

1 **Q. Mr. Duvall, did you previously file testimony in this proceeding?**

2 A. Yes. My Direct Testimony was part of the Company's original filing with the
3 Commission in December 2003.

4 **Q. What is the purpose of your Rebuttal Testimony?**

5 A. The purpose of my Rebuttal Testimony is to:

- 6 • Discuss the issue of cost shifts arising from differences in load growth among
7 States raised by several witnesses and describe related analyses done by the
8 Company since my Direct Testimony was filed. I explain the trade-offs
9 associated with the design of an allocation system and demonstrate that the
10 Protocol and Revised Protocol are workable allocation methods and
11 reasonable;
- 12 • Discuss the Hybrid method for allocating costs as proposed by Staff witness
13 Buckley and Public Counsel witness Lazar. I conclude that the Commission
14 should not adopt a Hybrid approach because it is not well enough developed
15 for use in this proceeding;
- 16 • Discuss Mr. Lazar's proposal to reserve low-cost Hydro-Electric Resources
17 for Washington customers alone. I explain why this proposal is inequitable
18 and unreasonable;
- 19 • Discuss the challenges associated with developing an "islanding" allocation
20 method proposed as a long-term approach by Mr. Buckley. I explain why
21 islanding is likely not a good choice for Washington customers;
- 22 • Discuss why the Commission should reject specific "market-based"
23 adjustments to the Protocol proposed by ICNU witness Falkenberg;

- 1 • Discuss the control area wheeling expense adjustments proposed by Mr.
2 Buckley. I explain that this adjustment is inconsistent with the Hybrid method
3 discussed in the MSP and make corrections to the numbers; and
- 4 • Given the number of references of the Revised Protocol in the other Parties’
5 testimony, sponsor Exhibit No.__(GND-11), which is Appendix F to the
6 Revised Protocol. That Appendix provides details on the calculation of the
7 Mid-Columbia (MC) allocation factor.

8 **Cost Shifts**

9 **Q. What causes costs to shift among states?**

10 A. Several situations may lead to cost shifts. If one State grows rapidly – and, as a
11 result, requires the addition of new resources to the system – while other States do
12 not change, additional costs may be allocated to the other States, resulting in a
13 cost shift. Additionally, if an allocation method associates a particular resource
14 with a particular state, a cost shift could result if that resource does not perform as
15 expected or goes out of service and more costs were allocated to other States.

16 Allocation methods have numerous provisions that operate together to
17 produce an overall result. The Protocol and the Revised Protocol allocate costs of
18 New Resources across the system, but also change the allocation of other costs so
19 that they are borne to a greater degree by a growing State. These provisions of
20 the Protocol and revised Protocol are discussed in the testimony of David L.
21 Taylor. In evaluating an allocation method, the total impact of all provisions
22 operating together – not cost shifts from a single provision – is important.

1 **Q. What should be the Commission's objective regarding cost shifts?**

2 A. The Commission should seek to minimize cost shifts without sacrificing other
3 important objectives of an allocation system. The Direct Testimony of Andrea L.
4 Kelly describes the principles that were generally recognized by MSP
5 participants. Most relevant here, an allocation system should be equitable to
6 PacifiCorp's customers and shareholders and should permit continued effective
7 regulatory oversight. Based on my observations, it is my belief that all MSP
8 participants were in agreement that the greater the overall cost shifts caused by an
9 allocation system, the less equitable it would be viewed. As described in the
10 Rebuttal Testimony of Andrea L. Kelly, Utah MSP participants agreed that Utah
11 customers should bear the cost of their load growth. However, an allocation
12 method that causes Utah to bear all of the costs of its load growth, but assigns all
13 the low-cost Existing Resources to another State is clearly not equitable. I will
14 return to this topic later in my testimony when I discuss the proposal to reserve
15 low-cost Hydro Electric Resources for Washington customers.

16 There are other considerations that relate to the equity of an allocation
17 system. An allocation system should be relatively free of unintended
18 consequences. If circumstances change, results should remain reasonable.
19 Additionally, an allocation system should permit us to plan and operate our
20 generation and transmission system on an integrated basis, afford the Company a
21 reasonable opportunity to recover all of its prudently incurred costs, and preserve
22 the ability of each of our jurisdictions to implement individual state energy
23 policies in a manner that does not unreasonably burden customers in our other

1 jurisdictions.

2 The principle that an allocation system should “permit continued effective
3 regulatory oversight” implies that it should be reasonably simple and free from
4 conflict about the details. This argues for simple allocation methods that produce
5 equitable results. Cost shifts are an important consideration but they are not the
6 only consideration.

