Oregon

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May 12, 2010

Via Electronic Filing and U.S. Mail

OREGON PUBLIC UTILITY COMMISSION
ATTENTION: FILING CENTER
PO BOX 2148
SALEM OR 97308-2148

RE: Docket No. UE 216 – In the Matter of PACIFICORP, dba PACIFIC POWER 2011 Transition Adjustment Mechanism.

Enclosed for electronic filing in the above-captioned docket is the Public Utility Commission Staff's Reply Testimony.

/s/ Kay Barnes
Kay Barnes
Regulatory Operations Division
Filing on Behalf of Public Utility Commission Staff
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c: UE 216 Service List (parties)

PUBLIC UTILITY COMMISSION
OF OREGON

UE 216

STAFF REPLY TESTIMONY OF
Kelcey Brown
Michael Dougherty

In the Matter of
PACIFICORP, dba PACIFIC POWER,
2011 Transition Adjustment Mechanism.

<u>REDACTED VERSION</u>
May 12, 2010

CASE: UE 216
WITNESS: Kelcey Brown

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 100

Reply Testimony

May 12, 2010

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Kelcey Brown. My business address is 550 Capitol Street NE Suite 215, Salem, Oregon 97301-2551. I am a Senior Economist in the Electric and Natural Gas Division of the Utility Program of the Public Utility Commission of Oregon (OPUC).

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. My Witness Qualification Statement is found in Exhibit Staff/101.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I will provide Staff's recommended adjustments to the net variable power costs (NVPC) PacifiCorp filed in its annual Transition Adjustment Mechanism (TAM).

Q. PLEASE PROVIDE A SUMMARY OF STAFF'S ADJUSTMENTS IN THIS TAM FILING.

A. Staff recommends the following adjustments (on an Oregon allocated basis) to PacifiCorp's filed net power cost request of $69,170,576.[1]

1. A reduction of $8,509,362 to NVPC associated with PacifiCorp's wind integration costs.
2. A reduction of approximately $153,193 to NVPC due to removing the Long Hollow and Stateline wind facility incremental generation wind integration costs.

[1] *See* Exhibit PPL(TAM)/101, Duvall/1.

3. A reduction of $134,986 to NVPC as a result of lowering the forced outage rate of Colstrip 4 associated with a prolonged outage that lasted 164 days in 2009 (May 14, 2009 – October 28, 2009), 50 days of this outage is included in the current filing.
4. A reduction of $302,389 to NVPC for the adjustment to PacifiCorp's Coal Fuel Burn expense associated with costs for bonuses, meals and entertainment, and donations at the Company's affiliated mines Bridger Coal Company and Deer Creek Mine.

These adjustments total $9,099,930[2] on an Oregon allocated basis. In addition, I recommend that the Commission require PacifiCorp to update its "Other Revenue" account for those items that have a direct relation to variable power costs filed within the TAM proceedings. In making this recommendation, I am not suggesting any adjustment to base rates in UE 217, PacifiCorp's current rate case filing.

Q. DO YOU WISH TO INTRODUCE AN ADDITIONAL STAFF WITNESS IN THIS TAM PROCEEDING?

A. Yes. Staff witness Michael Dougherty provides testimony supporting the adjustment to PacifiCorp's coal fuel burn expense in Staff/200, Dougherty/1-3.

Q. PLEASE PROVIDE A SUMMARY OF STAFF'S ADJUSTMENTS TO PACIFICORP'S COAL FUEL BURN EXPENSE.

A. Staff's adjustment to PacifiCorp's coal fuel burn expense is associated with a line item cost review of PacifiCorp's affiliate coal mines Bridger Coal Company

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[2] *See* Exhibit Staff/102, Brown/1.

and Deer Creek Mine. In this review Staff identified costs associated with bonus amounts, meals, entertainment and donations. Consistent with the adjustment Staff would make in a utility general rate case review for these types of expenses, Staff removed 50 percent of the bonus, meals, and entertainment costs and 100 percent of the donation costs.

Q. PLEASE SUMMARIZE STAFF'S PROPOSED ADJUSTMENTS TO PACIFICORP'S WIND INTEGRATION COSTS.

A. Based on its 2008 Integrated Resource Plan (IRP) wind integration study, PacifiCorp has increased its total wind integration costs by $34,183,565 or 732 percent on a system basis compared to its previous TAM filing (UE 207). Staff proposes to decrease PacifiCorp's wind integration rate of $6.97/MWh to its previous rate from UE 207 of $1.17/MWh.

