

1 **Q. Please state your name, business address and position with the Company.**

2 A. My name is Richard C. Woolley. My business address is 201 South Main, Suite
3 2200, One Utah Center, Salt Lake City, Utah. My position is Vice President of
4 Thermal Production and System Coordination for PacifiCorp.

5 **Qualifications**

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

7 A. I have a Bachelor of Engineering degree and Master of Business Administration
8 degree. During my career with PacifiCorp, I have served as an Operations
9 Superintendent, a Maintenance Superintendent, and a Plant Manager at both
10 Centralia Plant and Wyodak Plant. In conjunction with the sale of Centralia
11 Plant, I joined Trans Alta as Vice President of Centralia Plant and Mine
12 Operations. In 2002, I rejoined PacifiCorp as Managing Director of Process
13 Support and became Vice President of Thermal Production and System
14 Coordination in 2004 with responsibility for all thermal generation assets.

15 **Summary of Testimony**

16 **Q. Please summarize your rebuttal testimony.**

17 A. My rebuttal testimony responds to certain issues raised by Committee of
18 Consumer Services (CCS) witness Falkenberg regarding the treatment of certain
19 generating unit outages; and certain issues raised by CCS witness DeRonne
20 regarding the Generation business unit Capital budget. My testimony makes the
21 following points:

- 22 • In response to Mr. Falkenberg's testimony that certain generating unit outages
23 should be excluded from ratemaking calculations because they were the result

1 of “imprudence” and/or personnel error, my testimony shows that outages
2 caused by personnel error should not be excluded inasmuch as these personnel
3 errors cannot be completely eliminated.

- 4 • In response to Mr. Falkenberg’s testimony that certain generating unit outages
5 should be excluded from ratemaking calculations because the events are
6 highly unusual, non-representative of future conditions, or are catastrophic in
7 nature, my testimony shows that:

- 8 • PacifiCorp’s unplanned outage rate includes unusual and catastrophic
9 outage events. Although specific events cannot be predicted, the overall
10 unplanned outage rates can be estimated based on past experience. All
11 outages should be included in the ratemaking calculations.

- 12 • PacifiCorp’s thermal unit equivalent availability (EAF) and capacity factor
13 (CF) are significantly better than the industry average.

- 14 • In response to Ms. DeRonne’s testimony that the level of projected plant
15 additions in the filing be reduced, my testimony explains that:

- 16 • Actual capital expenditures have been at or above budget for the past three
17 years and it is inappropriate to extrapolate future level of plant additions
18 based on six months of actual capital expenditures.

- 19 • Capital budgeting is a dynamic process in which projects are continually
20 being added, deferred, and modified in order to meet operational,
21 regulatory and fiscal constraints. The future level of plant additions
22 cannot be adjusted based on the treatment of certain isolated projects
23 without consideration of all other project adjustments.

- 1 • In response to Ms. DeRonne’s testimony that Operation and Maintenance
2 (O&M) savings related to capital expenditures should be removed, my
3 testimony explains that the O&M budgets and Capital budgets are prepared
4 jointly. Savings related to capital expenditures are already reflected in the
5 operating expenditures in this filing.

6 **Exclusion of Outages Related to “Imprudence” and Personnel Error**

7 **Q. Do you agree with Mr. Falkenberg that the Jim Bridger Unit 4 transformer**
8 **outage in June 2000 was the result of imprudence?**

9 A. No. In response to a question from Wyoming PSC Chairman Ellenbecker,
10 PacifiCorp witness Barry Cunningham in Docket No. 20000-ER-02-184
11 acknowledged that PacifiCorp performed an investigation of the Jim Bridger
12 Unit 4 outage and found that the failure resulted, in part, from personnel error.
13 Simply because personnel error contributed to the incident does not mean or
14 imply that PacifiCorp was imprudent.

