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**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**

<b>IN THE MATTER OF THE</b>	)	
<b>APPLICATION OF ROCKY</b>	)	<b>CASE NO. PAC-E-07-05</b>
<b>MOUNTAIN POWER FOR APPROVAL</b>	)	
<b>OF CHANGES TO ITS ELECTRIC</b>	)	<b>Rebuttal Testimony</b>
<b>SERVICE SCHEDULES</b>	)	<b>of Gregory N. Duvall</b>

**ROCKY MOUNTAIN POWER**

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**CASE NO. PAC-E-07-05**

**October 2007**

1 **Q. Please state your name, business address and present position with the**  
2 **Company (also referred to as Rocky Mountain Power).**

3 A. My name is Gregory N. Duvall. My business address is 825 NE Multnomah, Suite  
4 600, Portland, Oregon, 97232. My present position is Director, Integrated  
5 Resource Planning and Regulatory Strategy.

6 **Q. How long have you been in your present position?**

7 A. I have been in my present position since December 2005.

8 **Q. Please describe your education and business experience.**

9 A. I received a degree in Mathematics from the University of Washington in 1976  
10 and a Masters of Business Administration from the University of Portland in  
11 1979. I was first employed by Pacific Power in 1976 and have held various  
12 positions in resource and transmission planning, regulation, resource acquisitions  
13 and trading. From 1997 through 2000 I lived in Australia where I managed the  
14 Energy Trading Department for Powercor, a PacifiCorp subsidiary at that time.  
15 After returning to Portland, I was involved in direct access issues in Oregon, was  
16 responsible for directing the analytical effort for the Multi-State Process ("MSP"),  
17 and currently direct the work of the integrated resource planning group, the load  
18 forecasting group, and the market assessment group in PacifiCorp Energy. Both  
19 Rocky Mountain Power and PacifiCorp Energy are divisions of PacifiCorp (the  
20 "Company").

21 **Purpose and Summary of Testimony**

22 **Q. What is the purpose of your testimony?**

23 A. The purpose of my testimony is to respond to issues raised in the pre-filed direct

1 testimony of the Commission Staff and the Idaho Irrigation Pumpers Association  
2 (“IIPA”) regarding the Company’s irrigation load control program in Idaho.  
3 Specifically, I will address the proper inter-jurisdictional allocation treatment of  
4 program costs and the appropriate value of incentives paid to irrigation customers  
5 in exchange for participation in this program. I am adopting the Supplemental  
6 Testimony of Company Witness Mr. Mark T. Widmer on issues relating to the  
7 irrigation load control program.

8 **Q. Please summarize your testimony.**

9 **A.** My testimony establishes the following:

10 **Inter-jurisdictional Cost Allocation**

- 11 • Situs assignment of the irrigation load control program credit is required  
12 under the Revised Protocol.
- 13 • Situs assignment provides over \$1 million in reduced revenue requirement to  
14 Idaho.
- 15 • Staff’s claim that the Revised Protocol did not address Class 1 DSM load  
16 control based on “loosely defined” language is incorrect and has no basis.
- 17 • The Idaho irrigation load control program is significantly different than the  
18 Monsanto contract in that it does not provide ancillary services, it is not  
19 contractually as firm, it is not separately metered, and it is integrated into the  
20 local Idaho distribution system.
- 21 • The proposal of Mr. Bryan Lanspery and Mr. Anthony Yankel to allocate the  
22 Idaho irrigation credit system-wide double counts the benefits of the  
23 interruptions and is inconsistent with the treatment of Monsanto in that it does

1 not adjust loads as if the curtailment had not taken place. In addition, it is  
2 inconsistent as it does not propose the same treatment for Class 1 DSM  
3 programs in other states.

#### 4 **Product Valuation**

- 5 • The current value ascribed to the scheduled firm irrigation load control  
6 program is \$27 per kilowatt-year which is inclusive of a customer incentive of  
7 \$11.19 per kilowatt-year.
- 8 • The recently completed potential study conducted by Quantec identified  
9 demand-side resource availability, type, location and cost. The report did not  
10 determine avoided cost as alleged by Mr. Yankel.
- 11 • Mr. Yankel's contention that the Quantec study identified \$98 per kilowatt-  
12 year as the avoided cost for the Idaho irrigation load control program is a  
13 gross misrepresentation of the report.
- 14 • The \$98 per kilowatt-year value was used by Quantec as a screening  
15 mechanism to determine demand-side resource availability, type, location, and  
16 cost, and was never intended to represent an avoided cost for Idaho irrigation  
17 load control.