Q. PLEASE SUMMARIZE STAFF'S PROPOSED ADJUSTMENTS ASSOCIATED WITH THE LONG HOLLOW AND STATELINE WIND FACILITIES.

A. The Long Hollow and Stateline wind facilities are non-owned wind facilities connected to PacifiCorp's transmission system through the Company's Open Access Transmission Tariff (OATT). PacifiCorp is not currently charging these facilities for wind integration services; however, the Company is reporting the expense for recovery from customers. Staff believes customers would be harmed if PacifiCorp is allowed to recoup the wind integration expense of approximately $2,449,559 for Long Hollow and $1,036,935 for Stateline on a system basis using the PacifiCorp wind integration rate, or $411,168 and $174,054 respectively using the proposed Staff wind integration rate.[3]

Q. PLEASE SUMMARIZE STAFF'S PROPOSED ADJUSTMENT TO THE COLSTRIP 4 FORCED OUTAGE RATE.

A. Colstrip 4 realized a prolonged outage in 2009 that lasted 164 days. This event falls under the definition of an extreme or outlier event, which has almost no likelihood of being repeated in the test year. Therefore, Staff proposes to remove the prolonged outage from the forced outage rate 48-month average calculation.

<u>Wind Integration Adjustment</u>

Q. PLEASE PROVIDE A BACKGROUND ON THE WIND INTEGRATION RATE PACIFICORP USED IN THE TAM FILING.

A. PacifiCorp first introduced its wind integration study and rate in its 2008 IRP (LC 47) filed on May 29, 2009. Comments filed by Staff, the Renewable Northwest Project (RNP), the Citizens' Utility Board (CUB), and the Northwest Energy Coalition all criticized the Company's wind integration analysis.

Q. PLEASE DISCUSS THE SPECIFIC ISSUES PARTIES HAD WITH THE WIND INTEGRATION STUDY IN PACIFICORP'S 2008 IRP.

A. Specifically, RNP and CUB argued that PacifiCorp's representation of wind generation from new wind projects significantly overstated the reserve requirement, the forecast relied upon in the analysis significantly overestimated the hour-ahead forecast error and the Company incorrectly assumed that all

[3] *Id.*

inter-hour balancing is done through market transactions. The combination of these errors, and others highlighted in RNP and CUB's comments,[4] leads to a significant overestimate of cost associated with integrating wind generation into the PacifiCorp system.

Q. DID THE COMMISSION ACKNOWLEDGE PACIFICORP'S WIND INTEGRATION STUDY IN ITS 2008 IRP?

A. No. In Order No. 10-066 the Commission adopted Staff's recommendation to not acknowledge PacifiCorp's wind integration study and to require the Company to conduct a new study, with stakeholder participation, to be completed by August 2, 2010.

Q. PLEASE DISCUSS THE CURRENT STATUS OF THE NEW WIND INTEGRATION STUDY PACIFICORP IS CONDUCTING.

A. PacifiCorp held its first public workshop on the new wind integration study with all interested stakeholders on February 16, 2010. At this meeting PacifiCorp presented a power point with a high level explanation of its newly proposed methodology to quantify the cost of wind integration. Parties provided comments on the new proposal to PacifiCorp on March 12, 2010. Subsequently, PacifiCorp issued a White Paper with a more detailed description of the new wind integration methodology.

Q. HAS PACIFICORP ASKED THAT THE RESULTS OF THIS STUDY BE INCORPORATED INTO THE TAM ONCE IT IS COMPLETE?

[4] *See* RNP and CUB opening comments, LC 47, filed October 9, 2009.

A. Yes. At PPL/(TAM)/100, Duvall/2, PacifiCorp proposes to update the wind integration charge in this proceeding based on the outcome of the August 2, 2010 wind integration study.

Q. IS STAFF SUPPORTIVE OF THE COMPANY UPDATING THE TAM WIND INTEGRATION RATE ONCE THE NEW WIND INTEGRATION STUDY IS COMPLETE?

A. No. Staff continues to have concerns with the Company's proposed methodology in its new wind integration study, and since Staff has not yet had the opportunity to review the results, work papers and assumptions of this study, Staff cannot support including these results in the current TAM proceeding. Once the study is complete Staff will re-evaluate the Company's proposal to include the results of its new wind integration study.

Q. WHAT ARE SOME OF STAFF'S CONCERNS WITH REGARD TO THE NEW WIND INTEGRATION STUDY?

A. First and foremost, PacifiCorp has not incorporated intra-hour transmission scheduling or dynamic scheduling in its proposed methodology. In addition, Staff is concerned with PacifiCorp's proposed data extrapolation methodology, using the IRP planning and risk model to assess costs for a specific test period in the TAM versus using the GRID net power cost model, and PacifiCorp's inability to verify the results of its study with actual operations.

Q. HOW DOES INTRA-HOUR TRANSMISSION SCHEDULING AND DYNAMIC SCHEDULING AFFECT WIND INTEGRATION?

A. In Staff Data Request No. 25, PacifiCorp explained that Intra-hour transmission scheduling provides the opportunity for buyers and sellers in different Balancing Areas to transact intra-hour to help offset generation imbalance created by unforecasted wind deviations within the operating hour. These intra-hour transactions will allow access to other, presumably cheaper, resources in an adjacent Balancing Area to adjust, up or down, to accommodate the new wind schedule. This type of transaction moves the integration costs to a cheaper resource, thus lowering the total integration costs.

