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March 22, 2007

***VIA ELECTRONIC FILING AND  
OVERNIGHT DELIVERY***

Washington Utilities and Transportation Commission  
1300 S. Evergreen Park Drive S.W.  
P.O. Box 47250  
Olympia, WA 98504-7250

Attention: Carole Washburn  
Executive Secretary

Re: Docket Nos. UE-061546/UE-060817 **Revised pages to Mark T. Widmer's  
Rebuttal Testimony**

Enclosed for filing are an original and twelve (12) copies of revised pages to Mark T. Widmer's Rebuttal Testimony. in this proceeding. In accordance with WAC 480-07-460(1)(b)(iii), each changed page is labeled "REVISED MARCH 22, 2007." Marked pages showing the changes in legislative style are also included.

The enclosed revised pages are the following:

Mark T. Widmer Rebuttal Testimony (MTW-8T) 16-26, 37 and 50.

Sincerely,

*Andrea L. Kelly /p.r.*

Andrea L. Kelly  
Vice President, Regulation

Enclosures

cc: Service List

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of March, 2007, I caused to be served, via E-mail and overnight delivery in Docket Nos. UE-061546/UE-060817 PacifiCorp's Revised pages to Mark T. Widmer's Rebuttal Testimony to the following:

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Peggy Ryan  
Supervisor, Regulatory Administration

Corrected Pages to Mark T. Widmer's Rebuttal Testimony

(Exhibit No. \_\_\_\_((MTW-8T) (Unmarked)

1 discuss in my following rebuttal testimony.

2 **Interconnection Benefits**

3 **Q. Please explain Mr. Falkenberg's proposed interconnection benefit**  
4 **adjustment.**

5 A. The proposed interconnection benefit adjustment purports to calculate likely  
6 benefits WCA could capture if sales made at the MID-C market hub were instead  
7 made at PV, SP15 or Four corners market hubs. Mr. Falkenberg believes the  
8 adjustment is reasonable because, according to him, the WCA model includes  
9 costs without benefits. The proposed adjustment would reduce Washington net  
10 power costs by \$8.6 million. The \$8.6 million adjustment comprises \$5.7 million  
11 for transfer capability and \$2.9 million for dynamic overlay benefits.

12 **Q. Do you agree with the assumed \$5.7 million interconnection portion of the**  
13 **benefit?**

14 A. No. The adjustment does not meet the required showing of "tangible and  
15 quantifiable benefits" as it is based only on loose assumptions about how much  
16 energy is available, how much transmission is available, where it can be sold and  
17 for what price, all without doing an hourly dispatch of the Company's system.  
18 Further, there are flaws in his calculation. For these reasons alone the adjustment  
19 should be rejected.

1 **Q. On page 18 lines 7-9, Mr. Falkenberg states: "...in the WCA model, the**  
2 **Company includes only the costs, while ignoring some of the most important**  
3 **benefits of the PACW-PACE interconnections." Do you agree with this**  
4 **statement?**

5 A. No. The statement is misleading. The primary interconnection between PACW  
6 and PACE is the ability to deliver Bridger generation to Utah under the terms of  
7 Idaho Power Revised Transmission Service Agreement (RTSA). As the  
8 Company acknowledged in response to ICNU data request 2.9, the Company  
9 inadvertently left in that portion of the RTSA cost related to moving Bridger  
10 generation into Utah and moving Wyoming generation to WCA. As I previously  
11 addressed in my discussion of Mr. Buckley's testimony, the Company agrees that  
12 this oversight should be corrected. Mr. Falkenberg's observation is predicated on  
13 a perceived disconnect between costs and benefits. With this correction, this  
14 potential disconnect does not exist. Also, as I explain later in my rebuttal  
15 testimony, his adjustment is overstated.

16 **Q. On page 18, line 17, Mr. Falkenberg states: "It makes no sense to include**  
17 **COB, while ignoring PACE as a potential market for surplus PACW**  
18 **generation." Do you agree with this conclusion?**

19 A. No. COB is a liquid market hub to which the WCA is connected; the  
20 interconnection between PACW and PACE does not constitute a liquid market  
21 hub. The nearest liquid market hub in PACE is Four Corners. In absence of a  
22 transmission cost, the price between COB, Mid C and Four Corners should be  
23 equal. Any transactions with an independent PACE would have to take into

1 account the transmission cost of reaching the Four Corners market. Therefore, it  
2 is reasonable to conclude that COB and Mid-C prices serve as a reasonable  
3 surrogate for Four Corners prices adjusted for transmission costs.

