



1 **Q. Please state your name, business address and present position with**  
2 **PacifiCorp (the Company).**

3 A. My name is Mark R. Tallman, my business address is 825 NE Multnomah, Suite  
4 600, Portland, Oregon 97232, and my present position is Managing Director of  
5 Trading & Origination, Commercial & Trading. My position is part of  
6 PacifiCorp's regulated merchant side.

7 **Q. How long have you been the Managing Director of Trading & Origination at**  
8 **PacifiCorp?**

9 A. I have been the Managing Director of Trading & Origination since September 12,  
10 2003. Prior to that date, I worked in the Origination Department, first as an  
11 Originator (beginning March 1995), then as the Manager of Origination  
12 (beginning January 1999), and finally as the Director of Origination (beginning  
13 September 2000).

14 **Q. What did you do before working in the wholesale side of PacifiCorp's**  
15 **business?**

16 A. I served in a variety of different roles in PacifiCorp's engineering organization  
17 and retail distribution organization, including five years as a District Manager. I  
18 have worked at PacifiCorp for more than 18 years.

19 **Q. Please describe your educational history.**

20 A. I have a Bachelor of Science degree in Electrical Engineering from Oregon State  
21 University and a Masters of Business Administration from City University. I am  
22 also a Registered Professional Engineer in the states of Oregon and Washington.

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

2 A. The purpose of my testimony is to provide information regarding the Company's  
3 acquisition of two long-term system resources: the West Valley lease agreement  
4 ("West Valley Lease") and the installation of three General Electric LM-600  
5 generation units at the Gadsby plant site (the "Gadsby Project"). My testimony  
6 will demonstrate that these resources were prudently acquired and explain to the  
7 Commission how these resources provide system-wide benefits to all of the  
8 Company's customers, including the Company's Washington customers.

9 **Q. Would you please summarize your testimony in this proceeding?**

10 A. My testimony will first describe PacifiCorp's need for additional resources.  
11 Because the West Valley Lease was acquired through a Request for Proposal  
12 ("RFP") solicitation, my testimony will next describe the RFP process. I will then  
13 discuss the West Valley Lease and the Gadsby Project.

14 For each resource, my testimony will discuss generally the reasonableness  
15 of the resource costs, consideration of alternatives, and the information provided  
16 to the Board of Directors. Finally, I discuss how these new resources have  
17 provided system-wide benefits, including a substantial savings in transmission  
18 expenses because the Company was able to reduce the amount of power imported  
19 from California and the desert Southwest into an area that is severely transmission  
20 constrained, thereby saving the Company's customers several million dollars by  
21 reducing net power costs.

1                   **PacifiCorp's Need for Additional Resources**

2   **Q.    Why were these additional resources acquired by PacifiCorp?**

3    A.    PacifiCorp's service territory is divided into East (Wyoming, Utah and Idaho) and  
4           West (Oregon, Washington, California) electrical control areas. PacifiCorp's East  
5           control area, which is summer peaking, has experienced consistent growth in  
6           recent years. As a result, there was a growing imbalance between summer peak  
7           load requirements and the resources to meet it. Prior to the construction of the  
8           Gadsby Project and the acquisition of the West Valley Lease, PacifiCorp projected  
9           a resource shortage in Utah of 439 MW in July 2002, increasing to 1,262 MW by  
10          July 2009. In particular, PacifiCorp projected a need for additional flexible  
11          generation resources to allow it to meet seasonal East-side peak demand.

12   **The RFP Process**

13   **Q.    Please provide a general description of the RFP process.**

14    A.    In September 2001, PacifiCorp issued an RFP soliciting bids for resources in  
15          excess of 25 MW and capable of delivery in or to its East control area beginning  
16          in the summer of 2002. Attached as Exhibit No. \_\_ (MRT-2) is a copy of  
17          PacifiCorp's RFP. The RFP was issued in response to projections that the  
18          Company would experience a shortage of resources. The Company's goal was to  
19          secure cost effective resources to meet its East-side capacity requirements.

1 **Q. What level of response did the RFP receive?**

2 A. The RFP generated 52 proposals from 27 different parties. The proposals varied  
3 widely in terms of the type of product offered and the date of availability of the  
4 resource.