With dynamic scheduling, wind generation is telemetered from the physical host Balancing Area to another Balancing Area. In this case wind is integrated at the costs of the receiving Balancing Area. To the extent that wind can be transacted at a lower cost in alternate Balancing Areas via dynamic schedules, wind owners and operators might be expected to take advantage of this cost savings.[5]

Q. WHEN DOES THE COMPANY EXPECT TO IMPLEMENT INTRA-HOUR SCHEDULING AND DYNAMIC SCHEDULING?

A. In response to Staff Data Request No. 24, PacifiCorp stated that the Company implemented intra-hour scheduling on December 3, 2009. In addition, the "Dynamic System Scheduler" is currently in the development stage and scheduled to be implemented in September 2010.[6]

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[5] *See* Exhibit Staff/103, Brown/1.
[6] *Id,* Brown/2.

Q. SINCE THE COMPANY IS NOT INCORPORATING THESE KNOWN CHANGES IN SCHEDULING INTO ITS CURRENT WIND INTEGRATION STUDY, AND THE PREVIOUS WIND INTEGRATION ANALYSIS WAS UNACKNOWLEDGED BY THE COMMISSION IN ITS 2008 IRP, WHAT RATE DOES STAFF PROPOSE BE USED IN THIS TAM PROCEEDING?

A. Staff proposes that the wind integration rate used in the previous TAM (UE 207), based on the 2007 IRP wind integration analysis, as the only reasonable alternative rate to use at this time. It is unreasonable to use proxy wind integration rates from BPA or PGE due to the fact that they are not representative of PacifiCorp's unique and flexible system. The 2007 IRP wind integration analysis was acknowledged in Order No. 08-232 and was acceptably used in the previous TAM proceeding without issue.

Q. SINCE PACIFICORP HAS OPERATED WIND FACILITIES ON ITS SYSTEM FOR OVER TEN YEARS, WITH A SIGNIFICANT AMOUNT OF WIND BEING ADDED OVER THE LAST THREE YEARS, WHY DOESN'T THE COMPANY USE ACTUAL WIND INTEGRATION COSTS IT HAS REALIZED OVER THAT TIME TO SET THE RATE?

A. In Staff Data Request No. 18, PacifiCorp states that it is unable to explicitly track actual wind integration costs. Operationally, the Company holds reserves to maintain reliability and balances the system in response to changes in actual system conditions affected by a broad range of variables not just wind.

Therefore, they claim they are unable to isolate how operations and associated costs would have changed absent the wind.[7]

Q. PLEASE SUMMARIZE YOUR ADJUSTMENT ASSOCIATED WITH PACIFICORP'S WIND INTEGRATION COSTS IN THIS TAM PROCEEDING.

A. Staff recommends that the wind integration rate of $1.17/MWh from the 2007 IRP wind integration analysis, be used in this proceeding. In addition, Staff has removed the additional inter-hour wind integration component PacifiCorp added to the BPA wind integration costs for Leaning Juniper and Goodnoe Hills. Overall, Staff recommends an Oregon allocated wind integration cost adjustment of -$8,509,362 or, on a system basis, -$32,507,017.[8]

Non-Owned Generation Facilities

Q. PLEASE PROVIDE A BACKGROUND ON THE "LONG HOLLOW' FACILITY.

A. In a previous Staff Data Request provided in UE 207, the Company clarified that the "Long Hollow" facility is actually called Pleasant Valley Wind Farm. Pleasant Valley Wind Farm has a total capacity of 144 MW, and is operated by NextEra and the power is purchased by Iberdola. The Company refers to the facility as Long Hollow because of the Long Hollow switching station at which the Company receives energy from the project.

[7] *See* Exhibit Staff/103, Brown/3.
[8] *See* Exhibit Staff/102, Brown/1

Q. WHAT TYPE OF AN AGREEMENT DOES THE PLEASANT VALLEY WIND FARM AND STATELINE WIND FARM HAVE WITH PACIFICORP?

A. PacifiCorp provides transmission service through an existing Transmission Service and Operating Agreement and a point-to-point agreement. The Company is also responsible for providing operating reserves and wind integration services.

Q. IS THE COMPANY CURRENTLY CHARGING FOR THE WIND INTEGRATION SERVICES IT IS PROVIDING?

A. No. According to the Company, charging non-owned generators for the cost of wind integration would require modification of the Company's Open Access Transmission Tariff. The Company has not applied to FERC to accomplish this modification.