4 **Q. In Exhibit No.\_\_(RJF-5), Mr. Falkenberg calculates an interconnection**  
5 **benefit. Does his analysis provide a reasonable adjustment?**

6 A. No. Ignoring the fact that Wyoming resources have not been shown to be used  
7 and useful to Washington customers, the analysis makes several false assumptions  
8 regarding the Company's access to the Southern liquid markets and double counts  
9 the access used in Exhibit No.\_\_(RJF-6). The first false assumption the analysis  
10 makes is that when PACW wishes to make a sale to PACE with an offsetting  
11 purchase at Mid C, transmission from Mid-C to PACW load pockets is available.  
12 This is not the case. Generally, the transmission capability between Mid-C and  
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16 because it is the only outlet for a surplus in the Walla Walla area. The third false  
17 assumption the analysis makes is that whenever PACW wishes to make a sale,  
18 PACE has surplus transmission to a liquid market hub. In reality, it is likely that  
19 when PACW has a surplus to sell, PACE also has surplus to sell and is already  
20 using the transmission path to a liquid market.

21 **Q. Please explain the false assumptions regarding access to the Southern liquid**  
22 **markets.**

1 A. Mr. Falkenberg starts his analysis by referring to the topology diagram on page 9  
2 of his testimony. As noted in the footnote on page 8, the diagram is from the  
3 GRID Algorithm Guide. As noted in the guide, the diagram is for illustrating the  
4 topology generally, and is unrelated to a particular rate case or period of time.  
5 For example, because the Commission disallowed Colstrip 3 for purposes of  
6 setting Washington rates, the link from Colstrip to Goshen is not pertinent to the  
7 Washington study. As noted on the diagram, the 104 MW link to Bridger is not a  
8 physical path; rather, it is a surrogate for a feature of the RTSA agreement. The  
9 fourth false assumption his analysis makes is that the terms of the agreement  
10 allow the type of purchase transaction proposed by Mr. Falkenberg. The contract  
11 specifically precludes the type of purchase transaction he proposes. He also  
12 looks at the transmission capability from Bridger to Utah North and concludes  
13 there is 415 MWs of access to the Four Corners market. The fifth false  
14 assumption that Mr. Falkenberg makes is that he ignores the 280 MW limitation  
15 of moving generation from Utah South to Four Corners and assumes that the line  
16 is available at all times, which is not the case. In addition, part of that 415 MWs  
17 consists of short-term firm transmission from Idaho Power. The sixth false  
18 assumption in Mr. Falkenberg's analysis is to deem the transmission rate as only  
19 \$0.73/MWh in all hours. In contrast, IPC's short-term rate is \$2.38/ MWh in  
20 heavy load hours and \$1.33/MWh in light load hours.

21 Mr. Falkenberg improperly calculates the highest margin of Mid-C with  
22 assumed sales at SP-15, Four Corners or Palo Verde ("PV") which involves two  
23 additional false assumptions. First, as shown on the topology diagram, the

1 Company has zero access to SP-15. Of course, transmission may be available at  
2 times for a sale to the ISO, but there is an import fee that generally ranges from  
3 \$4 to \$4.5 per MWh depending on the market clearing price. Second, as shown  
4 on the topology diagram, the Company's access to PV is via the Arizona Public  
5 Service ("APS") transmission contract. The Company uses this transmission  
6 contract to serve the APS exchange. Therefore, any access to PV is going to be  
7 with Cholla generation in the lower priced hours when there are not deliveries for  
8 the APS Exchange. These hours are probably the hours when both PACE and  
9 PACW have a surplus so the PACE transmission is already being utilized.

10 **Q. Are there additional issues with the margin calculation?**

11 A. Yes. As discussed above, the price spread between markets is the market's view  
12 of transmission costs between markets. PACE would exercise a trade with  
13 PCAW only if its transmission cost is less than the spread. In other words, if  
14 PACE could save on transmission cost, it would make a transaction. This is the  
15 concept behind the share-the-savings transaction incorporated in Mr. Buckley's  
16 proposed Eastern Market Modification adjustment. Mr. Falkenberg reduces the  
17 margin by a fixed \$0.73/MWh for transmission cost in all hours. The \$0.73 from  
18 Exhibit No.\_\_(RJF-3) is Mr. Falkenberg's calculation of the Company's third  
19 party transmission cost for PACE. It does not consider PACE's recovery of its  
20 investment in owned transmission assets. The Company's posted OASIS rate for  
21 transmission is \$5.84/MWh and the posted rate for losses is 4.48 percent. Using  
22 the \$51.11/MWh price from Mr. Falkenberg's Exhibit No.\_\_(RJF-7), the  
23 transmission cost plus the market value of the losses is \$8.13/MWh. Considering



1 the IPC transmission rates, the Cal ISO import rates previously mentioned and the  
2 Company's posted OASIS rates, the \$0.73/MWh is unrealistic.