5 **Q. What steps were taken to ensure an unbiased selection method?**

6 A. PacifiCorp took prudent and direct steps to ensure an unbiased evaluation of all  
7 proposals. For example, PacifiCorp's legal department "blinded" the proposals so  
8 that those evaluating them would not know the identity of the sponsoring  
9 company. Similarly, PacifiCorp hired a respected independent consultant to  
10 monitor and review the RFP process for non-discriminatory practices and fairness.

11 **Q. Please describe the initial evaluation process for the RFP responses.**

12 A. After an initial credit evaluation, the responses were separated into tiers based on  
13 their ability to meet the Company's short-term resource needs. For example, bids  
14 in the first tier had to be capable of providing firm supply during peak, or super-  
15 peak hours, commencing the third quarter of 2002 and with a point of delivery in  
16 or to PacifiCorp's eastern control area. The Company then asked a short-list of  
17 bidders, those with bids in the first two tiers, to refresh their bids and bid pricing  
18 specifically for the summer months during 2002 - 2004.

19 **Q. Why did PacifiCorp focus on short-term resources?**

20 A. During the RFP time period, PacifiCorp was actively engaged in updating its  
21 Integrated Resource Plan ("IRP"), which was due to be completed in  
22 December 2002. As a result, long-term supply proposals were held for  
23 consideration pursuant to the IRP process.

1 **Q. Please describe the evaluation process for the short-list proposals.**

2 A. PacifiCorp utilized a sophisticated structuring model and accepted industry  
3 practices to quantitatively evaluate the net present value based upon the delivery  
4 characteristics of the proposals under consideration. Each bid was evaluated  
5 based on the following criteria: (1) net value (PV\$) against then current market;  
6 (2) net value (PV\$) per 100 MW of capacity against the then current market; (3)  
7 dispatch flexibility (day of calls, day ahead calls, take-or-pay); (4) point of  
8 delivery to PacifiCorp's system; (5) delivery period (shaped June through  
9 September, annual); (6) capacity delivered (MW); (7) term (3 years, 10 years,  
10 other); and (8) firmness (firm, unit contingent). Exhibit No.\_\_(MRT-3)  
11 summarizes the results of these offers.

12 **Q. Please briefly summarize the transactions that resulted from the RFP**  
13 **process.**

14 A. Based on its quantitative analysis of the proposals, PacifiCorp negotiated with  
15 three counterparties to consummate the following three transactions: (1) the 200  
16 MW West Valley lease agreement with West Valley Leasing Company LLC (a  
17 subsidiary of PacifiCorp Power Marketing); (2) a 100 MW day-ahead call option  
18 for delivery of physical power; and (3) a 100 MW day-ahead call option for  
19 delivery of physical power.

20 **Consideration of the Alternatives**

21 **Q. What other alternatives to the RFP products did the Company consider?**

22 A. Going into the RFP, the Company had projected a summer short position for its  
23 eastern control area of 439 MW in the summer of 2002, increasing to 710 MW by

1 the summer of 2004. The Company's alternatives were to try to fill the position  
2 with one-size-fits-all power products from the forward markets or to seek out  
3 flexible power products from the RFP. Because standardized forward contracts  
4 would not have addressed the need for flexible generation resources to meet peak  
5 summer demand, PacifiCorp issued its RFP in September 2001.

6 **Q. PacifiCorp rejected several other offers in the RFP. Why were those other**  
7 **offers rejected?**

8 A. The Company rejected the other offers because they failed to provide the  
9 necessary flexibility the Company was seeking, offered products that did not meet  
10 the Company's needs, or were priced out of the market. Page two of Exhibit  
11 No.\_\_(MRT-3) explains the reasons why certain offers were rejected.

12 **Q. Did PacifiCorp make any comparison of the final structure of the RFP**  
13 **product with the next best alternative from the forward markets?**

14 A. Yes. As part of the RFP process, the Company calculated an expected net benefit  
15 by comparing the final structure of the RFP product against a comparable forward  
16 market product.

#### 17 **Description of the West Valley Lease**

18 **Q. Please provide a general description of the West Valley Lease.**

19 A. The West Valley Lease is a 15-year operating lease between PacifiCorp and West  
20 Valley Leasing Company, LLC, for the output of a 200 MW gas-fired, simple-  
21 cycle combustion turbine electric generating station. The generating station  
22 consists of five nominal 40 MW units in West Valley, Utah near Salt Lake City  
23 ("West Valley Project"). Exhibit No.\_\_(MRT-4) is a copy of the West Valley

1 Lease. West Valley Leasing Company, LLC, is a subsidiary of PPM Energy who,  
2 at the time, was doing business as PacifiCorp Power Marketing (“PPM”). The  
3 West Valley Project’s units became operational during the summer of 2002. The  
4 West Valley Project has access to natural gas from both the Questar and Kern  
5 River pipelines.