Q. ARE CUSTOMERS HARMED BY PACIFICORP ATTEMPTING TO RECOUP WIND INTEGRATION COSTS FOR THESE TWO FACILITIES?

A. Yes. Looking at the Pleasant Valley Wind Farm, on a system basis PacifiCorp is receiving approximately $278,000 per year for spinning and supplemental reserves. The cost reflected in this TAM filing associated with these services is approximately $153,413. Therefore, the total margin customers realize in 2011 associated with spinning and supplemental reserves is $121,587. PacifiCorp also shows that it is receiving additional revenues from the parent company Iberdola for wheeling and firm transmission scheduling in the amount of

$3,191,000 for 2011.[9] Using generous assumptions of an estimated margin of 15 percent associated with wheeling and transmission services, and 50 percent of these services related to Pleasant Valley Wind Farm, Exhibit Staff/102, Brown/2 shows that customers are harmed if they are required to pay for the wind integration services.

Q. TO WHAT DEGREE ARE CUSTOMERS HARMED BY PAYING FOR WIND INTEGRATION SERVICES FOR THE PLEASANT VALLEY WIND FARM?

A. Using the PacifiCorp wind integration rate customers are harmed by an estimated $2,088,647 on a system basis. Using the much lower Staff wind integration rate customers are harmed by an estimated $50,256 on a system basis. Both calculations take into consideration the estimated realized margins for all services associated with the Pleasant Valley Wind Farm. For clarification, the Company claims that it cannot separately track the additional wheeling revenue specifically associated with the Pleasant Valley Wind Farm. The costs associated with these wheeling services are based on the underlying capital and operating costs of the transmission system, which are not included in net variable power costs.

Q. PLEASE SUMMARIZE STAFF'S ADJUSTMENT ASSOCIATED WITH THE PLEASANT VALLEY WIND FARM (LONG HOLLOW) AND STATELINE WIND FACILITY.

[9] The revenue PacifiCorp realizes for providing transmission and operating reserves is booked to the "Other Revenue" account. Staff Data request No. 20 details all revenue associated with the Pleasant Valley Wind Farm. *See* Exhibit Staff/103, Brown/4.

A. Staff has shown that it is harmful to customers to allow PacifiCorp to collect wind integration costs for facilities that PacifiCorp is not currently charging for wind integration services. Even after taking into consideration realized margins on all services provided for the Pleasant Valley facility, essentially making customers indifferent, customers are still found to be harmed by the Company attempting to recoup wind integration costs. Regardless of whether or not PacifiCorp is required to provide these services, customers should be held harmless. Therefore, Staff recommends an Oregon allocated adjustment, using the Staff wind integration rate, of $153,193.[10] Alternatively, if the Commission adopts the PacifiCorp wind integration rate Staff recommends an Oregon allocated adjustment of $839,066.

Forced Outage Adjustment

Q. PLEASE DISCUSS STAFF'S ADJUSTMENT ASSOCIATED WITH THE COLSTRIP 4 FORCED OUTAGE RATE.

A. In 2009 Colstrip 4 realized a prolonged forced outage that lasted 164 days, May 14, 2009 through October 28, 2009.[11] An outage of this length has a significant impact on a simple 48-month rolling-average forced outage rate calculation. The forced outage rate used in the TAM proceeding is representative of a forecast of how the plant will operate in the test period. Due to the fact that the plant experienced an outage that on a statistical basis

[10] *See* Exhibit Staff/102, Brown/1.
[11] *See* Exhibit Staff/103, Brown/5.

would be considered an outlier, or an unprecedented event, it is unreasonable to include this outage in the calculation of the forecast.

Q. IS THE ENTIRE OUTAGE REFLECTED IN THIS TAM FILING?

A. No. In the current filing PacifiCorp used the time period of July 1, 2005 through June 30, 2009 to calculate the 48-month average forced outage rates. Fifty days of the prolonged outage are included in the current TAM filing. The remaining 114 days of the outage will be reflected in the next TAM filing.

Q. PLEASE DISCUSS HOW YOU CALCULATED YOUR ADJUSTMENT.

A. PacifiCorp's calculated forced outage rate for Colstrip 4 is 8.54 percent for weekdays and 11.59 percent on weekends. Removing the fifty day outage from the 48-month average calculation and then adding back the average forced outage rate over the fifty-day period , results in a weekday forced outage rate of 5.59 percent and a weekend forced outage rate of 7.59 percent. Using Staff's calculated forced outage rate values in PacifiCorp's GRID model results in a decrease of NVPC on an Oregon allocated basis of $134,986.[12]

Q. IS STAFF'S TREATMENT OF THIS OUTAGE CONSISTENT WITH PAST COMMISSION DECISIONS ASSOCIATED WITH PROLONGED OUTAGES?

A. Yes. In PacifiCorp's 2007 TAM filing, UE 191, Order No. 07-446, the Commission stated the following: "The Company documents show that the anticipated duration of the resulting outage was five to seven weeks. An outage of that duration, no matter what the cause, is anomalous, and raises

[12] *See* Exhibit Staff/102, Brown/1

issues regarding its inclusion in normalized rates." Subsequently, the Commission required that PacifiCorp remove the outage in question from the calculation of the forced outage rate for the test period.

