost ratio can be attributed to the
8 offsetting effect between the increase in the number of days
9 during a week the participant can be interrupted and the
10 decrease in the actual load reduction per participant,
11 coupled with the increase in the incentive payment amount.

12 Q. Please describe Idaho Power Company's other
13 customer focused DSM programs.

14 A. The Company currently operates two customer
15 focused DSM programs that were not analyzed through the IRP
16 process. The Company plans to continue operating both of
17 the programs, known as the Small Project and Education Fund
18 and the Distribution Efficiency Initiative.

19 Q. Please describe the purpose of the Small
20 Project and Education Fund.

21 A. Idaho Power, with the support of the EEAG,
22 established two funds in an effort to respond to research
23 requests, educational opportunities, and qualified small
24 projects that are not eligible for participation under other
25 programs. The Small Project Fund and the Education Fund

1 were initially funded with 2% of the current Idaho DSM Rider
2 funding which results in approximately \$54,000 annually for
3 each fund. The Company plans to continue making Rider funds
4 available for the Small Project and Education Fund on an
5 annual basis as detailed in Exhibit 5, column 3.

6 Q. Please describe the purpose of the
7 Distribution Efficiency Initiative.

8 A. The Distribution Efficiency Initiative, DEI,
9 encourages the operation of the distribution system at a
10 lower average voltage, when possible, to reduce consumption
11 of various end-use loads. This research project, developed
12 by the Alliance, involves multiple utilities and
13 technologies to evaluate the cost effectiveness of different
14 approaches to lowering average voltage. This project will
15 also assess the potential effects of this effort by
16 quantifying the achievable energy savings and demand
17 reduction. The Company has identified program costs of
18 \$100,000 per year for 2005 and 2006 as detailed on Exhibit
19 5, column 4.

20 Q. Does the Company plan to implement any other
21 customer focused programs?

22 A. Yes. The Company plans to implement two new
23 customer focused programs for the existing commercial and
24 residential sectors. The new commercial and residential
25 programs were analyzed and shown to be cost-effective during

1 the IRP process; however, they were not selected to be
2 included in the final IRP resource portfolio. Exhibit 9
3 shows how these programs, referred to as Commercial
4 Efficiency (Existing Construction) and Residential
5 Efficiency (Existing Construction), ranked compared to the
6 other DSM programs analyzed in the IRP in terms of their
7 Total Resource Costs, net power supply benefits, and
8 benefit/cost ratios.

9 Q. Why were the Commercial Efficiency (Existing
10 Construction) and Residential Efficiency (Existing
11 Construction) programs not selected to be included in the
12 Company's final IRP resource portfolio?

13 A. The Commercial Efficiency (Existing
14 Construction) and Residential Efficiency (Existing
15 Construction) programs were found to be cost-effective
16 during the IRP analysis; however, the two programs were not
17 selected for the final resource portfolio. During the IRP
18 process, it was decided that it would not be feasible from
19 an operational perspective to ramp-up six, resource size,
20 energy efficiency programs along with the two demand
21 response programs within a year's time. The decision was
22 made to include the Commercial and Residential Efficiency
23 (New Construction) programs in the selected IRP portfolio in
24 order to capture lost opportunity savings, while also
25 establishing smaller program offerings within the

1 residential and commercial customer classes. In addition,
2 the Commercial and Residential Efficiency (New Construction)
3 programs had the lowest 30-year benefit/cost ratios of the
4 six energy efficiency programs analyzed, indicating that
5 although they were cost-effective, they were not as cost-
6 effective as the four programs selected for the final
7 portfolio. The rankings for these two programs are shown on
8 Exhibit 9. By offering a limited rollout of the Residential
9 and Commercial (Existing Construction) programs in 2006, the
10 Company plans to gain a better understanding of the energy
11 efficiency potential of these programs that may serve as the
12 basis for the design of larger, resource-sized programs in
13 the future.

14 Q. Please describe the purpose of the
15 Residential Efficiency (Existing Construction) program.

16 A. The Residential Efficiency (Existing
17 Construction) program is designed to reduce the peak demand
18 and energy consumption of residential customers taking
19 service under Schedule 01. Although a firm program design
20 has not been determined, initial assumptions include payment
21 of direct incentives for modifications to existing single-
22 family homes, multifamily homes or manufactured homes.
23 Incentives will be based on kilowatt or kilowatt-hour
24 savings. Marketing and education will be a large component
25 of this program. Exhibit 7, page 6 describes this program

1 in detail.

2 Q. Please describe the purpose of the Commercial
3 Efficiency (Existing Construction) program.

4 A. The Commercial Efficiency (Existing
5 Construction) program is designed to reduce the peak demand
6 and energy consumption of commercial customers taking
7 service under Schedules 7 and 9. Although a firm program
8 design has not been determined, initial assumptions include
9 payment of direct incentives for modifications to commercial
10 customers categorized in 11 different building types
11 including retail, small offices and hospitals. Incentives
12 will be based on kilowatt or kilowatt-hour savings. Exhibit
13 7, page 4 describes this program in detail.