7 **Q. Why not just directly assign costs to the State responsible for them?**

8 A. It is not always clear which State is responsible for what costs. While the proper
9 assignment of distribution costs is clear, costs related to production, transmission
10 and overheads are not related to any specific load. My Direct Testimony
11 described the interrelated nature of the Company’s system. It presented model
12 simulations, for example, that show when loads change on either the West or East
13 side of our system, generation in all parts of our system responds. This testimony
14 has not been rebutted. We have seen during the MSP how participants can
15 reasonably disagree about what costs should be the responsibility of which
16 jurisdiction.

17 **Q. How can cost shifts be estimated?**

18 A. Cost shifts are estimated using model results that simulate the overall response of
19 an allocation system to various assumed events. Analyses of the impact of
20 allocation systems on revenue requirements, such as those provided in exhibits to
21 my Direct Testimony, are highly relevant. They are the means by which the
22 Commission can assess the size of the cost shifts and balance them against other
23 important concerns.

1 **Q. Is the impact of load growth certain?**

2 A. No, the impact of load growth is uncertain in two key respects. Load forecasts
3 themselves are clearly not certain. Additionally, the impact of the load growth
4 depends on the costs of the resources needed to meet it. The Company has
5 conducted 41 studies to address this issue. They show that under the Protocol and
6 Revised Protocol, the growing State bears substantial costs, ranging from 86
7 percent to 127 percent of the incremental revenue requirement increase associated
8 with their growth. Note that under some circumstances, other States actually
9 experience a benefit from a fast-growing State under a rolled-in allocation method
10 because the shift in costs due to changes in allocation factors exceeds the
11 incremental revenue requirement incurred to meet the fast growing State's loads.

12 **Q. Is load growth the only reason the Company adds New Resources?**

13 A. No. The Company adds New Resources to replace resource or transmission
14 contracts that expire, plants that retire, and to increase planning margin as well as
15 to meet load growth. My Direct Testimony showed that the total need for
16 Resources from all these causes in the West and East Control Areas is roughly
17 equal. When the Company adds New Resources to its system, it is not possible to
18 clearly identify which costs are incurred to meet load growth. This is discussed
19 further in Mr. Taylor's Rebuttal testimony.

1 **Q. In your Direct Testimony, you concluded that the “MSP Solution.”**
2 **incorporated in the original Protocol, did not result in a “material” subsidy**
3 **flowing from slower-growing States to faster growing States. Why did you**
4 **continue to study the load growth issue after the December 2003 filing of the**
5 **original Protocol?**

6 A. For two reasons. First, Oregon parties were not convinced that the analyses done
7 before the Protocol filing were adequate to resolve the load growth issue. Second,
8 the concept of “materiality” is somewhat subjective. Oregon parties pointed out
9 that what appears to be a “small” cost shift, when expressed as a percentage of
10 existing rates, can nonetheless translate into a significant impact when expressed
11 in dollars. Because our Protocol filing did not resolve the load growth issue,
12 parties in Oregon and Utah submitted a number of additional data requests which
13 gave rise to a number of additional studies.

14 **Q. Please describe the nature of these studies.**

15 A. Most of the studies assumed either a one-time increase in Utah loads or a
16 continuing pattern of higher Utah load growth which were matched with different
17 types of Resource additions. Additional similar studies were done assuming
18 higher Oregon load growth and corresponding Resource additions. Furthermore,
19 two studies were done which attempted to quantify the cumulative impact of
20 faster Utah load growth over a 14-year period. These studies (one performed in
21 response to OPUC Data Request 59/60, and the other performed subsequently in
22 response to Committee of Consumer Services (CCS) Data Request 10.1), estimate
23 and compare two different cost streams – one corresponding to low Utah load

1 growth (equal to the average of the other States' projected load growth) and one
2 corresponding to the higher rate of Utah load growth that is currently forecasted.
3 For purposes of these studies, the difference between these cost streams is
4 predictive of the impact on other States of the costs of Utah's additional relative
5 load growth. In his testimony, Mr. Falkenberg cites the higher estimates of cost
6 shift from the OPUC studies. The analysis performed in response to CCS Data
7 Request 10.1 improved upon the OPUC studies by more closely matching new
8 resources to load growth. The improved study, provided in Exhibit ___(RJF-20C)
9 page 2, shows that the 14-year present value of cost shifts to Washington from
10 Utah load growth is \$22 million, or less than one percent of revenue requirements,
11 roughly half the impact of the OPUC studies.

12 **Q. What quantitative assumptions underlie these studies?**

13 A. Major assumptions are as follows:

- 14 1. All studies use the Company's 2003 load forecast. ICNU witness
15 Falkenberg states in his testimony that the Company's analysis is based on a load
16 forecast that has subsequently been revised upward by the Company. This is
17 incorrect. The 2003 load forecast used in these analyses is higher than previous
18 forecasts. Subsequent analysis in the IRP has tended to reduce Utah load growth
19 somewhat.
- 20 2. Additional Resources are layered on top of underlying load growth and
21 planned IRP Resource additions.
- 22 3. All studies assume an underlying system peak Resource deficiency in the
23 early years and the addition of Resources that closely match the Diversified

1 Portfolio I from the Company's 2003 Integrated Resource Plan with two long-
2 term purchased power contracts removed from the West Control Area to reflect
3 the lower loads forecast for the West in the Company's 2003 load forecast.