<u>Other Revenue</u>

Q. PLEASE DISCUSS STAFF'S RECOMMENDATION ASSOCIATED WITH THE "OTHER REVENUE" ACCOUNT.

A. In non-general rate case years, in which only a power cost update is filed, the Company is allowed to include or update the costs associated with new resources, contracts and existing facilities for services that it is providing to a third party entity. With the update or inclusion of these new costs there can also be a corresponding change in revenue. If these revenues are accounted for as "other revenue" they currently go un-recognized in rates. This mismatch between updating costs and revenues is unreasonable.

Q PLEASE PROVIDE AN EXAMPLE OF THIS INEQUALITY.

A. For example, if the Company had not filed a General Rate Case (GRC) concurrently with its TAM filing in the year that the Pleasant Valley Wind Farm was reflected in power costs customers would have realized additional costs of $156,413 without realizing any associated revenue.[13] I use this example because it is a very clear case where the service provides no benefit to customers other than the recognition of revenue that the Company receives.

[13] The reflected cost of $156,413 reflects only those costs associated with providing spinning and supplemental reserves. This does not reflect the additional wind integration costs for the Pleasant Valley Wind Farm PacifiCorp is currently requesting.

There are many contracts and agreements of this nature in the existing TAM, e.g. storage and exchange agreements, steam sales, gas resale revenue, and other ancillary services. Staff believes that this regulatory asymmetry is inequitable to the customer and needs to be corrected in all TAM filings that are not filed concurrently with a GRC.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATION ASSOCIATED WITH THE "OTHER REVENUE" ACCOUNT.

A. I recommend that the Commission require PacifiCorp to update its "Other Revenue" account for those items that have a direct relation to variable power costs filed in future TAM proceedings filed in non-general rate case years. In making this recommendation, I am not suggesting any adjustment to base rates in UE 217, PacifiCorp's current rate case filing.

General Issues

Q. DO YOU HAVE ANY GENERAL CONCERNS WITH PACIFICORP'S TAM FILING AT THIS TIME?

A. Yes. In PacifiCorp's TAM filing the Company has included forecasts for potential rate changes associated with contracts, wheeling charges, and other net power cost services. Staff is concerned that PacifiCorp's inclusion of these unknown changes are a reflection of services that the Company does not anticipate will be settled prior to the contract lockdown date of November 1, 2010.

Q. IS A SIGNED CONTRACT OR APPROVED TARIFF NECESSARY FOR INCLUSION IN THE TAM FILING FOR THE TEST PERIOD?

A. Not necessarily. However, without the benefit of a signed contract or approved tariff the Company must justify its forecasted assumptions or continue to use the currently contracted rates. In subsequent updates and through data requests Staff will continue to monitor all ongoing contract negotiations, settlements, and tariff filings for resolution prior to the start of the test year.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

CASE: UE 216
WITNESS: Kelcey Brown

PUBLIC UTILITY COMMISSION
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STAFF EXHIBIT 101

Witness Qualification Statement

May 12, 2010

WITNESS QUALIFICATION STATEMENT

NAME: Kelcey Brown

EMPLOYER: Public Utility Commission of Oregon

TITLE: Senior Economist, Electric and Natural Gas Division, Resource and Market Analysis

ADDRESS: 550 Capitol Street NE Suite 215, Salem, Oregon 97301-2115.

EDUCATION: All course work towards Masters in Economics
University of Wyoming

B.S. University of Wyoming
Major: Business Economics
Minor: Finance

EXPERIENCE: Since November 2007 I have been employed by the Public Utility Commission of Oregon. Responsibilities include research, analysis and recommendations on a wide range of cost, revenue and policy issues for electric utilities. I have provided testimony in UE 199, UE 200, UE 207, UE 210, UM 1355, and UE 204. I have also filed comments on several dockets such as LC 47, UM 1466 and UM 1467.

From June 2003 to November 2007 I worked as the Economic Analyst for Blackfoot Telecommunications Group, a competitive and incumbent telephone provider in Missoula, Montana. I conducted all long and short term sales and revenue forecasts, resource acquisition cost-benefit analysis, business case analysis on new products and build-outs, pricing, regulatory support, market research, and strategic planning support.

From May 2002 to August 2002 I worked as an intern at the Illinois Commerce Commission in Springfield, Illinois. I performed competitive market analysis, spot market monitoring and pricing review, and extensive research on locational marginal pricing and transmission system incentives for development.

My course work, towards a Master's degree at the University of Wyoming, focused heavily on the regulatory economics of network industries such as electricity, natural gas, and telecommunications.