14 Q. Would you briefly describe the goal of the
15 Alliance?

16 A. Idaho Power addresses market transformation
17 in its service territory by being a member of the Alliance
18 and working to coordinate Alliance activities in Idaho. The
19 Alliance is a regional group whose mission is to catalyze
20 the Northwest marketplace to embrace energy-efficient
21 products and services.

22 Q. Idaho Power's current contract with the
23 Alliance ends on December 31, 2004. Has the Company elected
24 to participate in the Alliance in the future?

25 A. Yes. The Company has signed an agreement with

1 the Alliance for the period 2005-2009. A provision in the
2 agreement allows the Company to cancel its participation in
3 the Alliance if recovery of the Alliance funding is not
4 authorized by the Commission in a manner acceptable to the
5 Company. The Company's 2005-2009 agreement with the Alliance
6 is included as Exhibit 11.

7 Q. How has the Company's participation in the
8 Alliance been funded in the past?

9 A. Funding for the company's participation in
10 the Alliance was authorized through 2004 by Order No. 28333
11 in Case No. IPC-E-99-13. Through this Order, the Commission
12 authorized the use of revenue sharing funds to offset the
13 annual payments to the Alliance through 2004. The annual
14 contribution level for Idaho Power has been set at 6.39% of
15 the total Alliance budget, or \$1.3 million, and is based
16 upon the Company's percentage of Pacific Northwest retail
17 energy sales. Idaho's share of the \$1.3 million payment
18 amount is 95.5%. Currently, the Company has accumulated a
19 credit balance of approximately \$1.9 million in its Alliance
20 funding account. The Company recommends that the excess
21 dollars be used to fund the first two quarters of the
22 Company's 2005 funding commitment to the Alliance and that
23 the remaining funds be spread equally across the remaining
24 contract years of 2006-2009.

25 Q. What is the annual funding amount required to

1 support the Company's participation in the Alliance?

2 A. The annual Alliance funding amounts over the
3 next five years are detailed in column 7 on Exhibit 5.
4 These funding amounts reflect the net amount after the
5 application of the \$1.9 million credit.

6 Q. Has the Company explored the cost-
7 effectiveness of funding the Alliance activities?

8 A. In 2003, after six years of existence, the
9 Alliance initiated a retrospective evaluation to determine
10 whether it had transformed enough markets to justify the
11 costs of the Alliance. An ad hoc committee that included
12 members both internal and external to the organization led
13 the retrospective. Two primary findings of the study were
14 that the Alliance has been successful at transforming, or
15 contributing to the transformation of, markets and that the
16 benefits of the Alliance have exceeded costs. The study
17 concluded that the regional approach of the Alliance is an
18 asset and even greater leverage in program implementation
19 can be gained in the future. It is estimated that the
20 overall energy savings attributable to the Alliance efforts
21 has come at a cost of approximately \$0.01 per kilowatt-hour.
22 The Alliance estimates Idaho Power's share of the cumulative
23 energy savings attributable to its efforts was approximately
24 8.5 average megawatts by 2003.

25 Q. The Company has identified costs for DSM

1 research and studies in its overall plan. What are the
2 types of DSM studies and research the Company plans to
3 undertake?

4 A. The Company plans to conduct research and
5 studies in order to continue to effectively manage and grow
6 its DSM operations. These studies and research may include
7 DSM assessments, customer characteristic surveys, and
8 participation in regional studies. Information provided
9 through these studies and research will serve as a basis for
10 enhancements to existing DSM programs and the development of
11 other potential DSM resources. In the past, the results of
12 similar research and studies have been presented to the EEAG
13 in order to provide a solid foundation of information to aid
14 the group in providing valued input. For example, the Idaho
15 Power Demand-Side Management Peak Reduction Assessment
16 prepared by Mike Rufo at Quantum Consulting, Inc. and Rich
17 Barnes of Kema-Xenergy, Inc. was completed in 2003. This
18 assessment was presented to the EEAG and served as the basis
19 for the design of four of the DSM programs included in the
20 2004 IRP. The Company has identified \$100,000 per year for
21 studies and research. Exhibit 5, column 2 details the
22 estimated annual cost associated with studies and research.

23 Q. Are the costs associated with the evaluation
24 of the various DSM programs categorized as "DSM studies and
25 research"?

1 A. No. The costs associated with the evaluation
2 of individual DSM programs are included in the total costs
3 for each individual program.

4 Q. You have identified "DSM departmental
5 administration" as a main DSM cost category. What
6 administrative costs are included in this category?

7 A. DSM departmental administration costs will
8 include various incremental overhead costs related to the
9 operation of the DSM efforts funded through the Rider that
10 are not directly attributable to a specific DSM program.
11 These departmental administration costs may include, but are
12 not limited to labor costs, office supplies and equipment,
13 DSM database support, and travel. Departmental
14 administration costs are expected to average approximately
15 \$290,000 annually over the next five years. Exhibit 5,
16 column 1 details the annual DSM departmental administration
17 costs.

18 Q. Does this conclude your testimony?

19 A. Yes, it does.