6 **Q. Please describe the lease terms.**

7 A. Under the lease, PacifiCorp has the total responsibility for operation and  
8 maintenance of the West Valley Project, provides all of the fuel used by the West  
9 Valley Project, and has the exclusive right to dispatch and receive all of the  
10 generation from the West Valley Project, as well as all of the use of the West  
11 Valley Project to produce ancillary services, such as operating reserves. The lease  
12 requires PacifiCorp to make quarterly payments of \$749,150 for each of the five  
13 units (\$14,983,000/year).

14 **Q. Does the lease give PacifiCorp an option to purchase the West Valley Project  
15 or terminate the lease?**

16 A. Yes, the lease is very flexible. PacifiCorp has two options (vesting in years three  
17 and six) to either terminate the lease or purchase the West Valley Project. If  
18 PacifiCorp elects to exercise either purchase option, the fixed purchase price  
19 (\$138 million or \$123 million, respectively) were, at the time, estimated to be near  
20 the then-depreciated book cost for the West Valley Project at the time of the  
21 purchase. These options allow PacifiCorp to hedge against changes in market  
22 prices and load forecasts in the coming years and then decide which of three



1 paths—continuation of the lease, termination of the lease or outright purchase of  
2 the West Valley Project—is the best economic choice.

3 **Q. Please describe in more detail how the West Valley Lease addresses the**  
4 **Company’s need for additional East-side on-peak resources and provides**  
5 **system benefits.**

6 A. The West Valley Lease gives PacifiCorp full discretion to dispatch and adjust the  
7 output of the West Valley Project. The West Valley Project has quick-start (fast-  
8 responding) units that can be deployed as necessary in response to changing load,  
9 generation, or transmission conditions on the system. Similarly, the West Valley  
10 Project can be dispatched based on changing market conditions to either displace  
11 higher cost resources or to sell excess power into the wholesale markets.

12 In addition, the West Valley Project provides system benefits by  
13 expanding resource diversity, increasing voltage support and reliability, and  
14 reducing the risk of incurring unexpectedly high costs associated with wholesale  
15 market purchases. This level of flexibility is important to the Company because it  
16 enhances the ability of the East control area to recover from the unexpected loss  
17 of transmission import capability or the unexpected loss of other generation units.  
18 Lastly, because the West Valley Project is located in the Company’s major load  
19 center east of the Cascade Mountains, it avoids transmission costs and constraints  
20 historically incurred in meeting summer peak load in the East control area. In  
21 summary, the West Valley Lease gives PacifiCorp new and highly valuable  
22 flexibility in meeting its load profile, increases system reliability, and reduces the

1 Company's exposure to transmission and energy price risks associated with  
2 volatile wholesale markets.

3 **Q. Please describe the benefits of the structure of the West Valley Lease.**

4 A. The structure of the Lease Agreement is particularly beneficial for several reasons.  
5 First, as noted above, it allows PacifiCorp full discretion to adjust the output of  
6 the West Valley Project. Second, the purchase and termination options in the  
7 Lease Agreement allow PacifiCorp to hedge against changes in market prices and  
8 load forecasts by revisiting the economics of the transaction in three- and six-year  
9 windows. These are very attractive contractual provisions, given the recent  
10 volatility of the power markets. Finally, because the West Valley Project utilizes  
11 the same model of generation units as PacifiCorp's Gadsby Project, discussed  
12 below, PacifiCorp is able to functionally integrate the resource into the Company  
13 as if it were an owned resource. This functional integration allows the Company  
14 to pursue efficiency enhancements such as the consolidation of spare parts  
15 inventory, the scheduling and procurement of major maintenance activities, and  
16 the use of employees in operating other generation projects.