4 4. Most of the studies assume that future wholesale gas and electricity prices
5 will follow the Company's forward price curves. Some of the studies were done
6 with a high natural gas/electricity price assumption.

7 **Q. Please summarize the results of these studies.**

8 A. Under a total system allocation method, such as that embodied in the Protocol and
9 Revised Protocol, a faster-growing State supports both its allocated share of any
10 new Resource additions and a larger share of the Company's existing costs.

11 Correspondingly, slower growing States support their allocated share of the cost
12 of the New Resource addition, but a smaller share of the Company's existing
13 costs. In our studies, the sum of these two State revenue requirement impacts is
14 compared to the total revenue requirement impact of the new Resource additions.
15 If the total revenue requirement increase experienced by a faster-growing State is
16 equal to or greater than the total revenue requirement impact of a new Resource,
17 the faster growing State is deemed to be "supporting the cost of its load growth"
18 and not causing a cost shift to slower growing States.

19 When considered from this perspective, our studies suggest that under the
20 various approaches, a total system allocation method, as embodied in the Protocol
21 and Revised Protocol, results in the growth State supporting between 86 percent
22 and 127 percent of the cost of its load growth.

1 **Q. Why do the percentages differ from study to study?**

2 A. It appears that principal drivers of the study outcomes are:

3 1. The greater the rate of growth of one State compared to other States, the
4 greater is the potential for cost shifts to slower growing States.

5 2. The higher the cost of new Resource additions compared to existing
6 Resources, the greater is the potential for cost shifts to slower growing States.

7 3. The better New Resource additions are matched to load patterns through
8 an effective IRP process, the lower is the potential for cost shifts to slower
9 growing States.

10 **Q. Do these studies suggest that parties should ignore the potential for faster
11 growing States shifting costs to slower growing States?**

12 A. No. The studies indicate that there is a potential for some shifting of costs. As a
13 general proposition, MSP participants seem to favor eliminating any potential cost
14 shift, as long as that could be done in a relatively simple and understandable way
15 without giving rise to other, undesirable unintended consequences.

16 **Q. Are there other mitigating factors to consider?**

17 A. Yes. When a State loses load unexpectedly, other States are allocated a greater
18 share of the fixed and variable costs of all Resources. This helps to mitigate the
19 impact on the remaining customers in the State that loses load who would
20 otherwise bear a larger share of the fixed and variable costs.

21 In addition, the impact of Utah load growth is balanced by the expected
22 Resource loss in western States. One of the underlying tenets of both the Protocol
23 and Revised Protocol is that all States bear a rolled-in share of Resources that are

1 acquired to replace existing Resources. Existing Resources that will require
2 replacement over the next several years include expiring long-term wholesale
3 contracts (primarily on the West side of the system), plant retirements, and the
4 lost generation from Hydro-Electric Resources and Mid-Columbia Contracts as a
5 result of relicensing and contract renegotiation. For the States that are recipients
6 of the “hydro endowment,” this means that other States are paying a share of the
7 costs of replacing resources from which the hydro endowment States have
8 benefited.

9 **Q. Has the Company examined alternate methods of providing a Hydro-**
10 **Endowment to Washington?**

11 A. Yes. As indicated by Ms. Kelly in her Rebuttal Testimony, it was evident that
12 few parties supported the proposal in the Company’s original Protocol for a hydro
13 endowment matched with a “coal endowment.” It was also evident that the hydro
14 endowment included in the Modified Accord, known as the fuel adjustment, was
15 no longer acceptable. Therefore, we needed to design and test an alternate means
16 of implementing a hydro endowment. The first such substitute tested was the
17 “load decrement method.” Mr. Taylor’s Rebuttal Testimony describes this
18 approach and explains why the Company’s analyses of the load decrement
19 method indicated that it was not likely to be workable. The Company’s analysis
20 of the fuel adjustment approach and the load decrement approach led us to
21 develop and conduct analyses of the “embedded cost differential method.” These
22 analyses did not identify any apparent flaws in the embedded cost differential
23 method and it was, therefore, incorporated into the Revised Protocol.

1 **Q. Does the “embedded cost differential” method affect cost shifts?**

2 A. Yes, it helps to mitigate them for Washington if New Resources cost more than
3 existing ones, because the embedded cost of other Resources increases. The
4 embedded cost differential method compares Hydro-Electric Resource costs to the
5 embedded cost of other Resources. If embedded costs grow due to load growth,
6 the value of the hydro endowment increases in the Revised Protocol. In our
7 studies that attempted to quantify the cumulative impact of faster Utah load
8 growth over a 14-year period, the impact of the embedded cost differential is to
9 reduce the impact of cost shifts to Washington customers due to load growth in
10 Utah.