CASE: UE 216
WITNESS: Kelcey Brown

PUBLIC UTILITY COMMISSION
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STAFF EXHIBIT 102

Exhibits in Support
Of Reply Testimony

May 12, 2010

Total Staff Adjustment	PacifiCorp System	Oregon Allocated Adjustment	
Wind Integration	$32,507,017	$8,509,362	
Other Generation (Staff rate)	$585,221	$153,193	
Forced Outage Rate	$555,887	$134,986	
Coal Fuel Cost Adjustment	$1,245,270	$302,389	See Staff/200, Dougherty/1-3
Total	**$34,893,396**	**$9,099,930**	

Wind Integration Adjustment		
	$/MWh	
PacifiCorp Wind integration Rate	$6.97	
Staff Wind Integration Rate	$1.17	
	PacifiCorp System	**Oregon Allocated Adjustment**
Current Wind Integration Costs	$38,855,180	$10,171,120
Staff Wind Integration Costs*	$6,348,163	$1,661,759
Total Staff Adjustment	**-$32,507,017**	**-$8,509,362**

*Also includes the deletion of the additional inter-hour integration cost

Other Generation Adjustment		
	Annual MWh	
Long Hollow wind generation	351,426	
Stateline wind generation	148,764	
	PacifiCorp System	**Oregon Allocated Adjustment**
Current wind integration costs		
PacifiCorp wind integration rate		
Long Hollow	$2,449,559	$641,221
Stateline	$1,036,935	$271,439
Total Staff Adjustment	**$3,486,494**	**$912,660**
	PacifiCorp System	**Oregon Allocated Adjustment**
Current wind integration costs		
Staff wind integration rate		
Long Hollow	$411,168	$107,631
Stateline	$174,054	$45,562
Total Staff Adjustment	**$585,221**	**$153,193**

Colstrip Forced Outage Rate

Unit	Period	PacifiCorp reported outage MWh	Total Scheduled MWh	EFOR PacifiCorp	Staff Adjusted MWh	Staff EFOR
Colstrip 4	Weekday	1,475,405	17,284,821	8.54%	966,109	5.59%
Colstrip 4	Weekend	798,788	6,890,880	11.59%	523,054	7.59%
Total		**2,274,194**	**24,175,701**	**9.41%**	**1,489,163**	**6.16%**

PacifiCorp NPC	$1,278,181,609
Staff Adjusted NPC	$1,277,625,721
Total Staff System Adjustment	**$555,887**
Total Staff Oregon Adjustment	**$134,986**

Pleasant Valley Wind Farm (Long Hollow) Example

	Test Year 2011	Source
Spinning Revenue	$278,000	Exhibit Staff/103, Brown/4
NVPC	$156,413	Staff GRID run excluding Pleasant Valley Wind Farm only
Margin	**$121,587**	
Company reported total Iberdola Wheeling Revenues*	$3,191,000	Exhibit Staff/103, Brown/4
Potential Margin at 15% above capital cost	$478,650	
Estimate attributable to Long Hollow at 50%	**$239,325**	
Total estimated Margin per year on all services	**$360,912**	=$121,587+$239,325
PacifiCorp wind integration costs for Long Hollow	$2,449,559	UE 216 NPC report
Staff Adjusted wind integration costs for Long Hollow	$411,168	Using wind integration rate of $1.17/MWh
Total cost to customers at PacifiCorp wind integration rate	**$2,088,647**	=PacifiCorp wind integration cost-estimated margin
Total cost to customers at Staff wind integration rate	**$50,256**	=Staff wind integratin cost - estimated margin

*The Company claims it cannot isolate the Pleasant Valley wheeling revenues from the rest of the wheeling services provided for the Company Iberdola, which owns and operates the facility.

CASE: UE 216
WITNESS: Kelcey Brown

PUBLIC UTILITY COMMISSION
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STAFF EXHIBIT 103

Exhibits in Support
Of Reply Testimony

May 12, 2010

OPUC Data Request 25

Does the Company believe that implementation of intra-hour transmission scheduling and dynamic scheduling among the Joint Initiative participants would lower wind integration costs? Please explain your answer, and quantify the estimated benefits or additional costs associated with your response.

Response to OPUC Data Request 25

The Company is not aware of any studies that quantify the estimated benefits and costs of implementing intra-hour transmission scheduling and dynamic scheduling; however the Company is investigating these issues from the perspective of both a merchant and a transmission provider. There are a number of technical and logistical issues that need to be addressed in the development process as these initiatives move forward.

To accomplish robust intra-hour transmission scheduling requires broad regional participation. It would be futile for PacifiCorp to be the only transmission provider to offer intra-hour transmission scheduling, because there would be no party to accept the schedule. Once business practices are in place, buyers and sellers in different Balancing Areas can transact intra-hour to help offset generation imbalance created by unforecasted wind deviations within the operating hour. Active markets between buyers and sellers at the half hour will help minimize large generation imbalances and integration costs within a single Balancing Area. These intra- hour transactions will allow access to other, presumably cheaper, resources in an adjacent Balancing Area to adjust, up or down, to accommodate the new wind schedule. In theory, this type of transaction moves the integration costs to a cheaper resource, thus lowering total integration costs.