17 **Q. Please describe the operational benefits of the West Valley Lease.**

18 A. The West Valley Lease adds flexibility and diversity to PacifiCorp's generation  
19 portfolio. Every power system that serves variable loads requires a blend of  
20 generation resources. Even though monthly energy usage may seem relatively  
21 predictable, power generation and delivery is dynamic and requires resources that  
22 can scale up and down when loads change or other unexpected events take place.  
23 Gas-fired generators, like those at the West Valley Project, are a cost-effective

1 option to quickly balance loads and resources. Without flexible generators,  
2 PacifiCorp's alternative in its East control area is to ramp up and down other  
3 generators that have a lower incremental cost or to rely on third party suppliers  
4 who, assuming there are no transmission constraints involved, are willing to  
5 transaction for the needed delivery period (such as within the hour, next hour(s),  
6 or next day(s)). Reliance on other generators for this type of flexibility can lead to  
7 increased operating and repair costs and a decrease in fuel efficiency. Relying on  
8 third parties for this type of flexibility involves the risk that third party suppliers  
9 will not be sufficiently available. Generators such as the ones being leased allow  
10 other generation units in the portfolio to operate efficiently and provide cost-  
11 effective flexibility in meeting balancing load/resource requirements. The West  
12 Valley quick-start units have performed in just this fashion and have proven to be  
13 a valuable addition to PacifiCorp's generation portfolio by providing capacity and  
14 energy to the system, displacing more expensive power purchases, reducing  
15 transmission expenses and, during times when adequate transmission capability  
16 exists, being available for economical wholesale sales.

17 **Q. Why was the West Valley Project structured as a lease instead of a purchase?**

18 A. This transaction was structured as a lease in order to meet summer 2002 load  
19 service obligations, respect the validity of the IRP process, and meet the  
20 requirements of applicable state/federal laws. Because the transaction involved an  
21 affiliate, regulatory approvals for a purchase power contract could not have been  
22 accomplished in time to have the resource available to meet the 2002 summer  
23 peak. Given the imminence of the IRP, PacifiCorp wished to defer a long-term

1 resource acquisition decision until the Company's position and resource needs  
2 became clearer. A lease under the Federal Power Act "safe harbor provision"  
3 permitted PacifiCorp to meet these objectives, while complying with all  
4 applicable laws and regulations.

5 **Q. Does the West Valley Lease act as a system hedge against wholesale market**  
6 **spikes, such as those that occurred in 2000-2001?**

7 A. Yes. The lease reduces PacifiCorp's exposure to market extremes, which are  
8 most pronounced during high demand, system peak periods.

9 **Reasonableness of the Resource Costs**

10 **Q. Do you think the construction costs of the West Valley Project are relevant to**  
11 **the Commission's prudence analysis?**

12 A. No. PacifiCorp did not buy the West Valley Project, it is only leasing it.  
13 Therefore, because this is a lease transaction, it is the cost of the lease, not the  
14 underlying cost of the West Valley Project that should be taken into account under  
15 the Commission's prudence analysis. It should also be noted that even if  
16 PacifiCorp exercises one of its options to purchase the plant, the purchase price  
17 would be relevant to the Commission's prudence analysis at that time instead of  
18 the actual cost to construct the project. As explained below, the costs of the West  
19 Valley Lease is competitive when compared to other market options for acquiring  
20 this capacity and are below PacifiCorp's estimate of the costs to build a project  
21 similar to the West Valley Project.

1 **Q. Please describe your financial modeling methodology for the West Valley**  
2 **Lease structure.**

3 A. The Company conducted a real option analysis based on the best market  
4 information available at the time, using forward price curves of January 29, 2002  
5 Exhibit No. \_\_ (MRT-5) describes the methodology used by the Company to  
6 determine the value of the West Valley Lease.

7 **Q. What value did the Company derive for the right to use the plant to convert**  
8 **gas into electricity?**

9 A. The plant was valued as a daily spark spread option (power delivered at Mona vs.  
10 natural gas delivered at Opal/Rockies) net of operating costs and benefits and net  
11 of taxes. The straight right to use the plant for fifteen years had a value of  
12 \$13,225,000 per annum. This number is the discounted free cash flow annuity for  
13 the gas/electric conversion value. Any residual value considerations are irrelevant  
14 in calculation of the tolling option because there is no up-front purchase payments  
15 and no liabilities extending past the end of the lease. Essentially, \$13,225,000 per  
16 annum is the value of the tolling option premium (the right for PacifiCorp to  
17 convert gas to electricity) and does not include the value associated with the two  
18 lease termination and plant purchase options.