15 **Q. Do you agree that “because this outage was the result of imprudence, it**
16 **should be removed from calculation of net power costs”?**

17 A. No. Power plants are operated and maintained by people and unfortunately
18 people make errors. Personnel errors do occur and cannot be completely
19 eliminated. The number and frequency of personnel errors can be minimized by
20 good training, good procedures, continuous emphasis on safety, and learning
21 through investigation of failures. Mr. Cunningham was able to respond to
22 Chairman Ellenbecker's question in detail because PacifiCorp had conducted a
23 thorough investigation of the Jim Bridger incident and had determined that

1 personnel error had contributed to the failure. The fact that PacifiCorp
2 investigated the incident and identified personnel error as a contributing factor is,
3 if anything, evidence that PacifiCorp is a prudent operator. The investigation is
4 also evidence that PacifiCorp emphasizes continuous improvement through
5 learning from past experience. The fact that personnel error contributed to the
6 Jim Bridger Unit 4 June 2000 failure is no evidence of PacifiCorp's imprudence
7 and is no justification for removing the outage from the ratemaking calculations.

8 **Q. Mr. Falkenberg claims that outage incidents “under the categories of**
9 **“Operator Errors,” “Maintenance Errors,” “Subcontractor Errors,” or**
10 **“Other Safety Problems”... “are imprudent outages and customers should**
11 **not bear the associated costs.” Do you agree?**

12 A. No. Personnel errors alone are not an indication of imprudence, for the same
13 reasons as I expressed earlier in my testimony. Recording the cause of each
14 outage incident as accurately as practical in the PacifiCorp Availability database
15 is essential to having good information for making decisions on how to improve
16 plant performance. PacifiCorp recognizes that personnel error does contribute to
17 some outages, and PacifiCorp is committed to minimizing these incidents by
18 maintaining an emphasis on continuous improvement.

19 **Q. How does PacifiCorp's record with respect to personnel errors compare with**
20 **that of other utilities?**

21 A. PacifiCorp examined data from the NERC GADS data base for the population of
22 coal-fired units for the period of 1983-2003. The loss of Equivalent Availability
23 Factor (“EAF”) for the cause codes related to personnel error among this

1 population is 0.10 percent per unit-year. The PacifiCorp rate for the same cause
 2 codes and period is 0.07 percent per unit-year. PacifiCorp also evaluated the loss
 3 data for all coal-fired units for the four-year period, 2000-2003. The loss of
 4 Equivalent Availability Factor for the industry was 0.06 percent per unit-year and
 5 the rate for PacifiCorp is 0.04 percent per unit-year. PacifiCorp’s performance is
 6 thus in line with – and in fact is slightly better than – the industry standard. It is
 7 unreasonable to suggest our plant operations are imprudent when our recorded
 8 rates for personnel errors are in line with the industry, which is a relevant point of
 9 reference for determining prudence. There is no basis for removing the outage
 10 incidents reported under the categories of “Operator Errors,” “Maintenance
 11 Errors,” “Subcontractor Errors,” or “Other Safety Problems” from the ratemaking
 12 calculations.

13 **Exclusion of “Unusual,” “Non-Representative,” or “Catastrophic” Outages**

14 **Q. How does PacifiCorp’s record regarding Equivalent Availability Factor and**
 15 **Capacity Factor compare with other utilities’ performance?**

16 A. PacifiCorp’s equivalent availability factor and capacity factor are significantly
 17 better than the industry averages. Thus, even after taking into account
 18 “unusual,” “non-representative,” or “catastrophic” outages, PacifiCorp is able to
 19 achieve a higher than average utilization of generating assets.

Calendar Year	Industry		PacifiCorp	
	EAF	CF	EAF	CF
2000-2003	83.88%	68.99%	86.70%	80.14%

20 Equivalent availability is the percentage which indicates how much of the optimal
 21 energy could have been generated during a given report period. Optimal energy is

1 net nameplate capacity multiplied by the hours of the period of time under
2 consideration. Capacity factor is the actual percentage of the optimal energy
3 which was produced during a given report period.