3 **Q. Please explain the portion of the interconnection benefit adjustment related**  
4 **to the dynamic overlay.**

5 A. Mr. Falkenberg proposes to allocate to Washington a portion of the dynamic  
6 overlay benefits based on an unrelated and outdated study from 2004. The  
7 adjustment comprises \$2.9 million of the total \$8.6 million interconnection  
8 adjustment. Of the \$2.9 million portion, \$1.2 million is related to ready reserves  
9 and \$1.7 million is related to spinning reserves.

10 **Q. Please provide the context for the dynamic overlay benefits.**

11 A. As a result of the RTSA transmission agreement with Idaho Power, the Company  
12 has historically been able to meet up to 100 MW of spinning reserve requirements  
13 and up to 75 MW of ready reserve requirements from WCA resources in lieu of  
14 PACE carrying those reserves on low-cost coal and gas resources.

15 **Q. Do you agree with the proposed adjustment?**

16 A. No. The adjustment value used by Mr. Falkenberg is based on stale information  
17 from a three-year old data response from the Multi-State Process ("MSP") related  
18 to a different allocation method. Further, the adjustment does not consider the  
19 fact that the reserves may have little or no value if PACE carried its own reserves  
20 (as Utah Power did prior to the merger) or bought them from another entity.

21 **Q. How have changes on the system impacted the proposed adjustment?**

22 A. The Company has made significant system changes in the three intervening years.  
23 The Company has entered into new operating reserve contracts with its PACE

1 industrial customers. Using the updated semi-annual report from the Company's  
2 response to Commission Staff data request 61, it indicates there is little value to  
3 the ready reserve dynamic overlay component in the 12-month period ending  
4 March 2007. Setting the ready reserve dynamic overlay component to zero and  
5 making the corresponding adjustment in Path C capability result in a total system  
6 net power cost benefit of \$0.17 million. In addition, the 525 MW Currant Creek  
7 combined cycle combustion turbine has been added to the system, thereby  
8 reducing the value of the spinning reserve dynamic overlay component.

9 **Q. Have the spinning reserve and regulating margin requirements of the WCA**  
10 **also increased?**

11 A. Yes. With the addition of the 100 MW Leaning Juniper Wind project in 2006 and  
12 the addition of the 140 MW Marengo 1 wind project in 2007, WCA spinning  
13 reserve and load following requirements have increased due to the variability of  
14 wind resources. While the spinning reserve requirements increase by only 2.5  
15 percent for each MW of wind project that is added, the variability of wind can  
16 cause a significant increase in load-following requirements. Since WCA load  
17 following would be provided from hydro units that can provide spinning reserves,  
18 those same units would not be able to provide spinning reserves to PACE if they  
19 are being used to follow ever increasing wind generation. For example, a 100  
20 MW wind facility could operate anywhere between a 0 percent and a 100 percent  
21 capacity factor for a given hour. When the wind stops blowing, the regulating  
22 margin requirement could be as much as 100 MW for this one project, depending  
23 upon the operating level. Of course, on average most wind projects in the

1 Northwest will probably operate at an average capacity factor of 30-35 percent.  
2 Nonetheless, the variability of wind resources will reduce the flexibility of WCA  
3 to provide spinning reserves to PACE.

4 **Q. Do you expect those requirements to increase substantially in the future?**

5 A. Yes. As a result of the renewable portfolio standards ("RPS") in Washington and  
6 California and the expectation that Oregon will follow, load following and  
7 spinning reserve requirements will increase substantially. At some point there is  
8 simply not going to be enough hydro to follow the wind. So the question needs to  
9 be asked whether it is better to retain the load-following capability for the WCA  
10 or sell it to PACE. I believe it should be retained for the WCA.

11 **Q. Is it reasonable to assume that the full value of the dynamic overlay spinning**  
12 **reserve benefits would accrue to the WCA in a situation of an independent**  
13 **WCA and PACE?**

14 A. No. The PACE system has the ability to provide its own reserve requirements or  
15 to buy them from another entity. The excess spinning reserves may not have any  
16 value unless PACE is willing to buy them or WCA can find another customer.  
17 However, finding another customer in the hydro-heavy Northwest may be  
18 difficult to do. Prior to the merger with Utah Power, the Company did not sell  
19 excess spinning reserves. So, PACE would be willing to acquire those reserves  
20 from WCA only if they were cheaper than other alternatives. Therefore, it would  
21 not be reasonable to ascribe the full value to the WCA.