19 **Q. What specific risks are mitigated through the termination and purchase**  
20 **options in the lease structure?**

21 A. There is always some level of uncertainty over the value of power and gas at  
22 points far into the future. Since PacifiCorp is typically able to make electric and  
23 gas hedge transactions approximately three to five years into the future, it is

1 prudent and valuable for PacifiCorp to explore leasing provisions that would  
2 minimize losses if the gas/electric spark spread collapses or capture additional  
3 value for customers if the gas/electric spark spread widens. The lease termination  
4 and the plant purchase provisions negotiated for Year 3 and Year 6 of the lease  
5 serve to mitigate those risks.

6 **Q. How were the values for termination of the lease and plant purchase**  
7 **determined?**

8 A. Black-Scholes option theory was used to value the special termination/purchase  
9 provisions. The option to abandon the lease was valued as a put option with the  
10 strike equal to the Net Present Value (“NPV”) of the remaining lease payments  
11 against the underlying asset price (i.e., NPV of free cash flows for the remaining  
12 lease period).

13 The option to purchase the plant is a call option with the strike at the net  
14 book value against the underlying asset price (i.e., NPV of free cash flows until  
15 the end of the assumed book life plus the liquidation of remaining assets). To  
16 value the first purchase option, the Company explicitly calculated the residual  
17 value of the plant based on the best market information available. The nominal  
18 value of the put and call options in Year 3 of the lease is in excess of \$28,568,000.  
19 For these options in Year 3 and Year 6, PacifiCorp did not have to make any up-  
20 front payment at the beginning of the lease. Instead, a premium is included in the  
21 annual lease payment. Therefore, if PacifiCorp exercises the either of the lease  
22 termination options, PPM will not receive full payment for the options it granted.  
23 The inferred annualized contract option premium is \$1,758,000 (the difference

1 between the lease payments of \$14,983,000/year and the \$13, 225,000/year value  
2 of the gas/electric conversion option). This amount is lower than the amount  
3 determined by amortizing the \$28,568,000 option value referenced above over the  
4 life of the lease (\$2,110,000/year).

5 **Q. What risk mitigation characteristics do put and call options provide?**

6 A. A put option owner has the right to sell or deliver (put) an underlying asset on a  
7 certain date at a predetermined price (strike price) to the put option seller. A put  
8 option buyer mitigates price or value risk if the underlying asset price moves  
9 downward. A call option owner has the right to buy or receive (call) an  
10 underlying asset on a certain date at a predetermined price from the call option  
11 seller. A call option buyer mitigates price or value risk if the underlying asset  
12 price moves upward. The owner of both a put option and call option hedges both  
13 downward and upward price or value risk.

14 **Q. What economic benefit does the lease structure provide?**

15 A. By adding the value of the annual tolling option premium of \$13,225,000 and the  
16 value of the lease termination and purchase option premium of \$2,110,000 per  
17 year, the fair market value of the lease payment was \$15,335,000 per annum. The  
18 lease payment of \$14,983,000 per annum is below market and therefore beneficial  
19 to PacifiCorp's customers. In addition, the put and call options in Year 6 have  
20 significant value but were left out of the valuation analysis, demonstrating that  
21 additional value is associated with the West Valley Lease but, in order to be  
22 conservative, was not evaluated.

1 **Q. Can you mitigate the market risk of future higher or lower implied market**  
2 **heat rates that will affect the value of the plant?**

3 A. Yes. Options to terminate a lease (put options) provide protection if the  
4 gas/electric spread collapses and drives the implied market heat rate below the  
5 heat rate of the West Valley Project. Options to purchase the West Valley Project  
6 (call options) provide protection if the gas/electric spread increases and drives the  
7 implied market heat rate above the plant heat rate.

8 **Q. Following the RFP that resulted in the West Valley Lease, did PacifiCorp**  
9 **make additional purchases of resources to meet the East Side summer**  
10 **requirements for 2003, 2004, and 2005?**

11 A. Yes. Through a separate solicitation effort, PacifiCorp made super-peak (8-  
12 hours/day, seven days/week) purchases between 150 MW and 225 MW for  
13 delivery of power at Four Corners during June through September for 2003, 2004,  
14 and 2005. The purchase price of this power ranges between \$73.02/MWh and  
15 \$76.00/MWh. Exhibit No. \_\_ (MRT-6) summarizes the market purchases described  
16 above.