#### 18 **Recommendations**

19 **Q. What is the Company's recommendation regarding the inter-jurisdictional**  
20 **allocation of the irrigation load control program credit?**

21 A. The Company recommends that the Commission continue situs assignment of the  
22 irrigation load control program credit as dictated by the Revised Protocol. To  
23 respond to the change in allocation approaches suggested by Staff and IIPA, the

1 Company recommends that the Commission order the parties to take this issue to  
2 the Multi-State Process Standing Committee. A more thorough description and  
3 the rationale for my recommendations are provided below.

4 **Q. What is the Company's recommendation regarding the level of the irrigation**  
5 **load control program credit?**

6 A. The Company recommends that the Commission not adjust the credit at \$11.19  
7 per kilowatt-year for the scheduled firm product (Schedule 72) in this rate case.  
8 Moreover, any change made to the price would need to be reflected in the  
9 Company's revenue requirement in this case. The Company expects to continue  
10 the scheduled firm product as well as the dispatchable program launched in 2007.  
11 The Company will make a separate filing with the Commission before the end of  
12 2007 to determine the load control incentive credit level and operating criteria for  
13 both products in the 2008 season. A more thorough description and the rationale  
14 for my recommendations are provided below.

15 **Inter-Jurisdictional Cost Allocation**

16 **Q. Please describe the irrigation load control demand side management**  
17 **program offered by the Company in Idaho.**

18 A. Since 2003 the Company has offered an optional irrigation load control program,  
19 Schedule 72, which allows customers to agree to restrict, through the use of  
20 timers, the use of electricity during peak hours in exchange for a dollar credit on  
21 their bill. Under this program, load control is scheduled in advance for the entire  
22 irrigation season and executed automatically according to the prescribed schedule.  
23 In 2007, the Company launched a pilot program utilizing new technology that

1 allows the Company to control participating load on a day-ahead basis, subject to  
2 certain constraints. The pilot program was for the 2007 irrigation season, and the  
3 results of its operation are currently being analyzed. A report of the pilot  
4 program's outcome and plans regarding the program's expected operation in 2008  
5 will be provided to the Commission later this year.

6 **Q. Do you agree with the proposal advocated by Staff witness Mr. Lanspery and**  
7 **IIPA witness Mr. Yankel that the incentive credits paid to irrigation**  
8 **customers who participate in the load control demand side management**  
9 **program should be system allocated?**

10 A. No. Their proposals violate the Revised Protocol and double count the benefits of  
11 the load control incentive credit. Both witnesses claim that the payments made to  
12 Idaho irrigation customers as an incentive to participate in the load control  
13 demand side management program should be allocated system wide and paid for  
14 by customers in all of the Company's jurisdictions. Yet neither witness adds the  
15 irrigation loads back into the inter-jurisdictional allocation factors, thereby  
16 enjoying the benefit of a lower allocation of system costs, and only paying a  
17 fraction of the incentive credit. Situs treatment of the load control incentive credit  
18 is required under the Revised Protocol allocation methodology approved and  
19 implemented by this Commission, and provides a reasonable matching of the cost  
20 and benefits related to load management within a particular state. Indeed, Mr.  
21 Yankel acknowledges at pages 6 and 7 of his testimony that his proposal requires  
22 the Commission to "ignore" the Revised Protocol:

23 "I recommend that for purposes of this case that this portion of the  
24 Revised Protocol be ignored and a more appropriate "system" treatment of

1           these costs be utilized. Over the long-term, this defect in the Revised  
2           Protocol should be corrected, such that it reflects the treatment of the  
3           benefit of the Irrigation Load Curtailment program in a manner similar to  
4           the treatment of the benefit of the Monsanto interruptible program.”

5   **Q.    On Page 7 of his testimony, Mr. Yankel states that the Revised Protocol has**  
6   **never been used to establish rates in Idaho. Is this true?**

7   A.    No. The Company has now filed three rate adjustments since the Commission  
8        approved the Revised Protocol. Case No. PAC-E-05-01, a general rate case filed  
9        by the Company in January 2005, was settled by way of a stipulation approved by  
10       the Commission in Order No. 29833. All parties signing the settlement  
11       agreement, including the Commission Staff and IIPA, stipulated that the Revised  
12       Protocol was then implemented for setting rates in Idaho. In each of these cases,  
13       the Company’s filing allocated the irrigation load control program on a situs  
14       basis—without objection from any party.