22 **Q. What is your recommendation for Mr. Falkenberg's interconnection benefit**  
23 **adjustment?**

1 A. Given the large number of errors associated with the portion of his adjustment  
2 related to transfer capability from West to East and from East to West, the \$5.7  
3 million portion of the adjustment should be rejected entirely. The portion of the  
4 adjustment related to dynamic overlay benefits is stale due to resource changes on  
5 the system so it also should be rejected. If, however, the Commission finds merit  
6 in the adjustment, at a minimum, its value should be lower. First, the \$1.2 ready  
7 reserve component of the adjustment should be adjusted to the current WCA  
8 value of \$0.17 million and then reduced by 50 percent to account for sharing. The  
9 Washington share of this adjustment is \$0.019 million. Second, at a minimum,  
10 the value associated with spinning reserves should be reduced by 50 percent from  
11 \$1.7 million to \$0.85 million Washington to account for sharing. In addition, the  
12 Commission should decide whether these benefits should be assumed to be sold  
13 to PACE or are reserved for the WCA. I believe the current benefits should be  
14 retained for the WCA for the future and the entire adjustment should be rejected.

15 **Johnston/Wyodak (Part 1)**

16 **Q. Please explain Mr. Falkenberg's proposed adjustment.**

17 A. The proposed adjustment assumes that generation from Dave Johnston and  
18 Wyodak is transferred through Bridger, is sold in the wholesale market, and is  
19 therefore used and useful for Washington customers. The adjustment would  
20 reduce net power cost by \$3.8 million Washington.

21 **Q. Do you agree with the proposed adjustment?**

22 A. No. I do not believe the necessary showing of "tangible and quantifiable  
23 benefits" can be made in the case of Dave Johnston and Wyodak.

1 **Q. Is it possible to quantify how much energy is available from Dave Johnston**  
2 **and Wyodak after Wyoming load requirements have been met?**

3 A. No. East Wyoming PACE resources comprise not only Dave Johnston and  
4 Wyodak, but include many other resources located in the state. For example,  
5 during 2006, other Wyoming resources (including power purchases) accounted  
6 for over 1,200,000 MWh. The Company also has 110 MW of transfer rights from  
7 Utah North to Wyoming. Since electrons are not color coded, there is no way to  
8 identify whether or not Dave Johnston and Wyodak energy is even available for  
9 interconnection benefits. For that matter we do not know the cost of the energy  
10 that may be available for interconnection benefits, because we do not know if it is  
11 energy from a Qualifying Facility ("QF"), market purchases, Dave Johnston, or  
12 Wyodak. Therefore, we cannot calculate what the margin would be on such  
13 transactions. Further, the Company has signed agreements with the Mountain 1  
14 and Mountain 2 QF projects to provide an additional 400,000+ MWh of  
15 generation starting by April 2008 and July 2008, which will cloud the  
16 determination even further. In fact, the Company expects substantial load growth  
17 in the state of Wyoming beginning in 2008, which will require more of the  
18 existing energy to be used within Wyoming. Therefore, it cannot be adequately  
19 demonstrated that Dave Johnston and Wyodak (or any other Wyoming resources)  
20 are used and useful for Washington customers.

21 **Q. Are there also flaws in his proposed adjustment?**

22 A. Yes. There are several; I will explain each one separately. First, as I previously  
23 discussed, the Company's modeling already captures all generation being

1 delivered from Bridger to the WCA because our modeling transfers more energy  
2 to the WCA than has occurred historically. Therefore, the proposed adjustment  
3 would be a double count of benefits. Ignoring the double count, the second false  
4 assumption that Mr. Falkenberg makes is that the proposed incremental transfer is  
5 391,332 MWh. The figure was extracted from the wrong study; the correct figure  
6 is 237,430 MWh of Wyoming generation and with the possibility that some of the  
7 generation originated in Utah. The third false assumption that Mr. Falkenberg  
8 makes is that he applies an annual wholesale market price to a monthly  
9 distribution of energy transfers. This is troubling when approximately 43 percent  
10 of the transfers occur during the spring months when the Northwest hydro runoff  
11 occurs and when wholesale market prices are low.

## 12 Johnston / Wyodak (Part II)

13 **Q. Please explain Mr. Falkenberg's proposed adjustment.**

14 A. This adjustment reflects the allocation impact of his proposal to include the East  
15 Wyoming jurisdiction, including Dave Johnston and Wyodak, in the WCA. The  
16 proposed adjustment would reduce Washington net power costs by \$8.2 million.

17 **Q. Do you agree with the proposed adjustment from the perspective of the**  
18 **"used and useful" requirement?**

19 A. No, for the reasons discussed above. Inclusion of these resources and Wyoming  
20 East load amount to nothing more than an obvious case of cherry picking.

