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August 19, 2005

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 173** - In the Matter of PacifiCorp (d/b/a Pacific Power & Light Company) Application for Approval of Power Cost Adjustment Mechanism.

Enclosed for filing in the above-captioned docket is the Public Utility Commission Staff's Direct Testimony. This document is being filed by electronic mail with the PUC Filing Center.

/s/ Lois Meerdink

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PUBLIC UTILITY COMMISSION
OF OREGON

UE 173

STAFF DIRECT TESTIMONY
OF

Maury Galbraith
Bill Wordley

In the Matter of PacifiCorp (d/b/a Pacific Power & Light Company) Application for Approval of Power Cost Adjustment Mechanism

August 19, 2005

CASE: UE 173
WITNESS: Maury Galbraith

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 100

Direct Testimony

August 19, 2005

Q. PLEASE STATE YOUR NAME AND POSITION.

A. My name is Maury Galbraith. The Public Utility Commission of Oregon employs me as a Senior Economist. My qualifications are shown at Staff Exhibit 101.

Introduction and Summary

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. First, I describe PacifiCorp's proposed power cost adjustment mechanism (PCAM or PCA mechanism), the company's arguments for why a PCAM is needed, and the company's justification for the design of the proposed mechanism. Second, I present staff's analysis of the proposed PCAM and the arguments supporting its approval. Third, I present the staff's proposed long-term PCA mechanism and indicate why staff believes it is preferable to PacifiCorp's mechanism. Finally, I present staff's proposed interim PCA mechanism that can be applied prior to implementation of staff's proposed long-term mechanism.

Q. DOES STAFF PRESENT ANY OTHER WITNESSES IN THIS FILING?

A. Yes. Bill Wordley, Senior Economist in the Economic Research and Financial Analysis Division addresses the issues raised in the Allocation Methodology testimony of Gregory N. Duvall in this docket. Staff Exhibit 200.

Q. PLEASE SUMMARIZE STAFF'S OVERALL TESTIMONY.

A. Staff makes the following recommendations:

- The Commission should consider reasonable risk reduction, neutral cost recovery, and equal treatment criteria when evaluating automatic adjustment clauses.
- The Commission should reject PacifiCorp's proposed PCAM. The proposed sharing bands remove nearly all of PacifiCorp's earnings risk related to variation in net variable power costs (NVPC) and therefore the proposed mechanism fails the reasonable risk reduction criterion. Tracking asymmetric financial impacts with a symmetrically designed PCAM would result in an expected economic windfall for PacifiCorp and therefore the proposed mechanism fails the neutral cost recovery criterion.
- The Commission should indicate a preference for stochastic power cost modeling. Modeling the uncertainty associated with retail loads, natural gas and electricity market prices, hydroelectric generation, and thermal unit availability provides a more realistic simulation of PacifiCorp's system operations and produces a distribution of NVPC that can be used to design a fair PCA mechanism.
- The Commission should indicate a preference for a PCAM with a deadband set: (1) to exclude a reasonable range of normal variation from triggering the mechanism, and (2) to be neutral on an expected recovery basis. For example, a deadband set at the 10^{th} and 90^{th} percentiles of the 'All-in' NVPC distribution would likely satisfy these criteria.

- The Commission should indicate a preference for updating the PCAM deadband annually to account for changing economic relationships. When underlying economic conditions change (for example a change in the hydroelectric generation and electricity market price relationship) prior NVPC modeling and any associated findings or conclusions become invalid.
- The Commission should adopt an interim PCA mechanism for the period February 1, 2005 through December 31, 2006. The PCAM deadband should be set at an amount equal to the revenue requirement effect of plus and minus 250 basis points of ROE.
- The Commission should ensure any PCAM proposal does not incent direct-access eligible customers on their choice to go direct access or remain with the company.
- The Commission should recognize that PacifiCorp's hydro resources are not assigned to the states that received the Revised Protocol hydro endowment. All of the company's power resources are used to serve all its retail and wholesale loads. The Commission should instruct PacifiCorp to allocate PCAM costs and benefits to each state based on the state's contribution to system load.