15   **Q.    What facilitated the introduction of Idaho’s current irrigation load**  
16   **management program?**

17   A.    Two factors led to the development of the Company’s program: opportunity and a  
18        Company commitment implemented through a Commission order. The  
19        opportunity is created by Idaho having the greatest irrigation energy requirements  
20        of any of the six state territories served by PacifiCorp, which is approximately 18  
21        percent of all the energy consumed in Idaho. The vast majority of the energy  
22        consumed by irrigators occurs within a six month period each year with the  
23        greatest system impacts occurring in July and August. The timing and magnitude  
24        of the irrigation loads present the opportunity for acquisition of a demand-side

1 resource.

2 The second factor leading to the current Idaho irrigation program was a  
3 Company commitment whereby the Company worked with irrigators to develop  
4 an optional load control program for the 2003 irrigation season. Since program  
5 approval and implementation in 2003 in Commission Order No. 29034, the  
6 Company has continued working with irrigators and the Commission staff to  
7 evolve the program and increase program participation.

8 **Q. What is demand-side management (“DSM”)?**

9 A. Demand-side management refers to utility programs intended to affect the timing  
10 or amount of customer electricity use. These include conservation programs  
11 aimed at reducing the energy required to serve customer needs either through  
12 improved end-use efficiency or changes in behavior, and programs that shift  
13 electricity demand away from peak load hours, which in turn improves the  
14 efficiency of the system.

15 As a utility, PacifiCorp looks at demand-side resources as distributed  
16 resource acquisitions made possible through capturing and managing customer  
17 usage that can improve system efficiency. Opportunities for demand-side  
18 resource acquisitions differ by market sector, end-use equipment, load usage  
19 patterns, and jurisdiction, which led to the Company recently conducting a six-  
20 state demand-side management potential assessment to help identify demand-side  
21 resource availability, type, location, and cost.

22 **Q. Does Idaho’s irrigation load management program fall into this definition?**

23 A. Yes. The irrigation load control program’s primary objective is to improve the

1 management of Idaho irrigation loads through working with irrigators to reduce  
2 their contribution to system and local peak loads, shifting a portion of their  
3 demand to non-peak hours. As a result, costs are reduced reflecting more  
4 efficient use of resources and potential reduction in distribution investment.

5 **Q. Mr. Lanspery states that Idaho's irrigation load management program does**  
6 **not fall into the definition of Demand Side Management in the Revised**  
7 **Protocol. Do you agree?**

8 A. No. As one of the Company's lead participants in the Multi-State Process (the  
9 "MSP") and the Revised Protocol, I strongly disagree with Mr. Lanspery's  
10 conclusion. In the context of the MSP discussions and the Revised Protocol  
11 document, all classes of DSM were considered to be State Resources. One only  
12 needs to look at the Company's integrated resource plans or the Quantec potential  
13 study to understand what is considered to be DSM by the Company and its  
14 stakeholders. Class 1 DSM is fully dispatchable or scheduled firm load control  
15 programs, Class 2 is non-dispatchable, firm energy efficiency programs, Class 3 is  
16 price responsive programs, and Class 4 is customer education programs. They all  
17 fall under the category of Demand-Side Management Programs in the Revised  
18 Protocol and are therefore considered State Resources and their costs are assigned  
19 situs.

20 The sole basis of Mr. Lanspery's claim that load control programs,  
21 referred to as Class 1 DSM, are not DSM under the Revised Protocol is that DSM  
22 programs are "loosely defined" in the Revised Protocol. The exact wording  
23 contained in Appendix A of the Revised Protocol is:

1                   **“Demand-Side Management Programs”** means programs intended to  
2                   improve the efficiency of electricity use by PacifiCorp’s retail customers.

3                   Without any basis, Mr. Lanspery suggests that some programs like “See ya later  
4                   refrigerator” fit this definition, while others, such as the Idaho load control  
5                   program, do not. He gives no explanation for his claim, other than “loosely  
6                   defined” language. Rather than calling it “loose” language, I would characterize  
7                   it as a definition that is broad enough to capture all four classes of DSM. For  
8                   example, load control improves the efficiency of electricity used by PacifiCorp’s  
9                   retail customers at a system level. The most inefficient resources run at times of  
10                  highest load. By shifting load away from peak times, efficiency is improved.