11 **Q. Has an acceptable method of eliminating any potential for cost shifts from
12 different rates of load growth been identified?**

13 A. No. However, as indicated by Ms. Kelly, the Company and other parties have
14 committed to further discussions and analysis of potential additional allocation
15 mechanisms or structural changes that would better address the issue. Based upon
16 the analysis completed to date, the Company has concluded that a rolled-in
17 approach for the allocation of New Resource costs, as modified in the Revised
18 Protocol, provides the best balance of reasonably assigning costs without
19 unintended consequences.

20 **Hybrid Proposal**

21 **Q. Mr. Buckley and Mr. Lazar both propose using the Hybrid method for inter-
22 jurisdictional cost allocation. Is this appropriate?**

23 A. No. It is neither an acceptable short-term solution nor a long-term one. As stated

1 by ICNU witness Falkenberg in the Oregon MSP proceeding, “the Hybrid
2 proposal is not sufficiently developed to adopt that proposal in this case.” On a
3 long-term basis, Staff witness Braden states that “Staff does not believe that the
4 control area allocation methodology provides a workable long-term solution to the
5 cost allocation issues arising from the Company’s inter-jurisdictional operations.”
6 Staff testimony does not explain why a Hybrid approach is appropriate for the
7 short-term, but not the long-term.

8 MSP participants raised numerous concerns regarding current Hybrid
9 proposals. Most of these issues remain unresolved. Participants were concerned
10 that current Hybrid proposals:

- 11 • Lack agreement about initial assignment of Resources;
- 12 • Do not appear equitable across the States;
- 13 • Do not accurately track system planning and operation;
- 14 • Increase certain risks when compared to system-wide allocation; and
- 15 • Increase regulatory complexity.

16 **Q. Could you provide examples regarding the lack of agreement with respect to**
17 **the initial assignment of Resources under the Hybrid method?**

18 A. Yes. MSP participants from Oregon and Utah disagreed regarding the appropriate
19 assignment of Cholla Unit IV, together with the associated transmission rights and
20 exchange of power with Arizona Public Service Company. While the Cholla Unit
21 IV-related transactions are clearly in the East Control Area, the plant and
22 exchange contract deliver power mostly in the winter season. As another
23 example, participants from eastern States questioned the initial assignment of

1 Resources because it left the East Control Area short of Resources in initial years,
2 while the West Control Area was long. The East Control Area was thus more
3 exposed to market risks than the Company as a whole. High market prices made
4 customers in the West Control Area better off even though the Company as a
5 whole was worse off.

6 **Q. Did participants agree on the principles for initial assignment of Resources**
7 **under the Hybrid method?**

8 A. Not entirely. As described in my Direct Testimony, the general principle for
9 assigning resources under Hybrid allocation was locational: resources in the East
10 Control Area were assigned to the East and similarly for the West. Participants
11 also wished to take into account how much of each plant had been paid for by
12 each State regardless of its location. All States have been paying portions of the
13 costs of all of the Company's Resources. Some participants believed that if
14 Resources were assigned to States, compensation for the transfer would need to
15 be agreed. The examples I gave earlier in my testimony show that participants
16 were concerned about equity in relation to overall load/resource balance and
17 about seasonal concerns.

18 **Q. Please explain your statement that MSP participants were concerned that**
19 **current Hybrid proposals do not appear equitable across the States.**

20 A. In pre-filed testimony in Oregon's MSP proceeding, Dr. Hellman of the OPUC
21 Staff preferred the Revised Protocol allocation method to the Hybrid stating, "The
22 key concern is the rate impacts to Idaho and Wyoming that are in the eastern
23 control area with Utah." Under the Hybrid proposal, Idaho and Wyoming would

1 bear the full impact of cost shifts due to Utah forecast load growth. Our studies
2 show the impact of these costs shifts would increase revenue requirement in both
3 of these States by more than 3 percent over the 14-year study period and between
4 6 and 7 percent in some years. Additionally, the initial impact of the Hybrid
5 proposal exceeded 3 percent in Utah and Idaho and exceeded 4 percent in
6 Wyoming.