4 **Q. Do you agree with Mr. Falkenberg’s observation that the level of Hunter**
5 **transformer related outages “is highly unusual and non-representative of**
6 **future conditions”?**

7 A. No. The same observation may be made of other pieces of equipment on other
8 generating units. It is not unusual to have a particular piece of equipment be a
9 chronic problem on a generating unit. When viewed from the perspective of a
10 single generating unit, the percent lost availability caused by the equipment may
11 appear to be unusual with respect to other PacifiCorp units and the industry
12 averages. It is not appropriate to single out a specific incident or specific piece of
13 equipment, characterize it as “unusual and non-representative,” and remove it
14 from the ratemaking calculation. Mr. Falkenberg would like to exclude the
15 transformer failure history as unusual and non-representative compared to
16 industry. In any set of failure statistics some equipment categories are above
17 average while others are below average. It is inappropriate to exclude only those
18 incidents with higher than average restrictions or outages because the unit and
19 system equivalent availability will be biased higher and will no longer be
20 representative of actual performance. In PacifiCorp’s case, its system equivalent
21 availability and capacity factors are already better than industry.

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1 **Q. Mr. Falkenberg recommends that outages related to transformer failures at**
2 **Hunter Plant be removed from the ratemaking calculations because the**
3 **problem was “unusual and is not expected to reoccur.” Do you agree with**
4 **Mr. Falkenberg's reasoning and recommendation?**

5 A. No. Mr. Falkenberg's reasoning could be used to exclude many unusual outages
6 whose cause is corrected and are not expected to reoccur. Mr. Falkenberg
7 acknowledges that “there are always outages at generators and repair costs
8 associated with addressing them.” PacifiCorp was proactive in correcting the
9 transformer problem, and costs associated with correcting the problem are
10 included in base rates. However, the process and efforts involved in resolving
11 this problem were no different than are applied to resolving other emergent
12 problems. The characteristics and nature of these main transformer problems do
13 not make them unique from other problems that plant personnel resolve in the
14 course of doing business. There is no basis for claiming that the main transformer
15 problems are unique and therefore excludable from the ratemaking calculations.

16 **Q. Mr. Falkenberg recommends removal of two other outages that were**
17 **identified in the Oregon UE 134 case. Should these outages be removed from**
18 **the ratemaking calculations on the basis that the outages were “unusual and**
19 **catastrophic”?**

20 A. No. Mr. Widmer's testimony discusses the ratemaking treatment of these items.
21 Each of these forced outages was relatively long. These forced outages occurred
22 on jointly owned plants operated by other utilities. PacifiCorp's share of Colstrip
23 Unit 4 operated by PPL Montana is 74 MW. The outage duration was 16 days to

1 repair generator damage caused by a loose baffle. PacifiCorp's share of Hayden 1
2 operated by Xcel is 45 MW. The outage duration in this case was 76 days to
3 repair a crack in a steam turbine rotor. In each incident the outages occurred on
4 large rotating equipment that is highly stressed and is aging. The occurrence of
5 an occasional forced outage of long duration in a large fleet of generating units
6 can be expected and is not unusual or abnormal. While PacifiCorp and the
7 operators of its jointly owned plants try to minimize the risk of such failures, it is
8 not possible to completely eliminate the failures. For this reason, forced outages
9 of long duration should not be removed from the ratemaking calculation.
10 Removal of the forced outages of long duration implies that no forced outages of
11 long duration will occur in the future and that is not realistic.

12 **Q. Has the Commission addressed similar circumstances in previous cases?**

13 A. Yes. In 2001, the Committee of Consumer Services argued that a 3,124 hour
14 outage on Cholla Unit 4 in 1996 was unusual and should be removed from
15 ratemaking because it was an abnormal and nonrecurring event. The Commission
16 rejected this proposed adjustment in its Report and Order Issued September 10,
17 2001 in Docket No. 01-035-01. The Colstrip and Hayden forced outages were
18 similar to this Cholla Unit 4 outage in that all three outages were unanticipated.
19 The outages all occurred on units operated by other utilities for PacifiCorp. The
20 long Cholla outage was an unanticipated generator problem identified by testing
21 during a planned overhaul. The Hayden and Colstrip failures occurred with the
22 units in service. The duration of the Cholla Unit 4 outage was significantly longer
23 than the duration of either the Colstrip or Hayden outage. The unanticipated

1 outages can be considered similar in nature for ratemaking purposes.