11   **Q.    Is there additional support for situs allocation of the irrigation load control**  
12           **program under the Revised Protocol?**

13    A.    Yes. First, the understanding of what constitutes DSM under the Revised  
14           Protocol is evidenced by the treatment of Class 1 DSM under the Revised  
15           Protocol by other states: all assign it situs. Additionally, the MSP studies  
16           reflected situs treatment of Class 1 DSM program costs. Lastly, MSP legislative  
17           history indicates a clear policy decision to maintain situs assignment of the costs  
18           of all DSM programs on the basis that “the benefits from these programs, in the  
19           form of reduced consumption, [would be] reflected through time in each State’s  
20           Load-Based Dynamic Allocation Factors.”

21   **Q.    Is this irrigation program fundamentally the same as the Company’s**  
22           **agreement to purchase ancillary services from Monsanto?**

23    A.    No. Unlike the Monsanto contract, the irrigation load control program falls  
24           outside of the definition of “Special Contract with Ancillary Services,” described

1 in Appendices A and D of the Revised Protocol, for several reasons. First, unlike  
2 Monsanto, the irrigation program does not provide the Company with any  
3 ancillary services and is not available throughout the entire year. As described in  
4 detail by Company witness Mr. Paul H. Clements, the Company purchases three  
5 types of products from Monsanto: economic curtailment, operating reserves, and  
6 system integrity. All are provided to the Company pursuant to the terms of a  
7 negotiated contract over a specified number of years and provide the Company  
8 the option of curtailing Monsanto load for economic or operational reasons  
9 throughout the year, not just during the irrigation season. Otherwise, Monsanto is  
10 a high load factor customer taking service at transmission level voltage whose  
11 load does not pose significant operational challenges to the Company's  
12 distribution system.

13 Second, irrigation load control, unlike Monsanto, is not a contractually  
14 firm resource that can be counted on for multiple years or even one irrigation  
15 season. The purpose of the irrigation load control program is to manage a  
16 significant summer peak load by shifting usage away from on-peak periods.  
17 Participation in the program is determined not by a negotiated contract, but by  
18 each individual customer electing to participate at the beginning of each irrigation  
19 season under a tariffed offer with no commitment for participating in any  
20 subsequent irrigation season. Furthermore, if any customer elects to remove  
21 themselves from participation during the irrigation season, they may do so with  
22 no other penalty other than reimbursing the Company for costs associated with  
23 participation in the program, not including replacement power.

1 Third, irrigation load control, unlike Monsanto, is not separately metered.  
2 This makes it difficult to be as precise in valuing the irrigation load control  
3 discount as it is for Monsanto.

4 Finally, irrigation load control, unlike Monsanto, has the potential to avoid  
5 local distribution costs that are assigned directly to the state of Idaho. This  
6 provides one example of a basis to situs assign the costs of the program which is  
7 not the case for Monsanto.

8 When the Commission initially approved the irrigation load control  
9 program, it expressly recognized that it was a DSM program, not a purchase  
10 contract. See Commission Order No. 29034 (The Company's irrigation load  
11 control program "is essentially a time-of-use proposal and not a curtailment or  
12 buy-out proposal.")

13 **Q. Is it true that the cost of the program outweighs any benefits received in**  
14 **Idaho based on reduced load as purported by Mr. Yankel on pages 6 and 7 of**  
15 **his testimony?**

16 **A.** No. If all impacts of this program are removed from this case, the Idaho revenue  
17 requirement would increase over \$1 million. To properly remove the program  
18 from this case, the cost for incentives must be removed and the peak demand used  
19 for jurisdictional allocation must be adjusted (increased) to remove the effects of  
20 shifted load, increasing the total embedded costs allocated to Idaho.

21 The same load adjustment is required if the Idaho irrigation load control  
22 program is to be treated similar to the negotiated contract between the Company  
23 and Monsanto, i.e. system allocated. System allocation of the Idaho irrigation

1 load control program would also increase Idaho revenue requirement over \$1  
2 million.