7 **Q. Please explain your statement that MSP participants did not believe that**
8 **current Hybrid proposals accurately reflect system planning and operation.**

9 A. Utah parties criticized Hybrid proposals and supported dynamic allocation in a
10 report to MSP participants dated June 12, 2003. They stated, “First, we want to
11 respect the integrity of the integrated system and would do so by means of a
12 method of apportioning costs for recovery from jurisdictions that is fair and
13 consistent, to the extent practicable, with the planning and operation of the
14 integrated system.” PacifiCorp’s Resources are planned on a system-wide basis,
15 consistent with the Washington rules on Least Cost Planning as discussed by Mr.
16 Widmer. Operationally, PacifiCorp system Resources are dispatched from a
17 single location and each hour to minimize overall costs. For example, it may be
18 most economic for the system to meet loads in the East by purchasing from the
19 markets in the West and increasing transfers. From a Control Area perspective, it
20 may have been less expensive for the West Control Area to sell power in the
21 western markets rather than transfer power to the East Control Area, even though
22 transferring power to the East was the least cost action from a total Company
23 perspective. The conflict between minimizing total Company costs and Control

1 Area costs could lead to a loss of efficiency in the Company's operations.

2 **Q. Please explain your statement that MSP participants were concerned that**
3 **current Hybrid proposals increased risk when compared to system-wide**
4 **allocation?**

5 A. The minutes of the MSP meeting in December 2002 report that Utah Commission
6 advisor Becky Wilson "expressed concern with what appeared to be an increase in
7 the risks of Utah customers, particularly derived from fuel diversity mix." (page
8 15) Under the Hybrid, the fuel mix was more than 95 percent coal in the East
9 Control Area. Such risks could be increased throughout the system.

10 **Q. Please explain your statement that MSP participants were concerned about**
11 **regulatory complexities associated with current Hybrid proposals.**

12 A. The Hybrid method introduces interchange accounting, which is a form of transfer
13 pricing between Control Areas. Mr. Falkenberg notes, in reference to
14 jurisdictional allocation for multi-state utilities:

15 "This is a fairly common problem for multi-state utilities. In cases where
16 there is a "system agreement" such issues are resolved by the FERC.
17 Because PacifiCorp has no system agreement, the FERC is not involved.
18 However, FERC regulation of such agreements has frequently been a
19 source of bitter controversy. Also when mergers have occurred, there can
20 be lingering problems in resolving such issues when noticeable cost
21 differences existed between the pre-merger companies."

22
23 Details of an interchange allocation method were not resolved in the MSP.

24 **Q. Do you believe that the Hybrid method is acceptable to all of the States?**

25 A. No. For the above mentioned reasons, I do not believe that the Hybrid is
26 acceptable to all of the States.

1 **Islanding**

2 **Q. Mr. Buckley recommends that “islanding” is the best long-term solution for**
3 **Washington. Has Staff developed an “islanding” allocation proposal?**

4 A. No. Mr. Buckley’s testimony states that he has not fully developed his proposal,
5 but even the broad outlines of the proposal are not presented. Mr. Buckley
6 provides only examples of “islanding” provisions and decisions that will have to
7 be made. The lack of any specifics, or even a conceptual foundation for the
8 Staff’s proposal, is troubling. I assume that an “islanding” allocation method
9 would be similar to the Hybrid method but rather than separating the system into
10 two Control Areas, it would separate the system by States. Two years of
11 discussion in the MSP have not resolved issues related to Hybrid, and “islanding”
12 would appear to be more complicated than Hybrid given the complexity of
13 PacifiCorp’s system of resources and rights.

14 **Q. Mr. Buckley also states that “[i]t is in the best interest of Washington**
15 **customers to be as isolated as possible” from other States. Is that consistent**
16 **with Washington State policy?**

17 A. No. Washington’s 2003 Biennial Energy Report finds as follows:

18 Guiding Principle #11
19 Actively engage with nearby states, provinces, tribes, and the federal
20 government to help accomplish common energy goals.

21
22 Washington’s electricity and energy systems do not exist in isolation.
23 They are tied to those in the western U.S. and western Canada through an
24 extensive series of transmission lines. Despite our abundance of
25 hydroelectric generation within the state’s border, some of its electricity
26 and the vast majority of its other energy resources come from out of state.
27 ... Electricity moves throughout the Northwest, from coal-fired plants in
28 the Rocky Mountain region, and from seasonal exchanges with California
29 and the Southwest. ... Consequently, it is critical that Washington

1 continue to work cooperatively with regional governmental, quasi-
2 governmental, and private organizations.

3 **Q. Is the Company's Washington service area connected electrically with the**
4 **rest of the Company's system?**

5 A. Yes. As described elsewhere in my testimony, the Company's entire system of
6 resources is integrated, including those resources and contractual
7 rights/obligations that reside in States where PacifiCorp has no obligation to serve
8 end-use load.

9 **Q. Mr. Buckley lists a number of issues that would need to be resolved in order**
10 **to develop a workable islanding method. Which issues should be of most**
11 **concern to the Commission?**

12 A. Many of the issues associated with the Hybrid method would arise in developing
13 an "islanding" method. These include agreement on the initial assignment of
14 Resources, as well as the rules for sharing market transactions and interchange
15 pricing. While the outline of an interchange method had been developed for a
16 Hybrid method with two control areas, that method was not extended to six states,
17 even conceptually. While the interrelation of loads, resources, electrical
18 infrastructure, contractual rights, and markets between Control Areas is highly
19 complex, the interrelation of these system components between geographical
20 State boundaries is many times more complex.