2 **Q. Please summarize the Company’s position regarding the removal of outages**
3 **from the availability calculations for ratemaking purposes.**

4 A. Outages should not be removed. Exclusion of “unusual,” “non-representative,” or
5 “catastrophic” outages assumes that similar outages will not occur. Although
6 PacifiCorp strives to reduce unplanned outages, with the Company’s aging fleet
7 and high capacity factors it is illogical and unreasonable to assume that no
8 “unusual,” “non-representative,” or “catastrophic” outages will occur.
9 Unadjusted recent forced outage rates provide a probable value of forced outage
10 rates for future years. Additionally, PacifiCorp’s overall performance, as
11 measured by its Equivalent Availability Factor and Capacity Factor, indicates
12 there is no basis for adjusting the forced outage rate.

13 **Exclusion of Certain Capital Expenditures**

14 **Q. Do you agree with Ms. DeRonne’s conclusion that the level of plant additions**
15 **in the 2006 test year will be less than forecasted by PacifiCorp because**
16 **capital expenditures are below budget for the first six months of fiscal year**
17 **2005?**

18 A. No. While year-to-date spending on some projects is lower than budget, the
19 current forecast is that capital expenditures will be at budgeted level by end of
20 fiscal year 2005. PacifiCorp manages the portfolio of capital projects so that
21 necessary work is completed and end-of-year actual expenditures are as close to
22 approved budget levels as practical. The following table lists the recent variance
23 between budget values and actual values for Generation capital expenditures.

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Generation CapEx	FY 2002	FY 2003	FY2004	FY2005 Year end Forecast
Actual	\$155 m	\$170 m	\$241 m	\$461 m
Budget	\$137 m	\$ 175 m	\$199 m	\$448 m
Variance	\$18 m	(\$5 m)	\$42 m	\$14 m

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~~Q.~~This data demonstrates that the Generation business unit’s actual capital expenditures have been approximately equal to or above budget. This table is similar to the table provided for PacifiCorp total capital expenditures in response to data request CCS 6.31. Both tables show that capital expenditures are typically equal to or above budget. Actual expenditure history does not support Ms. DeRonne’s assumption that the trend of capital budget variance in the first six months of fiscal year 2005 can be extrapolated to the next eighteen months.

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Q. Do you agree with Ms. DeRonne’s statement that ~~the~~ PacifiCorp has included the capital expenditure for the second phase of Currant Creek project, “but does not project it to actually be used and useful in that month”?

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A. No. The construction contract requires that the plant be tested and ready for commercial operation by March 31, 2006. The plant will be tested and producing energy in the weeks preceding March 31, 2006. The revenue from the energy produced during testing prior to commercial operation is credited to the project and offsets fuel costs, operating costs, and capital expenditures. The in-service capital expenditures will reflect the value of energy produced during initial start-up. The plant is expected to be used and useful by March 31, 2006.

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3 **S.Q. Ms. DeRonne identifies a number of capital projects, including Generation**
4 **projects, with variances between in-service costs and budgeted costs in the**
5 **PacifiCorp filing. Do you agree with Ms. DeRonne’s recommendation that**
6 **the level of plant placed in service in the Company’s filing be reduced**
7 **because certain capital projects were placed in service with actual costs lower**
8 **than shown in the filing?**

9 A. No. While it is true that some projects are completed with lower final
10 expenditures than originally budgeted, there is generally a corresponding group of
11 Generation projects with expenditures that exceed the original budget. Further,
12 Generation management continually reviews project requirements compared to
13 the changing business and equipment needs and, consequently, shifts actual
14 project assignments and expenses. As a general statement, this process results in
15 historically close alignment of final actual capital expenditures and budgeted
16 capital expenditures. The alignment of actual and capital expenditures is
17 illustrated by the table in my previous response. The proposed additions to plant
18 in service in the filing should not be reduced simply because some capital projects
19 are completed under budget.