21 **Q. Using Mr. Falkenberg's reasoning, can this same argument be made for**  
22 **several other resources from PACE?**

23 A. Absolutely. This argument could be made for any resource with a lower  
24 embedded cost than WCA. Using the 100 MW Deseret purchase, for example,  
25 this purchase is similar to a flat product that is priced well below market at  
26 approximately \$37 per MWh. For this reason, all of the energy may not be used

1 included in the Company's filing. He believes the Company's adjustment is not  
2 warranted because he believes GRID understates actual coal-fired generation and  
3 the Company's modeling approach is not standard industry practice. He also  
4 believes the Oregon Commission Order in Docket UE-139 for Portland General  
5 Electric ("PGE") is supportive of his adjustment. The adjustment would reduce  
6 proposed net power costs by \$0.07 million Washington. Further, it should be  
7 noted that Mr. Falkenberg is revising his proposed adjustment to a \$0.26 million  
8 decrease in Washington net power costs.

9 **Q. Do you agree with the proposed adjustment?**

10 A. No. The reasons stated by Mr. Falkenberg in support of his proposed adjustment  
11 are either wrong or do not provide a sound basis for the proposed adjustment.

12 **Q. Is there any substance to the argument that the Company is modeling  
13 phantom outages and that the modeling is not standard industry practice?**

14 A. No. The Company has merely used an alternative modeling approach to capture  
15 the cost of thermal ramping because GRID is not currently structured to capture  
16 ramping as some models do.

17 **Q. Please explain.**

18 A. The availability rates in GRID assume that coal fired units are available at full  
19 load when being ramped down for maintenance and when restarted and ramped up  
20 after planned maintenance and forced outages. In reality, coal-fired units are not  
21 available at full load when ramping down for maintenance and when ramping up  
22 from outages due to the physical capabilities of the units. Generation is lost while  
23 a unit ramps to the minimum level required for synchronizing with the GRID and

1 process.

2 **Q. Mr. Johnson implies that there is a hydro reliance threshold that a utility**  
3 **need to pass to have a PCAM approved. Is this the case?**

4 A. To the best of my knowledge, the Commission has never identified a specific  
5 hydro reliance threshold that must be met in order to obtain a PCAM.

6 **Q. Mr. Johnson indicates that the use of historical hydro generation is not a**  
7 **reasonable basis to establish exposure to hydro conditions. Do you agree?**

8 A. No. It has been a long standing Commission policy to use historical generation  
9 adjusted for current operating capabilities to determine a normalized level that is  
10 included in rates.

11 **Q. Is the historical data used in your direct testimony too stale to provide a**  
12 **realistic analysis of the Company's potential hydro exposure?**

13 A. No. For the most part actual hydro generation variability is a function of annual  
14 precipitation and snow packs, so the variability is still relative.



Corrected Pages to Mark T. Widmer's Rebuttal Testimony

(Exhibit No. \_\_\_\_((MTW-8T) (Marked in legislative format))

1 discuss in my following rebuttal testimony.

2 **Interconnection Benefits**

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4 **adjustment.**

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6 benefits WCA provides to PACE, under the assumption that Dave Johnston and  
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1 A. Mr. Falkenberg starts his analysis by referring to the topology diagram on page 9  
2 of his testimony. As noted in the footnote on page 8, the diagram is from the  
3 GRID Algorithm Guide. As noted in the guide, the diagram is for illustrating the  
4 topology generally, and is unrelated to a particular rate case or period of time.  
5 For example, because the Commission disallowed Colstrip 3 for purposes of  
6 setting Washington rates, the link from Colstrip to Goshen is not pertinent to the  
7 Washington study. As noted on the diagram, the 104 MW link to Bridger is not a  
8 physical path; rather, it is a surrogate for a feature of the RTSA agreement. The  
9 fourth false assumption his analysis makes is that the terms of the agreement  
10 allow the type of purchase transaction proposed by Mr. Falkenberg. The contract  
11 specifically precludes the type of purchase transaction he proposes. He also  
12 looks at the transmission capability from Bridger to Utah North and concludes  
13 there is 415 MWs of access to the Four Corners market. The fifth false  
14 assumption that Mr. Falkenberg makes is that he ignores the 280 MW limitation  
15 of moving generation from Utah South to Four Corners and assumes that the line  
16 is available at all times, which is not the case. In addition, part of that 415 MWs  
17 consists of short-term firm transmission from Idaho Power. The sixth false  
18 assumption in Mr. Falkenberg's analysis is to deem the transmission rate as only  
19 \$0.73/MWh in all hours. In contrast, IPC's short-term rate is \$2.38/ MWh in  
20 heavy load hours and \$1.33/MWh in light load hours.