With dynamic scheduling, wind generation is telemetered from the physical host Balancing Area to another Balancing Area. In this case wind is integrated at the costs of the receiving Balancing Area. To the extent that wind can be transacted at a lower cost in alternate Balancing Areas via dynamic schedules, wind owners and operators might be expected to take advantage of this cost savings.

OPUC Data Request 24

Please provide a prospective timeline associated with implementing intra-hour transmission scheduling and dynamic scheduling that the Company is involved in coordinating as part of the Joint Initiatives?

Response to OPUC Data Request 24

PacifiCorp has been actively involved in the Joint Initiative effort and at this time is on task to meet all timelines. On December 3, 2009 the Company implemented intra-hour scheduling. The Dynamic System Scheduler (DSS) is currently in the development stage and scheduled to be implemented in September 2010.

OPUC Data Request 18

Please provide the Company's actual wind integration costs (inter-hour and intra-hour separately) on a $/MWh basis for calendar year 2009.

Response to OPUC Data Request 18

The Company is not able to explicitly track actual wind integration costs. Wind integration costs include expenses for holding incremental reserves and for balancing the system as wind deviates from expected generation levels. Operationally, the Company holds reserves to maintain reliability and balances the system in response to changes in actual system conditions affected by a broad range of variables. Consequently, it is not feasible to isolate how operations and associated costs would have changed absent wind.

OPUC Data Request 20

Please provide the total estimated revenue the Company will receive in 2010 and test year 2011 associated with providing wheeling and integration services for the Long Hollow wind facility. Please break-out the total estimated revenue to reflect the services PacifiCorp is providing.

Response to OPUC Data Request 20

Total spinning and supplemental revenues associated with the Pleasant Valley Wind Farm estimated for 2010 and 2011 is approximately $278,000 (please refer to Attachment OPUC 20 -1). The Company does not separately track non-firm and short-term firm wheeling revenues by location, however all short term capacity, if any, associated with Pleasant Valley Wind Farm would be purchased by Iberdrola. The total Iberdrola non-firm and short-term firm wheeling revenue, companywide, for 2010 and 2011 is approximately $1,387,000.

In addition, long-term point-to-point wheeling revenues expected for 2010 and 2011 utilized by Iberdrola, including re-directing an existing long term reservation, for their share of Pleasant Valley Wind generation is $729,000.

Lastly, a portion of the Pleasant Valley Wind generation is designated as a network resource by UAMPS and used to serve load within PacifiCorp's control area. Based on the test period, approximately $1,075,000 (please refer to Attachment OPUC 20 -2) in network wheeling revenue was attributable to this generation and is forecasted for 2010 and 2011.

Note: PacifiCorp's response is founded on the base period of July 2008 to June 2009, which is what was utilized to support the general rate case.

Please refer to non-confidential Attachments OPUC 20 –(1-2) on the enclosed CD.

UE-216/PacifiCorp
April 6, 2010
OPUC Data Request 17

OPUC Data Request 17

Please provide the dates of the entire length of the forced and planned outage event at Colstrip 4 which began in March 2009. Please provide the total percentage availability for Colstrip 4 for calendar year 2009.

Response to OPUC Data Request 17

The dates for the planned and forced outages at Colstrip 4 were as follows:

Planned Outage:	3/27/2009 22:19 – 5/14/2009 23:59
Forced Outage:	5/14/2009 23:59 – 10/28/2009 18:54

Equivalent Availability for Colstrip 4:

Jan-09	99.43%
Feb-09	99.45%
Mar-09	86.39%
Apr-09	0.00%
May-09	0.00%
Jun-09	0.00%
Jul-09	0.00%
Aug-09	0.00%
Sep-09	0.00%
Oct-09	8.23%
Nov-09	98.60%
Dec-09	99.25%
2009 Total	40.65%

CASE: UE 216
WITNESS: Michael Dougherty

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 200

Reply Testimony

May 12, 2010

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Michael Dougherty. I am the Program Manager for the Corporate Analysis and Water Regulation Section of the Public Utility Commission of Oregon. My business address is 550 Capitol Street NE Suite 215, Salem, Oregon 97301-2551.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. My Witness Qualification Statement is found in Exhibit Staff/201.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of this testimony is to describe my adjustments to PacifiCorp's Coal Fuel Burn Expense as listed in Exhibit PPL (TAM)/101, Duvall/1.