21 **Q. What consequences do you expect from implementing an "islanding**
22 **method?"**

23 A. For planning and operational purposes, Washington State is currently not an
24 island. The Company would likely need to change its Resource planning and

1 acquisition processes, as well as its operation, if Washington were to use an
2 Islanding method for cost allocation. With regard to Resource planning, this
3 would likely involve developing a least cost plan for Washington and a second
4 least cost plan for the rest of the PacifiCorp system. Resource acquisitions would
5 then follow the relevant plan in order for the Washington “island” to operate
6 independently. With regard to system operation, the Company would need to
7 separately dispatch Washington from the rest of the system in order to achieve the
8 lowest cost operation for each of these two entities. Thus, an islanding approach
9 for regulatory allocation purposes is likely to affect actual system operations and
10 may lead to a sub optimal outcome. Since present integrated planning and
11 operations attempt to minimize system cost for all customers, it is reasonable to
12 predict that split planning and operation methods could result in higher total costs
13 and less efficiency.

14 **Situs Assignment of Hydro-Electric Resources**

15 **Q. Public Counsel witness Lazar recommends that the lowest-cost hydro-electric**
16 **resources be reserved for Washington customers alone. Is this a reasonable**
17 **proposal?**

18 A. By no means. Such an approach would be strikingly inequitable, arbitrary and
19 without regulatory precedent.

20 **Q. Does the Company have Hydro-Electric Resources located in Washington**
21 **State?**

22 A. The Hydro-Electric Resources that Mr. Lazar would reserve for Washington
23 customers are located in Washington State. However, they are not in or adjacent

1 to the Company's service territory. The dams are located in western Washington,
2 while the Company's service area is in eastern Washington. The Company has no
3 direct transmission path connecting the two. Electrically, the dams might more
4 accurately be described as located in Oregon. The output of the dams is delivered
5 by transmission paths that directly lead to the Company's electrical system in
6 Oregon and, as such, can only help the Company meet its load service obligation
7 in Washington after the output is integrated into the overall system of loads,
8 resources, electrical infrastructure, and contractual rights.

9 **Q. Why is Mr. Lazar's proposal inequitable?**

10 A. Mr. Lazar's proposal would impose a substantial cost disallowance on the
11 Company with no finding of imprudence on the part of the Company. Accepting
12 for the moment Mr. Lazar's estimate that his recommendation would reduce
13 revenue requirements by \$34 million, the disallowance would amount to some 17
14 percent of total revenue.

15 Other States are highly unlikely to absorb the additional costs that Mr.
16 Lazar's recommendation would allocate to them. Even the author of this proposal
17 acknowledges this. PacifiCorp Data Request 1.14 asked whether Mr. Lazar has a
18 belief regarding the acceptability of his "situs hydro proposal" to jurisdictions
19 other than Washington. Mr. Lazar's reply, in its entirety, states, "Yes. Mr. Lazar
20 thinks they will not like it." The result of this proposal, made outside of the
21 context of an overall allocation agreement, is a large and completely unjustified
22 cost disallowance that is without merit or justification.

1 **Q. Are there other ways in which this proposal is without regulatory precedent?**

2 A. The Commission has never reserved local Hydro-Electric Resources for
3 Washington customers when setting rates. Mr. Taylor discusses the
4 Commission's allocation findings in its 1986 rate order. This order approved
5 rolled-in allocation among the Pacific Power states. At that time, the former
6 Pacific Power operated as an integrated system with two Control Areas – a West
7 Control Area and a Wyoming Control Area. Many of the same transmission
8 constraints for moving power between Control Areas that exist now existed then.
9 Following the merger between Utah Power and Pacific Power, the Staff supported
10 the Consensus allocation method, which retained the benefits of all former Pacific
11 Power Hydro-Electric Resources for the former Pacific Power states. These
12 precedents are sound and the principles should continue to be applied.

13 Mr. Lazar's testimony on pages 10 and 11 regarding past costs recovered
14 in rates is an argument for the Company's proposal rather than his own. Mr.
15 Lazar argues that Washington customers paid higher costs when the dams were
16 first put into service. In fact, all of Pacific Power's customers paid these costs,
17 not Washington customers only.

18 Mr. Lazar's testimony on page 14 is simply incorrect. He testifies there
19 that failure to adopt his proposal will cost Washington ratepayers substantial sums
20 of money. In fact, if the Commission rejects Mr. Lazar's proposal, it will be
21 continuing the status quo. No additional costs will be imposed.