21 Mr. Falkenberg improperly calculates the highest margin of Mid-C with  
22 assumed sales at SP-15, Four Corners or Palo Verde ("PV") which involves two  
23 additional false assumptions. First, as shown on the topology diagram, the

1 Company has zero access to SP-15. Of course, transmission may be available at  
2 times for a sale to the ISO, but there is an import fee that generally ranges from  
3 \$4 to \$4.5 per MWh depending on the market clearing price. Second, as shown  
4 on the topology diagram, the Company's access to PV is via the Arizona Public  
5 Service ("APS") transmission contract. The Company uses this transmission  
6 contract to serve the APS exchange. Therefore, any access to PV is going to be  
7 with Cholla generation in the lower priced hours when there are not deliveries for  
8 the APS Exchange. These hours are probably the hours when both PACE and  
9 PACW have a surplus so the PACE transmission is already being utilized.

10 **Q. Are there additional issues with the margin calculation?**

11 A. Yes. As discussed above, the price spread between markets is the market's view  
12 of transmission costs between markets. PACE would exercise a trade with  
13 PCAW only if its transmission cost is less than the spread. In other words, if  
14 PACE could save on transmission cost, it would make a transaction. This is the  
15 concept behind the share-the-savings transaction incorporated in Mr. Buckley's  
16 proposed Eastern Market Modification adjustment. Mr. Falkenberg reduces the  
17 margin by a fixed \$0.73/MWh for transmission cost in all hours. The \$0.73 from  
18 Exhibit No.\_\_(RJF-3) is Mr. Falkenberg's calculation of the Company's third  
19 party transmission cost for PACE. It does not consider PACE's recovery of its  
20 investment in owned transmission assets. The Company's posted OASIS rate for  
21 transmission is \$5.84/MWh and the posted rate for losses is 4.48 percent. Using  
22 the \$51.11/MWh price from Mr. Falkenberg's Exhibit No.\_\_(RJF-7), the  
23 transmission cost plus the market value of the losses is \$8.13/MWh. Considering

1 the IPC transmission rates, the Cal ISO import rates previously mentioned and the  
2 Company's posted OASIS rates, the \$0.73/MWh is unrealistic.

3 **Q. Please explain the portion of the interconnection benefit adjustment related**  
4 **to the dynamic overlay.**

5 A. Mr. Falkenberg proposes to allocate to Washington a portion of the dynamic  
6 overlay benefits based on an unrelated and outdated study from 2004. The  
7 adjustment comprises \$2.9 million of the total \$8.6 million interconnection  
8 adjustment. Of the \$2.9 million portion, \$1.2 million is related to ready reserves  
9 and \$1.7 million is related to spinning reserves.

10 **Q. Please provide the context for the dynamic overlay benefits.**

11 A. As a result of the RTSA transmission agreement with Idaho Power, the Company  
12 has historically been able to meet up to 100 MW of spinning reserve requirements  
13 and up to 75 MW of ready reserve requirements from WCA resources in lieu of  
14 PACE carrying those reserves on low-cost coal and gas resources.

15 **Q. Do you agree with the proposed adjustment?**

16 A. No. The adjustment value used by Mr. Falkenberg is based on stale information  
17 from a three-year old data response from the Multi-State Process ("MSP") related  
18 to a different allocation method. Further, the adjustment does not consider the  
19 fact that the reserves may have little or no value if PACE carried its own reserves  
20 (as Utah Power did prior to the merger) or bought them from another entity.

21 **Q. How have changes on the system impacted the proposed adjustment?**

22 A. The Company has made significant system changes in the three intervening years.  
23 The Company has entered into new operating reserve contracts with its PACE



1 industrial customers. Using the updated semi-annual report from the Company's  
2 response to Commission Staff data request 61, it indicates there is little value to  
3 the ready reserve dynamic overlay component in the 12-month period ending  
4 March 2007. Setting the ready reserve dynamic overlay component to zero and  
5 making the corresponding adjustment in Path C capability result in a total system  
6 net power cost benefit of \$0.17 million. In addition, the 525 MW Currant Creek  
7 combined cycle combustion turbine has been added to the system, thereby  
8 reducing the value of the spinning reserve dynamic overlay component.

9 **Q. Have the spinning reserve and regulating margin requirements of the WCA**  
10 **also increased?**

11 A. Yes. With the addition of the 100 MW Leaning Juniper Wind project in 2006 and  
12 the addition of the 140 MW Marengo 1 wind project in 2007, WCA spinning  
13 reserve and load following requirements have increased due to the variability of  
14 wind resources. While the spinning reserve requirements increase by only 2.5  
15 percent for each MW of wind project that is added, the variability of wind can  
16 cause a significant increase in load-following requirements. Since WCA load  
17 following would be provided from hydro units that can provide spinning reserves,  
18 those same units would not be able to provide spinning reserves to PACE if they  
19 are being used to follow ever increasing wind generation. For example, a 100  
20 MW wind facility could operate anywhere between a 0 percent and a 100 percent  
21 capacity factor for a given hour. When the wind stops blowing, the regulating  
22 margin requirement could be as much as 100 MW for this one project, depending  
23 upon the operating level. Of course, on average most wind projects in the

1 Northwest will probably operate at an average capacity factor of 30-35 percent.  
2 Nonetheless, the variability of wind resources will reduce the flexibility of WCA  
3 to provide spinning reserves to PACE.