17 **Q. How does the price of the West Valley Lease compare against these super-**  
18 **peak purchases?**

19 A. Taking the lease payment on a monthly basis (\$1,248,583/month or \$6.24/kW-  
20 mo) and assuming the West Valley Project only runs 8 hours a day this upcoming  
21 summer (33% capacity factor), the capacity charge on a \$/MWh basis is  
22 approximately \$25.85/MWh. The current price of forward delivered natural gas at  
23 the West Valley Project for the next three summers is \$3.95/mmBtu (based on



1 PacifiCorp's forward price curve of December 3, 2003 plus \$.35/mmBtu for  
2 transportation). The heat rate for the West Valley Project is assumed to be 10,000  
3 Btu/kWh and the variable O & M is approximately \$3.60/MWh which produces  
4 an energy cost of \$46.59/MWh. The all-in cost for West Valley on a super-peak  
5 basis is \$72.44/MWh. This is 0.8% percent to 4.7 percent below the above-  
6 mentioned market purchases for the same product.

7 **The West Valley Lease Was Priced At Market When Executed.**

8 **Q.** On what date did PacifiCorp commit to the West Valley lease?

9 A. PacifiCorp and PPM executed a binding agreement for PacifiCorp to lease the  
10 West Valley project on February 4, 2002. On March 5, 2002, the parties executed  
11 the formal West Valley lease agreement.

12 **Q.** **What was the date of PacifiCorp's forward price curve used to evaluate the**  
13 **relative value of the West Valley lease?**

14 A. January 29, 2002.

15 **Q.** **What does this forward price curve data demonstrate?**

16 A. This forward price curve date demonstrates the transaction was entered into based  
17 on then-current market prices and, therefore, its costs were reasonable and  
18 appropriate at the time that the transaction was entered into.

19 **Information Provided to the Company's Board of Directors Regarding the Decision**  
20 **to Acquire the West Valley Lease**

21 **Q.** **What information regarding the decision to acquire the West Valley Lease**  
22 **was presented to the Board of Directors?**

1 A. The Board of Directors was briefed on the terms of the West Valley Lease and an  
2 economic analysis of the proposed project was presented. These documents are  
3 attached as Exhibit No.\_\_(MRT-8). The Board of Directors granted approval to  
4 ratify the West Valley Lease on March 4, 2002.

5 **Description of the Gadsby Project**

6 **Q. Please describe the Gadsby Project.**

7 A. The Gadsby Project consists of three highly-efficient, 40 MW, gas turbine  
8 generators located in Salt Lake City, Utah. The three units are designated Unit 4,  
9 Unit 5 and Unit 6. Unit 4 was first synchronized to the grid on July 10, 2002.  
10 Unit 5 was synchronized on July 14, 2002 and Unit 6 was synchronized on  
11 July 29, 2002. During the period from July 10 to August 1, 2002, the units were  
12 tested at varying loads and the energy was supplied to the grid. On August 1,  
13 2002 all three units were declared commercial and became available for dispatch.

14 The Company pursued the Gadsby Project because it represented a least-  
15 cost, new resource option that was consistent with the demand for summer peak  
16 capacity in PacifiCorp's East control area. As explained below, the Gadsby  
17 Project compared very favorably with the resources acquired through the RFP.

18 **Q. Please provide additional detail about the Gadsby Project.**

19 A. The Gadsby Project consists of three 40 MW, simple cycle, General Electric  
20 LM6000 "Sprint" gas turbine generators and other equipment typically associated  
21 with a gas-fired generating plant. Exhibit No.\_\_(MRT-7) provides, among other  
22 things, a description of the Gadsby Project turbines. The LM6000 is based on an  
23 "aeroderivative" design and is the most efficient unit available in its class. In

1 order to meet local air pollution control requirements, the turbines are equipped  
2 with the latest pollution control equipment.

3 **Q. What is the cost of the Gadsby Project?**

4 A. As of October 30, 2003, the actual cost of the Gadsby Project is \$74.026 million.

5 **Q. What is the effect of any outstanding action items on the total cost of the  
6 Gadsby Project?**

7 A. All of the remaining work is expected to be completed by the end of 2003, for a  
8 total cost of \$2.4 million. Therefore, the total installed capital cost of the Gadsby  
9 Project is expected to be \$75.8 million (\$632 per kilowatt of installed capacity).

10 **Q. How does the actual cost of the Gadsby Project compare with the estimated  
11 cost?**

12 A. The Company's estimated total cost for the Gadsby Project was \$80.4 million.  
13 Since the total installed cost of the project is expected to be approximately \$75.8  
14 million, including all applicable overheads, sales taxes, and allowance for funds  
15 during construction, the actual cost of the Gadsby Project is expected to be  
16 approximately \$4.2 million, or 5.3 percent, less than the estimated cost.