1 **Q. How does the Company's proposal allocate Hydro-Electric Resources and**
2 **Mid-Columbia Contracts?**

3 A. The hydro endowment proposed in the original Protocol is described in the Direct
4 Testimony of Ms. Kelly. The hydro endowment proposed in the Revised Protocol
5 is described in Ms. Kelly's Rebuttal testimony. In the Protocol, the former PP&L
6 jurisdictions receive the low cost Hydro-Electric Resources and Mid-Columbia
7 Contracts. Under the Revised Protocol, the former PP&L jurisdictions receive the
8 low cost Hydro-Electric Resources, and Oregon and Washington receive larger
9 shares of the Mid-Columbia Contracts as a percent of load than any of the other
10 States. Both the Protocol and the Revised Protocol expand the hydro endowment
11 for the Hydro-Electric Resources compared to Modified Accord and assign
12 Washington a larger share of the Mid-Columbia Contracts than both the Modified
13 Accord and the Accord.

14 **Q. If the Commission were to accept Mr. Lazar's proposal, what action would it**
15 **take?**

16 A. The actions implied by Mr. Lazar's proposal are not clear and that is a further
17 reason to reject the proposal. Mr. Lazar provides estimates of the revenue
18 requirement impact of his proposal compared to a rolled-in allocation. These
19 estimates suffer from two deficiencies. First, the Company is not proposing a
20 rolled-in allocation method, as I discussed in my previous response. Second, Mr.
21 Lazar's analysis is based upon a simplistic comparison. Mr. Lazar's own
22 testimony states on page 15:

23 Q. Are the calculations you have performed sufficiently accurate to
24 set a revenue requirement in this proceeding?

1 A. No, they are approximate, based on data the Company supplied on
2 an aggregated basis.

3
4 No accurate estimate of the implications of Mr. Lazar's proposal exists.

5 Mr. Lazar's recommendation would, if adopted, result in a possibly large – but
6 certainly arbitrary – disallowance with no credible foundation upon which to base
7 it.

8 **Proposed Adjustments to Protocol**

9 **Q. Beginning on page 66 of his testimony, Mr. Falkenberg describes the benefits**
10 **of Hydro-Electric Resources and suggests three adjustments to the Protocol**
11 **method. Please comment.**

12 A. The first adjustment that Mr. Falkenberg makes with regard to Hydro-Electric
13 Resources is a fuel adjustment. This adjustment is arbitrary and is not principle-
14 based. It is not consistent with Washington's stated position in the MSP, that all
15 of the costs and benefits of the Hydro-Electric Resources should be assigned to
16 the former PP&L States. The Commission should reject this adjustment.

17 **Q. What other adjustments does Mr. Falkenberg make with regard to Hydro-**
18 **Electric Resources and Mid-Columbia Contracts?**

19 A. He makes a load following adjustment and a spinning reserve adjustment.

20 **Q. What are the problems with these adjustments?**

21 A. To make these adjustments, Mr. Falkenberg creates a fiction. Rather than focus
22 on cost of service, he uses market values to impute benefits of both load following
23 and peak shaving as well as spinning reserves.

24 **Q. Why is this a problem?**

25 A. Washington requires that rates be based on cost of service. For this reason alone,

1 these adjustments should be rejected.

2 **Q. Are there any other problems with these adjustments?**

3 A. Yes. Load following and reserves supplied from Hydro-Electric Resources have
4 little or no cost and are a function of ever changing system operations and
5 restrictions associated with individual resources. As such, there are no costs
6 specifically identified in the Company's accounts for load following or spinning
7 reserves. Therefore, there is not a cost basis for making these adjustments
8 proposed by Mr. Falkenberg.

9 Additionally, these adjustments value only two items. If the Commission
10 were to begin setting rates on value instead of cost, then all parts of the system
11 should be evaluated. For example, the former Utah Power thermal plants are
12 equipped with Automatic Generation Control (AGC) which, like Hydro-Electric
13 Resources, provides value in providing ancillary services to the system, yet there
14 is no value placed on AGC by Mr. Falkenberg. Likewise, the Company meets its
15 reserve obligation via myriad of non-hydro resources, rights, and, when available,
16 the market. Yet again, however, no value is placed on reserve carrying capability
17 by Mr. Falkenberg for such reserve sources. The Company does not recommend
18 this approach, and urges the Commission to continue basing Washington rates on
19 cost of service.

20 **Q. Do the Hydro-Electric Resources and Mid-Columbia Contracts provide load
21 following and reserves value to the PacifiCorp system?**

22 A. Yes, but the value is based on these Resources being a part of the integrated
23 system. It is primarily the baseload thermal resources, running at high capacity

1 factors, which allow the Hydro-Electric Resources and Mid-Columbia Contracts
2 to provide load following value to the system. The costs of the baseload thermal
3 plants are paid for by customers in all jurisdictions. The reserve value is based on
4 the assumption that the system includes more than just Hydro-Electric Resources
5 and Mid-Columbia Contracts. These are just two of the many values of the
6 integrated system and should not be singled out for purposes of making
7 adjustments to rates. Additionally, assigning values to different parts of the
8 integrated system involves making assumptions based on speculation, making it
9 that much more difficult to reach agreement among all jurisdictions on an
10 equitable set of adjustments that are based on valuation of different parts of the
11 integrated system.