4 **Q. Do you expect those requirements to increase substantially in the future?**

5 A. Yes. As a result of the renewable portfolio standards ("RPS") in Washington and  
6 California and the expectation that Oregon will follow, load following and  
7 spinning reserve requirements will increase substantially. At some point there is  
8 simply not going to be enough hydro to follow the wind. So the question needs to  
9 be asked whether it is better to retain the load-following capability for the WCA  
10 or sell it to PACE. I believe it should be retained for the WCA.

11 **Q. Is it reasonable to assume that the full value of the dynamic overlay spinning**  
12 **reserve benefits would accrue to the WCA in a situation of an independent**  
13 **WCA and PACE?**

14 A. No. The PACE system has the ability to provide its own reserve requirements or  
15 to buy them from another entity. The excess spinning reserves may not have any  
16 value unless PACE is willing to buy them or WCA can find another customer.  
17 However, finding another customer in the hydro-heavy Northwest may be  
18 difficult to do. Prior to the merger with Utah Power, the Company did not sell  
19 excess spinning reserves. So, PACE would be willing to acquire those reserves  
20 from WCA only if they were cheaper than other alternatives. Therefore, it would  
21 not be reasonable to ascribe the full value to the WCA.

22 **Q. What is your recommendation for Mr. Falkenberg's interconnection benefit**  
23 **adjustment?**

1 A. Given the large number of errors associated with the portion of his adjustment  
2 related to transfer capability from West to East and from East to West, the \$5.7  
3 million portion of the adjustment should be rejected entirely. The portion of the  
4 adjustment related to dynamic overlay benefits is stale due to resource changes on  
5 the system so it also should be rejected. If, however, the Commission finds merit  
6 in the adjustment, at a minimum, its value should be lower. First, the \$1.2 ready  
7 reserve component of the adjustment should be adjusted to the current WCA  
8 value of \$0.17 million and then reduced by 50 percent to account for sharing. The  
9 Washington share of this adjustment is \$0.019 million. Second, at a minimum,  
10 the value associated with spinning reserves should be reduced by 50 percent from  
11 \$1.7 million to \$0.85 million Washington to account for sharing. In addition, the  
12 Commission should decide whether these benefits should be assumed to be sold  
13 to PACE or are reserved for the WCA. I believe the current benefits should be  
14 retained for the WCA for the future and the entire adjustment should be rejected.

15 **Johnston/Wyodak (Part 1)**

16 **Q. Please explain Mr. Falkenberg's proposed adjustment.**

17 A. The proposed adjustment assumes that generation from Dave Johnston and  
18 Wyodak is transferred through Bridger, is sold in the wholesale market, and is  
19 therefore used and useful for Washington customers. The adjustment would  
20 reduce net power cost by \$3.8 million Washington.

21 **Q. Do you agree with the proposed adjustment?**

1 A. No. ~~As I previously discussed,~~ I do not believe the necessary showing of  
2 “tangible and quantifiable benefits” can be made in the case of Dave Johnston and  
3 Wyodak.

4 **Q. Is it possible to quantify how much energy is available from Dave Johnston**  
5 **and Wyodak after Wyoming load requirements have been met?**

6 A. No. East Wyoming PACE resources comprise not only Dave Johnston and  
7 Wyodak, but include many other resources located in the state. For example,  
8 during 2006, other Wyoming resources (including power purchases) accounted  
9 for over 1,200,000 MWh. The Company also has 110 MW of transfer rights from  
10 Utah North to Wyoming. Since electrons are not color coded, there is no way to  
11 identify whether or not Dave Johnston and Wyodak energy is even available for  
12 interconnection benefits. For that matter we do not know the cost of the energy  
13 that may be available for interconnection benefits, because we do not know if it is  
14 energy from a Qualifying Facility (“QF”), market purchases, Dave Johnston, or  
15 Wyodak. Therefore, we cannot calculate what the margin would be on such  
16 transactions. Further, the Company has signed agreements with the Mountain 1  
17 and Mountain 2 QF projects to provide an additional 400,000+ MWh of  
18 generation starting by April 2008 and July 2008, which will cloud the  
19 determination even further. In fact, the Company expects substantial load growth  
20 in the state of Wyoming beginning in 2008, which will require more of the  
21 existing energy to be used within Wyoming. Therefore, it cannot be adequately  
22 demonstrated that Dave Johnston and Wyodak (or any other Wyoming resources)  
23 are used and useful for Washington customers.