Q. HAVE YOU PREPARED ANY EXHIBITS FOR THIS DOCKET?

A. Yes. I prepared Confidential Exhibit Staff/202, consisting of 1 page.

Q. PLEASE PROVIDE A SUMMARY OF YOUR ADJUSTMENTS.

A. The following table summarizes my adjustments to PacifiCorp's Coal Fuel Burn Expense.

Staff Adjustment – Oregon Allocated

	Exhibit PPL(TAM)/101; Duvall/1	**Staff**	**Adjustment**
Fuel Consumed - Coal	$169,022,496	$168,720,017	$302,389

Q. PLEASE SUMMARIZE THE ANALYSES SUPPORTING YOUR RECOMMENDED ADJUSTMENTS.

A. I reviewed 2010 line item costs concerning affiliate coal mines Bridger Coal Company (BCC) and Deer Creek Mine (Deer Creek). This review resulted in the identification of costs (bonus amounts, meals and entertainment, and donations) that staff recommends as adjustments. I removed 50 percent of meals and entertainment expenses,[1] 50 percent of bonuses,[2] and 100 percent of donations.[3] Because coal costs are included in PacifiCorp Account 501, these adjustments are consistent with Commission policy concerning these types of adjustments. The adjustment amounts are shown in Confidential Exhibit Staff/202.

Q. DID YOUR PERFORM LOWER OF COST OR MARKET (LCM) ANALYSES FOR PACIFICORP'S THREE AFFILIATE MINES?

A. Yes. I performed LCM analyses for BCC, which supplies coal to the Jim Bridger plant; Deer Creek, which supplies coal to the Carbon and Hunter plants; and Trapper Mine, which supplies coal to the Craig plant. In all three analyses, the affiliate coal costs were lower than the calculated market costs.

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[1] In UE 197, the Commission adopted Staff's principal that costs for meals and entertainment are discretionary and should be shared equally by ratepayers and shareholders. (Order 09-020 at 20-21)

[2] In UE 210, the Commission stated: "We find that the Joint Parties have also adequately supported their position with respect to bonus and incentive payments. Pacific Power explained the purpose behind its bonus and incentive programs in detail, and the evidence shows that the stipulated adjustments to these programs generally reflect Staff's proposal (and ICNU's original similar proposal) that 100 percent of officer bonuses and 50 percent of annual incentive plan bonuses be removed from rates. This sharing arrangement has traditionally been supported by the Commission, and we see no reason to deviate from that tradition here." (Order 10-022 at 10-11)

[3] Commission Order 87-406 states at pp. 40-41, "Since community affairs expenditures are discretionary, the funds could be retained by the business's owners. . . .Owners of unregulated businesses, rather than their customers, make community affairs contributions." Also see Order 91-186 at 16.

As a result, I do not have LCM adjustments for the fuel burn expenses of the three affiliate mines.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

CASE: UE 216
WITNESS: Michael Dougherty

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 201

Witness Qualification Statement

May 12, 2010

WITNESS QUALIFICATION STATEMENT

NAME:	MICHAEL DOUGHERTY
EMPLOYER:	PUBLIC UTILITY COMMISSION OF OREGON
TITLE:	PROGRAM MANAGER, CORPORATE ANALYSIS AND WATER REGULATION
ADDRESS:	550 CAPITOL ST. NE, SALEM, OR 97308-2148
EDUCATION:	Master of Science, Transportation Management, Naval Postgraduate School, Monterey CA Bachelor of Science, Biology and Physical Anthropology, City College of New York
EXPERIENCE:	Employed with the Oregon Public Utility Commission from June 2002 to present, currently serving as the Program Manager, Corporate Analysis and Water Regulation. Also serve as Lead Auditor for the Commission's Audit Program. Performed a five-month job rotation as Deputy Director, Department of Geology and Mineral Industries, March through August 2004. Employed by the Oregon Employment Department as Manager - Budget, Communications, and Public Affairs from September 2000 to June 2002. Employed by Sony Disc Manufacturing, Springfield, Oregon, as Manager - Manufacturing, Manager - Quality Assurance, and Supervisor - Mastering and Manufacturing from April 1995 to September 2000. Retired as a Lieutenant Commander, United States Navy. Qualified naval engineer. Member, National Association of Regulatory Commissioners Staff Sub-Committee on Accounting and Finance.

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CASE: UE 216
WITNESS: Michael Dougherty

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 202

Exhibits in Support
Of Reply Testimony

<u>CONFIDENTIAL EXHIBIT</u>
May 12, 2010

STAFF EXHIBIT 202

IS CONFIDENTIAL AND SUBJECT TO PROTECTIVE ORDER NO. 10-069. YOU MUST HAVE SIGNED APPENDIX B OF THE PROTECTIVE ORDER IN DOCKET UE 216 TO RECEIVE THE CONFIDENTIAL VERSION OF THIS EXHIBIT.

UE 216
SERVICE LIST (PARTIES)

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CERTIFICATE OF SERVICE

UE 216

I certify that I have this day served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-13-0070, to the following parties or attorneys of parties.

Dated at Salem, Oregon, this 12th day of May, 2010.

Kay Barnes

Kay Barnes
Public Utility Commission
Regulatory Operations
550 Capitol St NE Ste 215
Salem, Oregon 97301-2551
Telephone: (503) 378-5763