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2 **R.Q. Ms. DeRonne recommends that the Huntington 1 Electrostatic Precipitator**
3 **(ESP) capital expenditure be removed from the Company filing because the**
4 **Company has allegedly provided no justification for the magnitude of the**
5 **expenditure and because the project was not referenced in PIC meeting**
6 **minutes. Ms. DeRonne also recommends that the Huntington 1 Low NOx**
7 **burner capital expenditure be removed from the company filing because the**
8 **project has been deferred. Do you agree with Ms. DeRonne's**
9 **recommendations?**

10 A. The Huntington Unit 1 ESP Expenditure Requisition (ER) was included in rate
11 filing as a \$20.5 million project. During a subsequent plant budget review, the
12 project scope was modified to be a partial rebuild during the upcoming outage
13 with the balance of the work to be completed in a later planned outage.
14 Following the plant budget review, the Company clean air initiative project
15 changed the scope of work and moved the project to FY 2009-2010 time frame.
16 The project was not addressed in the PIC meeting because it was deferred. Had
17 the project been presented to the PIC committee, a detailed cost justification
18 would have been prepared. This is an example of the dynamic process of capital
19 budget preparation and management. The Huntington Unit 1 Low NOx burner
20 project that was included in the rate filing for \$10.4 million has been deferred
21 until the FY 2009-2010 time frame. PacifiCorp management is constantly
22 reviewing and adjusting the mix and schedule of capital budget items to take into
23 consideration unit overhaul schedules, the intrinsic value of each project,

1 regulatory requirements, and approved capital budget levels. While the projects
2 identified by Ms. DeRonne have been deferred, other emergent projects have
3 been added in the capital budget. For example, unanticipated low pressure
4 turbine work on Huntington Unit 1 costing \$2.5 million has been added to the
5 capital budget for fiscal year 2005 and will be in service in fiscal year 2005.
6 Huntington Unit 1 low temperature superheater replacement at \$4.5 million and
7 Huntington Unit 1 front reheat pendant replacement at \$3.7 million have also
8 been added to the capital budget for fiscal year 2006 and will be in service in
9 fiscal year 2006. As stated previously in my testimony, it is not appropriate to
10 reduce capital expenditures in the filing based on the treatment of one project
11 because the treatment of other projects will have an offsetting effect. The total
12 portfolio of capital projects are managed so that necessary work is completed and
13 the actual expenditures are maintained as close to budget as practical. As
14 illustrated by the table in my previous response, total capital expenditures have
15 been in-line with or above approved capital budget levels.

16 **Exclusion of O&M Expenditures Related to Certain Capital Expenditures**

17 **Q. Ms. DeRonne recommends that the O&M cost savings for FY 2006 identified**
18 **in the justification for submerged drag chain conveyors be removed from the**
19 **projected test year expenses. Do you agree?**

20 A. No. At the outset, it should be noted that Ms. DeRonne incorrectly included 100
21 percent of the costs savings associated with the drag chain conveyor projects.
22 Each of the three units addressed in this testimony are jointly owned. The savings
23 should have been calculated based on the PacifiCorp ownership share of each

1 unit. Nevertheless, Ms. DeRonne is incorrect in recommending that the costs
2 savings be removed from the filed projected test year expenses. The Generation
3 business unit prepares the O&M budget and the Capital Expenditure budget at the
4 same time. Benefits and costs associated with capital projects are integrated into
5 the O&M budget. Ms. DeRonne's recommendation is not appropriate because the
6 O&M cost savings are already reflected in the O&M expenditures provided in this
7 filing.

8 **Q. Does this conclude your rebuttal testimony?**

9 A. Yes.