3 **Q. If the Commission concludes the incentive costs should be system allocated,**  
4 **does the Company agree with the adjustments proposed by Mr. Lanspery**  
5 **and Mr. Yankel?**

6 A. No. Their arguments indicate that system treatment would be merited because the  
7 product is similar to Monsanto's curtailment, and that it should be similarly  
8 system allocated. However, while Mr. Yankel admits the cost of service loads  
9 should be increased to reflect the irrigators as having been served as full  
10 requirements customers, both he and Mr. Lanspery neglect to increase the peak  
11 load used for inter-jurisdictional cost allocation purposes. Consistent with the  
12 Revised Protocol allocation methodology, because the Company's purchase of  
13 Monsanto curtailment is system-allocated, Monsanto's load is adjusted for both  
14 jurisdictional and class cost allocation as if the curtailment had not taken place.

15 **Q. With the adjustment to allocation factors as described above, would the**  
16 **Company agree to the adjustments proposed by Mr. Lanspery and Mr.**  
17 **Yankel?**

18 A. No. If load control programs (DSM Class 1) are deemed to be system resources,  
19 then all states' programs should be treated consistently and be system allocated.  
20 Neither Mr. Lanspery nor Mr. Yankel made this adjustment. Currently the  
21 Company offers both a Cool Keeper air conditioning load control program and  
22 irrigation load control program in Utah. The Utah Commission interprets DSM  
23 Class 1 load control programs as State Resources under the Revised Protocol and

1 assigns all costs and incentives of the Utah Cool Keeper and irrigation load  
2 control programs situs to the state of Utah. In addition, the cost of any future  
3 programs implemented in other states would necessarily be system allocated and  
4 partially charged to Idaho ratepayers.

5 **Q. Are there other possible consequences if these costs are system-allocated?**

6 A. Yes. The Company believes these proposals are a deviation from the Revised  
7 Protocol and believes other states would agree with the Company. This would  
8 likely raise questions about the allocation of all DSM, since arguably if Class 1  
9 DSM is allocated as a system resource, then arguably all DSM should likewise be  
10 allocated as a system resource. If deviation from the approved methodology is  
11 needed, the issue is appropriately addressed in committees established for just this  
12 purpose. Ms. Carlock mentions that other issues affecting states and cost  
13 allocation are currently under consideration at the MSP Standing Committee and  
14 workgroup. To respond to the allocation issues raised by Staff and the IIPA, the  
15 Company recommends that the Commission order the parties to take this issue to  
16 the Multi-State Process Standing Committee.

17 **Product Valuation**

18 **Q. What is the cost of the Idaho irrigation load control program?**

19 A. The total cost of providing the irrigation load control program varies year to year  
20 depending on participation, dispatch option selected, field and equipment costs.  
21 The average total cost for the 2006 scheduled firm program was approximately  
22 \$27 per kilowatt-year, including all operational and administrative costs and an  
23 \$11.19 per kilowatt-year credit to participating customers. Because this general

1 rate case is based on a historical test year, the credit to be recovered in rates is  
2 based on the scheduled firm program costs from calendar year 2006 and is set at  
3 \$11.19 per kilowatt-year.

4 **Q. What's the value of the program to PacifiCorp?**

5 A. The value that can best be ascribed to the scheduled firm program based on  
6 current modeling available is \$27 per kilowatt-year. The historical program cost  
7 of \$27 per kilowatt-year (incentive and delivery costs inclusive) was modeled  
8 within the 2007 IRP against supply-side alternatives and was selected at this cost  
9 as a least cost alternative within the IRP base case economics.

10 **Q. Is there a difference in value to the Company between the traditional  
11 scheduled firm product and the new dispatchable product?**

12 A. It is possible that there is; however, the Company has not yet finalized its analysis  
13 that provides a value estimate for the pilot dispatchable program. As I will  
14 describe later in my testimony, generic DSM programs with varying  
15 characteristics and cost structures have been analyzed using the Company's IRP  
16 models. A fully dispatchable summer product that had costs higher than those of  
17 the Company's current scheduled firm program was accepted by the Company's  
18 IRP models.