17 **Q. Please explain the design and operating assumptions of the Gadsby Project.**

18 A. The Gadsby Project was designed to be operated when the incremental generation  
19 cost is below market and during instances when a resource is required with short  
20 notice (as little as ten minutes in some instances) or when PacifiCorp has load  
21 service obligations in the East control area and there is no remaining transmission  
22 import capability left. Price forecasts at the time indicated that annual average  
23 capacity factors in the range of 30-35 percent could reasonably be expected. This

1 capacity factor anticipated that the units would operate during the heavy load  
2 hours of the peak seasonal periods and would be off-line during other hours.  
3 Because the LM-6000 units in the Gadsby Project can start and reach full load in  
4 less than 10 minutes, the gas turbines can provide ancillary services in the form of  
5 operating reserves.

6 **Q. How has the Gadsby Project performed against those initial assumptions?**

7 A. The Gadsby Project has met and continues to meet expectations. The equivalent  
8 availability of the plant from August 2002 through September 2003 ranged from a  
9 low of 88.7 percent for Unit 5 and a high of 93.8 percent for Unit 4. The capacity  
10 factors for each of the units during the same period ranged from a low of 39.5  
11 percent for Unit 5 and a high of 43.4 percent for Unit 4.

12 **Q. What would you conclude regarding the construction and operation of the  
13 Gadsby Project?**

14 A. The Gadsby Project was completed on time and within budget. It has been, and  
15 continues to be, used and useful in providing service to the Company's retail  
16 customers.

17 **Reasonableness of the Resource Costs**

18 **Q. Have you prepared a comparison of the Gadsby Project with the transactions  
19 resulting from the RFP?**

20 A. Yes. Exhibit No. \_\_ (MRT-9) provides a comparison of the Gadsby Project with  
21 other tolling transactions from the RFP.

1 **Q. What does the exhibit show?**

2 A. The first column on the left shows the criteria used to analyze the four  
3 alternatives. Moving from left to right, the second, third, fourth, and sixth  
4 columns summarize the results for the Gadsby Project, West Valley Lease and  
5 other transactions. The eighth column from the left (entitled “Physical”)  
6 summarizes the results for a market-based take or pay on-peak power delivered to  
7 Mona.

8 **Q. What do you conclude from the exhibit?**

9 A. The Gadsby Project compares very favorably with the resources acquired through  
10 the RFP. In fact, as shown in Exhibit MRT-8, the Gadsby Project has the highest  
11 NPV benefit (\$6,940,631, or \$5,783,859 on a per/100 MW basis) of any of the  
12 alternatives and an overall relative ranking of number one. As a consequence, the  
13 Gadsby Project was the least-cost resource alternative.

14 **Q. Are there any additional benefits of the Gadsby Project that are not captured  
15 in the above analysis?**

16 A. Yes. The Gadsby Project adds to the resource diversity of PacifiCorp’s generation  
17 portfolio, provides voltage support and increases reliability, and reduces the risk  
18 of incurring unexpectedly high costs associated with wholesale market purchases.  
19 These advantages have value in reliably meeting our obligation to serve and will  
20 continue to provide system-wide benefits to the Company’s customers over the  
21 life of the project.

22 **Consideration of the Alternatives**

23 **Q. Were other resources considered?**

1 A. Yes. To meet the urgent need for energy during summer peak demand, the  
2 Company considered entering into short-term market purchases (one to two  
3 years), long-term market purchases (5 to 15 years), supply agreements from a new  
4 local merchant plant, and building a generation facility. See Exhibit MRT-6,  
5 which discusses alternative resources.

6 **Q. Why didn't PacifiCorp simply meet its summer peak demand through short-**  
7 **term market purchases?**

8 A. In recent years, the Company has, in fact, served peak summer load in Utah  
9 through short-term contracts. The Company, however, found that it was paying a  
10 substantial premium to import energy into Utah to meet summer peak loads. For  
11 example, in addition to fixed transmission reservation charges, variable  
12 transmission charges for transfers over the Direct Current ("DC") line from  
13 Southern California cost approximately \$11/MWh or more.