12 **Wheeling Expense**

13 **Q. Mr. Buckley makes several adjustments that assign wheeling costs from the**
14 **West Control Area to the East Control Area. Is this consistent with the**
15 **Hybrid method discussed by the MSP participants?**

16 A. No. The Hybrid method last discussed by the MSP participants allocated all
17 wheeling expenses system-wide. Staff has unilaterally altered the Hybrid method
18 for purposes of this proceeding without the benefit of discussing the merits of this
19 change with other MSP participants. This is yet one more issue that would need
20 to be resolved among the States if the Hybrid method were to go forward.

1 **Q. Mr. Buckley's Exhibit APB-6 shows a proposed reduction in wheeling**
2 **expense to Washington of \$1,782,603. Do you agree with this proposed**
3 **adjustment?**

4 A. No. There are two problems with Mr. Buckley proposed adjustment. First, there
5 is an error in Exhibit APB-6. In his testimony, Mr. Buckley indicates that he has
6 reassigned half of the "Naughton Wheel" and "Bannack Wheel" expenses to the
7 East Control Area. In Exhibit APB-6, however, 100 percent of the expenses
8 associated with these contracts were assigned to the East Control Area.
9 Correcting this error would reduce Mr. Buckley's adjustment by about \$41,000.

10 **Q. What is the other problem with Mr. Buckley's adjustment to wheeling**
11 **expense?**

12 A. Mr. Buckley has proposed that the "SCE ISO Charge" be reassigned from the
13 West Control Area to the East Control Area. This proposed adjustment, however,
14 is inconsistent with the treatment of the SCE sale under the Hybrid method.
15 Under the Hybrid method, the SCE sale revenues and associated costs are
16 assigned equally between the West and the East. To be consistent, the wheeling
17 costs associated with the SCE sale should also be assigned equally between the
18 West and the East. Making this change reduces Mr. Buckley's adjustment by
19 \$783,669. This adjustment combined with the error cited above would result in a
20 reduction in wheeling expense to Washington of \$958,343.

21 **Development of the MC Factor**

22 **Q. What does Exhibit No. ___ GND-11 show?**

23 A. Exhibit No. ___(GND-11) is Appendix F to the Revised Protocol and contains a

1 description of the calculation of the MC factor as well as example calculations of
2 the factor. The MC factor is used in the Revised Protocol to allocate the Mid-
3 Columbia Adjustment among the States.

4 **Q. Why has the Company developed an MC factor?**

5 A. The Company performed an extensive review of the Mid-Columbia Contracts at
6 the request of the MSP participants. There are four contracts that were entered
7 into in the 1950's and 1960's, and three contracts that were entered into in 2001.
8 These latter three contracts are successor contracts to the two earlier contracts
9 with Grant County which provide the Company a share of the output of the Priest
10 Rapids and Wanapum dams. The Priest Rapids contract stated that the output was
11 for the benefit of Oregon customers and the Wanapum contract stated that the
12 output was for the benefit of Oregon and Washington customers. Based on this
13 language, the MC factor is developed as though the Priest Rapids energy is
14 assigned to Oregon and the Wanapum energy is assigned to Oregon and
15 Washington as described in Appendix F. The energy from the three successor
16 contracts is assigned to Oregon during the time subsequent to the expiration of the
17 Priest Rapids contract and prior to the expiration of the Wanapum contract. After
18 both contracts have expired, the energy from the successor contracts is split
19 between Oregon and Washington as described in Appendix F. In the MC factor,
20 the energy from the remaining two contracts, associated with the Rocky Reach
21 and Wells projects, is spread system-wide as these two contracts do not have
22 specific language identifying any particular State as the beneficiary of the output.
23 The MC factor is then calculated by dividing the energy assigned and allocated to

1 each State by the total energy from the Mid-Columbia Contracts. The Mid-
2 Columbia Adjustment is then made based on an allocated share of the costs of all
3 of the Mid-Columbia Contracts using the MC factor. This adjustment ensures
4 that no one State is burdened if the costs under one of the Mid-Columbia
5 Contracts diverge from the other contracts. This method ensures that all States
6 are afforded a share of the costs and benefits of the Mid-Columbia Contracts, with
7 Oregon and Washington receiving a larger share than would be the case if they
8 were treated as System Resources.

9 **Q. Does that conclude your Rebuttal Testimony?**

10 A. Yes.