1 **Q. Are there also flaws in his proposed adjustment?**

2 A. Yes. There are several; I will explain each one separately. First, as I previously  
3 discussed, the Company's modeling already captures all generation being  
4 delivered from Bridger to the WCA because our modeling transfers more energy  
5 to the WCA than has occurred historically. Therefore, the proposed adjustment  
6 would be a double count of benefits. Ignoring the double count, the second false  
7 assumption that Mr. Falkenberg makes is that the proposed incremental transfer is  
8 391,332 MWh. The figure was extracted from the wrong study; the correct figure  
9 is 237,430 MWh of Wyoming generation and with the possibility that some of the  
10 generation originated in Utah. The third false assumption that Mr. Falkenberg  
11 makes is that he applies an annual wholesale market price to a monthly  
12 distribution of energy transfers. This is troubling when approximately 43 percent  
13 of the transfers occur during the spring months when the Northwest hydro runoff  
14 occurs and when wholesale market prices are low.

15 **Johnston / Wyodak (Part II)**

16 **Q. Please explain Mr. Falkenberg's proposed adjustment.**

17 A. This adjustment reflects the allocation impact of his proposal to include the East  
18 Wyoming jurisdiction, including Dave Johnston and Wyodak, in the WCA. The  
19 proposed adjustment would reduce Washington net power costs by \$8.2 million.

20 **Q. Do you agree with the proposed adjustment from the perspective of the**  
21 **"used and useful" requirement?**

22 A. No, for the reasons discussed above. Inclusion of these resources and Wyoming  
23 East load amount to nothing more than an obvious case of cherry picking.

24 **Q. Using Mr. Falkenberg's reasoning, can this same argument be made for**  
25 **several other resources from PACE?**

1 A. Absolutely. This argument could be made for any resource with a lower  
2 embedded cost than WCA. Using the 100 MW Deseret purchase, for example,  
3 this purchase is similar to a flat product that is priced well below market at  
4 approximately \$37 per MWh. For this reason, all of the energy may not be used

1 included in the Company's filing. He believes the Company's adjustment is not  
2 warranted because he believes GRID understates actual coal-fired generation and  
3 the Company's modeling approach is not standard industry practice. He also  
4 believes the Oregon Commission Order in Docket UE-139 for Portland General  
5 Electric ("PGE") is supportive of his adjustment. The adjustment would reduce  
6 proposed net power costs by \$0.07 million Washington. Further, it should be  
7 noted that Mr. Falkenberg is revising his proposed adjustment to a \$0.26 million  
8 ~~increase~~ decrease in Washington net power costs.

9 **Q. Do you agree with the proposed adjustment?**

10 A. No. The reasons stated by Mr. Falkenberg in support of his proposed adjustment  
11 are either wrong or do not provide a sound basis for the proposed adjustment.

12 **Q. Is there any substance to the argument that the Company is modeling  
13 phantom outages and that the modeling is not standard industry practice?**

14 A. No. The Company has merely used an alternative modeling approach to capture  
15 the cost of thermal ramping because GRID is not currently structured to capture  
16 ramping as some models do.

17 **Q. Please explain.**

18 A. The availability rates in GRID assume that coal fired units are available at full  
19 load when being ramped down for maintenance and when restarted and ramped up  
20 after planned maintenance and forced outages. In reality, coal-fired units are not  
21 available at full load when ramping down for maintenance and when ramping up  
22 from outages due to the physical capabilities of the units. Generation is lost while  
23 a unit ramps to the minimum level required for synchronizing with the GRID and

1 process.

2 **Q. — Is Mr. Johnson correct when he states that 17.9 percent of West Control**  
3 **Area load is met by hydro generation and that this is less than half the level**  
4 **of exposure to PSE and Avista?**

5 A. — No. Hydro generation meets 30 percent of the Company's WCA load  
6 requirements and is 62 percent of the hydro exposure for Avista and is 71 percent  
7 of the hydro exposure for PSE.

8 **Q. Mr. Johnson implies that there is a hydro reliance threshold that a utility**  
9 **need to pass to have a PCAM approved. Is this the case?**

10 A. To the best of my knowledge, the Commission has never identified a specific  
11 hydro reliance threshold that must be met in order to obtain a PCAM.

12 **Q. Mr. Johnson indicates that the use of historical hydro generation is not a**  
13 **reasonable basis to establish exposure to hydro conditions. Do you agree?**

14 A. No. It has been a long standing Commission policy to use historical generation  
15 adjusted for current operating capabilities to determine a normalized level that is  
16 included in rates.

17 **Q. Is the historical data used in your direct testimony too stale to provide a**  
18 **realistic analysis of the Company's potential hydro exposure?**

19 A. No. For the most part actual hydro generation variability is a function of annual  
20 precipitation and snow packs, so the variability is still relative.