19           Unfortunately, none of the modeled generic programs had the same  
20 characteristics and constraints as the Company's new dispatchable program, and  
21 as a result, the values derived from the studies cannot be directly ascribed to the  
22 Company's program. In addition, the dispatchable program has higher initial  
23 operational and administrative costs than the scheduled firm program, due mainly

1 to the change over of required equipment. The Company is committed to fairly  
2 valuing this program and is working to incorporate the results of the 2007 pilot  
3 program into a study that will allow the Company, IIPA, and this Commission to  
4 analyze the value of this program and set a price for the 2008 irrigation season.

5 **Q. Is Mr. Yankel correct that the recently released DSM potential assessment,**  
6 **developed by Quantec, indicates that capacity-focused programs on the east**  
7 **side of PacifiCorp's system would be cost effective if they cost less than \$98**  
8 **per kilowatt-year?**

9 A. No. Mr. Yankel misrepresents the numbers from the Quantec potential  
10 assessment study in his testimony. The Quantec study did not determine an  
11 avoided cost for DSM programs. The \$98 per kilowatt-year value referenced in  
12 the study was a gross estimate for the purpose of an initial screen for Class 1  
13 DSM programs, such that programs that exceeded that amount would not be  
14 considered any further. It has no implication as to the value of the Idaho  
15 irrigation load control program. The analysis was designed to have virtually no  
16 chance of constraining what might be cost-effective in the study's results ahead of  
17 the modeling of the products in PacifiCorp's next integrated resource plan update  
18 or planning process. Further evidence of this fact is that the \$98 per kilowatt-year  
19 value was used to screen all Class 1 DSM programs, regardless of their hours of  
20 availability, firmness, dispatch characteristics, size, and contractual firmness.

21 **Q. How was the \$98 per kilowatt-year value derived?**

22 A. During the 2007 integrated resource planning process, PacifiCorp had limited  
23 information on demand-side management resource potentials and costs from

1 which to derive comprehensive supply curves for demand-side resources. To  
2 address this information gap while the demand-side potential assessment was  
3 being completed, PacifiCorp commissioned Quantec to develop a generic sample  
4 set of capacity program potentials and their costs for the purpose of modeling  
5 them in a comparable manner to supply-side resources. The modeling of these  
6 generic sample resources and the results were the basis for arriving at the \$98 per  
7 kilowatt-year screening values.

8 **Q. What generic sample capacity resource programs were modeled in the 2007**  
9 **plan?**

10 A. Five Class 1 generic sample load management products were modeled within the  
11 2007 integrated resource plan. The generic sample products had varying dispatch  
12 characteristics, hours of availability, assumed costs, and they varied in size. The  
13 intent was to create specific supply curve data for each generic sample product  
14 between control areas (east or west) and under different economic assumptions  
15 regarding electricity prices. The five generic sample products modeled in the east  
16 were:

- 17 • A fully dispatchable winter product that could be dispatched within 10  
18 minutes or less and was available up to 87 hours annually. Program  
19 costs ranged from \$57-\$83 per kilowatt-year.
- 20 • A fully dispatchable summer product dispatchable within 10 minutes  
21 or less and available up to 87 hours each season. Program costs  
22 ranged from \$52-\$71 per kilowatt-year.

- 1                   • A fully dispatchable large commercial and industrial customer summer  
2                   product dispatchable within 10 minutes or less and available up to 87  
3                   hours each season. Program costs ranged from \$82-\$159 per kilowatt-  
4                   year.
- 5                   • A scheduled firm irrigation product (no dispatch capabilities) available  
6                   336 hours each season. Program costs ranged from \$27 to \$36 per  
7                   kilowatt-year.
- 8                   • A scheduled firm product (no dispatch capabilities) available 1,437  
9                   hours each season. Program costs ranged from \$115 to \$118 per  
10                  kilowatt-year (thermal energy storage).

11                  For modeling purposes, each of these generic sample products were assumed to  
12                  be available on a firm basis over the entire planning horizon.

13   **Q.    What generic sample resources were selected under the base case within the**  
14   **2007 integrated resource plan modeling?**

15   A.    In the east under the base case assumptions the model accepted the fully  
16   dispatchable summer product at an assumed cost of \$71 per kilowatt-year, the  
17   fully dispatchable commercial and industrial product at an assumed cost of \$82  
18   per kilowatt-year, and the scheduled firm irrigation product at an assumed cost of  
19   \$27 per kilowatt-year.