14 **Q. Did the Company consider purchasing energy from a new merchant plant**  
15 **located in Utah?**

16 A. Yes. The RFP that was issued did not prevent such merchant plant owners from  
17 participating. However, given the magnitude of the resource need and the  
18 reasonable expectation on the part of the Company that few, if any, merchant  
19 plant developers would be able to construct a new facility in time to meet the  
20 2002 summer peak, the Company opted to pursue the Gadsby Project and issue  
21 the RFP such that the pendency of long-term resource decisions from the IRP was  
22 respected.

23 **Q. Why did PacifiCorp decide to build the Gadsby Project?**

1 A. PacifiCorp determined that it could build and operate the required peaking  
2 capacity less expensively than it could purchase such capacity from a third party  
3 building a similar dedicated facility in Utah. The fact that the Gadsby Project is  
4 more economic than the West Valley Lease, which was acquired through the RFP,  
5 demonstrates this.

6 **Q. How was PacifiCorp able to build the Gadsby Project at less cost than  
7 another developer could have built a comparable resource?**

8 A. The Gadsby site already had considerable infrastructure in the form of  
9 transmission access, water, operating personnel, and maintenance facilities.  
10 Further, the Company already owned emission credits associated with the  
11 previously existing Gadsby Plant. These factors contributed to a reduced cost to  
12 install the Gadsby Project compared to a new site.

13 **Information Provided to the Company's Board of Directors Regarding the Decision  
14 to Acquire the Gadsby Project**

15 **Q. What information regarding the decision to acquire the Gadsby Project was  
16 provided to the Company's Board of Directors?**

17 A. The Board of Directors was presented with information regarding the need for  
18 flexible thermal resources in the East control area. See Exhibit No. \_\_ (MRT-7)  
19 for a comprehensive discussion of the need for additional resources. The Board of  
20 Directors reviewed various options to meet the demand for summer capacity,  
21 including short-term contracts, long-term contracts, purchasing power from a new  
22 merchant plant, and having the company construct its own resources. The Board  
23 of Directors also reviewed an economic analysis of the proposed project.

1 **Q. Based on this information, what action, if any, did the Company's Board of**  
2 **Directors take?**

3 A. After a careful weighing of the potential costs and benefits, the Board of Directors  
4 granted approval for the Gadsby Project on October 26, 2001.

5 **These New Resources Provide Significant Benefits to the Company's Washington**  
6 **Customers**

7 **Q. How do the new resources described in this testimony benefit Washington**  
8 **customers?**

9 A. The new resources benefit the Company's Washington customers by reducing  
10 system-wide net power costs, of which Washington customers are allocated a  
11 share. As explained above, these resources reduce system-wide net power costs  
12 by reducing the Company's exposure to volatile wholesale markets and  
13 transmission costs associated with importing power into a transmission-  
14 constrained area.

15 **Q. Do these resources offer any benefits to Washington customers due to the**  
16 **seasonal peak diversity between the Company's eastern and western control**  
17 **areas?**

18 A. Yes. Because these are flexible resources, they will be available to serve the West  
19 control area through the direct transfer of power from East to West by wheeling  
20 power via the California Independent System Operator ("CAISO") or by the  
21 exchange of power with entities who have delivery rights to PacifiCorp's West  
22 control area (such as exchanging power with Southern California entities who  
23 have delivery rights to the California/Oregon border or the Nevada/Oregon



1 border). Additionally, when the resources are not being used to serve either the  
2 eastern or western control areas, they can be used to make additional wholesale  
3 sales, which will reduce system-wide net power costs. The benefits of peak  
4 diversity are described more fully in Mark Widmer's testimony.

5 **Q. What other benefits for Washington Customers do these resources add?**

6 A. The acquisition of these resources adds substantial diversity to PacifiCorp's  
7 resource base, allowing the Company an additional measure of valuable  
8 operational flexibility. Further, the Gadsby Project and the West Valley Lease  
9 add voltage support to the Company's transmission system, increasing reliability.

10 **Q. Do these flexible resources provide a hedge against unexpectedly high**  
11 **wholesale power costs?**

12 A. Yes. These resources provide real and significant protection for Washington  
13 customers from the risk of sustained high prices in Western wholesale power  
14 markets, such as those occurring during the 2000-2001 Western energy crisis.  
15 Although these resources came on-line after the Western energy crisis had passed,  
16 wholesale markets continue to experience fluctuations in market prices during  
17 periods of high demand, greater than expected resource outages, or unexpected  
18 duration of transfer capabilities on the integrated transmission system. By  
19 providing a hedge during such periods, these resources have reduced the  
20 Company's overall exposure to price spikes.

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

22 A. Yes.