20   **Q.    Does the dispatchable irrigation program provide the same value to the**  
21   **Company as the dispatchable air conditioning program selected in the IRP?**

22   A.    No. It has less value to the Company since it offers fewer hours of interruption  
23   and requires a full days notice rather than the 10 minute notice required under the

1 air conditioning program and therefore can not be used to provide non-spinning  
2 reserves.

3 **Q. You said that scheduled firm irrigation programs with costs ranging from**  
4 **\$27 to \$36 per kilowatt-year were made available to the model, but only the**  
5 **\$27 per kilowatt-year programs were selected?**

6 A. That is correct. The higher cost scheduled firm irrigation programs were not  
7 selected in the high demand-side potential scenario under which it was modeled;  
8 however, the \$36 per kilowatt-year cost wasn't modeled within the base case set  
9 of assumptions which were used in the development of the preferred portfolio.

10 **Q. How were these results used to arrive at the \$98 per kilowatt value?**

11 A. The Company factored in the results of the modeling selections to arrive at the  
12 proxy value of \$98 per kilowatt-year as the preliminary economic screen within  
13 the study. The east side load management resources with certain dispatch  
14 characteristics and hours of availability were accepted by the model in the base  
15 case at a price of \$82 per kilowatt-year (summer focused commercial and  
16 industrial dispatchable product) but the next highest priced product (summer  
17 focused thermal energy storage) was rejected at a price of \$117 per kilowatt-year.  
18 Ignoring the differences in dispatch characteristics and hours of availability, and  
19 not having specific values for the products identified in the potential study, the  
20 Company averaged the \$82 and \$117 to come up with the \$98 per kilowatt-year.  
21 Based on the understanding of how the \$98 per kilowatt-year was derived and  
22 what it was intended to be used for, it should be clear that Mr. Yankel's  
23 characterization of the \$98 per kilowatt-year as the Company's avoided cost for

1 Idaho irrigation load control, or any other resource, is simply incorrect.

2 **Q. Are any of the values cited in the Quantec potential study applicable for**  
3 **purposes of determining the amount of credit that should be provided to**  
4 **customers under the Idaho irrigation load control program?**

5 A. No. As mentioned above, the values determined by using the integrated resource  
6 planning models were based on generic sample resources, and were intended for  
7 use in screening and planning. Even if one were to assume that the resource  
8 acquired under the Idaho irrigation load control were firm over the entire 20-year  
9 planning horizon, the highest value that could be ascribed to the program is \$27  
10 per kilowatt-year based on the IRP studies. None of the other costs cited in the  
11 Quantec study or in the Company's IRP are applicable to the Idaho irrigation load  
12 control program.

13 **Q. Was the purpose of the Quantec potential study to determine the avoided**  
14 **cost of DSM programs?**

15 A. No. Mr. Yankel has quoted the primary goal of the Quantec study on page 21 of  
16 his testimony. The goal of the study was to provide data to the Company on the  
17 magnitude, timing and cost of DSM resources, inclusive of Class 1, Class 2, Class  
18 3 and Class 4. Nowhere does Quantec state that one of their goals is to determine  
19 the avoided cost of DSM programs, nor were they asked to do so.

20 **Q. Mr. Yankel bases much of his analysis on the comparison of the level of**  
21 **program incentives and the size of the BPA credit passed on to the**  
22 **Company's irrigation customers. Is this comparison appropriate?**

23 A. No. The outcome of the BPA credit issue is uncertain. As described by Company

1 witness Mr. A. Richard Walje, the Company is conscious of the impact of the  
2 BPA credit on the irrigators and is doing all it can to restore a portion of this  
3 benefit. A remedy based on artificially raising the irrigation load control credit,  
4 and then allocating it away from Idaho customers in violation of the Revised  
5 Protocol is not the right solution. Following Mr. Yankel's proposal to its ultimate  
6 conclusion would result in about a \$16 million disallowance for shareholders if  
7 other jurisdictions did not agree with this proposed treatment of the irrigation load  
8 control credit, which could then lead to additional states deviating from the  
9 guidelines that have been established in the Revised Protocol and the MSP work  
10 groups. A more reasonable approach would be for the Commission to allow the  
11 Company to complete its analysis regarding an appropriate level of incentive  
12 credits and to order the parties to take the allocation issue up with the MSP  
13 Standing Committee and report back to the Commission as recommended by the  
14 Company.

15 **Q. Does this conclude your testimony?**

16 **A. Yes.**