PacifiCorp's PCA Mechanism

Q. PLEASE SUMMARIZE PACIFICORP'S PROPOSED PCA MECHANISM?

A. PacifiCorp has constructed the proposed PCAM as an automatic adjustment clause under ORS 757.210. The PacifiCorp PCAM has the following attributes:

1. The PCAM would track the difference between adjusted actual net variable power costs (NVPC) and the normalized NVPC included in rates.
2. The PCAM would apply two symmetric sharing bands to any difference between actual and normalized NVPC. Seventy percent of any amount falling within plus or minus $100 million would be eligible for deferred accounting. Ninety percent of any amount exceeding plus or minus $100 million would be eligible for deferred accounting.
3. The PCAM would exempt cost increases or decreases associated with Qualifying Facility (QF) contracts from the sharing bands. In other words, 100 percent of any QF cost increase or decrease would be eligible for deferred accounting.
4. Amounts eligible for deferred accounting would be allocated to Oregon and placed in a balancing account for later offset or amortization. The balance would earn interest at PacifiCorp's authorized rate of return.
5. Amortization would occur whenever the cumulative Oregon allocated balance exceeded plus-or-minus $15 million. Once this trigger amount is reached, the Company would be required to return the

balance to, or request recovery from, customers. PacifiCorp proposes a minimum one-year amortization period.

6. Amortization of the Oregon allocated balance would be limited to prudently incurred costs. PacifiCorp proposes to exempt contracts and resources previously included in rates from this review.
7. Amortization of the Oregon allocated balance would be subject to an earnings test. If the company's actual rate of return is above its authorized rate of return, then deferred excess costs would not be recovered from customers. Conversely, if the company's actual rate of return is below its authorized rate of return, then deferred savings would not be returned to customers.
8. PacifiCorp would apply PCAM sur-charges and sur-credits to all customer classes, including customers on Direct Access schedules.

Q. WHAT IS THE PROBLEM THAT PACIFICROP INTENDS TO REMEDY WITH COMMISSION APPROVAL OF THE PROPOSED PCA MECHANISM?

A. PacifiCorp witness Omohundro indicated that:

> …PacifiCorp's proposed mechanism will return the Company to a reasonable level of earnings volatility and rebalance the overall interests of ratepayers and shareholders. PPL/100, Omohundro/2, Lines 3-5.

PacifiCorp witness Widmer indicated that asymmetric power cost risk is causing the company to bear a disproportionate share of net power costs and consequently diminishing the company's long run opportunity to earn its authorized rate of return. PPL/200, Widmer/2, Lines 5-14.

Q. ACCORDING TO PACIFICORP, WHAT IS THE ORIGIN OF THIS PROBLEM?

A. PacifiCorp witness Widmer indicated that the significant increase in company's net power cost exposure is primarily due to increased wholesale market electricity prices and price volatility. Mr. Widmer also indicated that the company expects wholesale market electricity prices to continue to trend upward. PPL/200, Widmer/3-4. Mr. Widmer concludes:

> The Commission should adopt the Company's proposed PCAM to rebalance net power cost exposure between customers and the Company so they are closer to historical levels. PPL/200, Widmer/5, Lines 16-18.

Staff Analysis of PacifiCorp's PCA Mechanism

Q. IS THE WHOLESALE ELECTRICITY MARKET HIGHER PRICED AND MORE VOLATILE THEN IN THE PAST?

A. Yes. The current and expected future price level for the Mid-Columbia and California-Oregon Board market hubs are clearly higher than the price levels that prevailed in the mid-1990s.

Q. DO YOU AGREE WITH PACIFICORP WITNESS OMOHUNDRO'S STATEMENT THAT THE INCREASED EARNINGS VOLATILITY ASSOCIATED WITH NVPC RISK WARRANTS CONSIDERATION IN THIS DOCKET?

A. Yes. PacifiCorp's relative risk position in the capital market and its resulting cost of capital are a fundamental regulatory issue. Staff believes the use of a reasonably structured automatic adjustment clause is preferable to the periodic use of deferred accounting.

Q. DO YOU AGREE WITH THE CHARACTERIZATION THAT AN AUTOMATIC ADJUSTMENT CLAUSE REDUCES RISK?

A. Yes, from PacifiCorp's perspective. However, an automatic adjustment clause does not reduce overall risk. It allocates risk between shareholders and customers. An automatic adjustment clause transfers risk previously borne by investors to customers. Whenever the company, staff, or any other party uses the phrase “risk reduction” to describe the effect of an automatic adjustment clause, they are viewing the risk from the company's perspective. From the customers' perspective, the NVPC risk is increased. Even if the expected value of the mechanism is zero, customers face more risk because they are exposed to significant swings in rates.

Q. IS AN AUTOMATIC ADJUSTMENT CLAUSE AN APPROPRIATE TOOL TO USE TO ADDRESS PACIFICORP'S NVPC-RELATED EARNINGS RISK?

A. Yes. Staff believes the best response to the identified problem is to use an automatic adjustment clause to address a portion of the NVPC-related earnings risk, while leaving a significant amount of that risk with the company. It is much more efficient to have the financial market diversify NVPC risk, than to allocate the risk to customers and have them bear it.

Q. HAS STAFF IDENTIFIED DESIGN CRITERIA THAT SHOULD BE USED IN CONSTRUCTING AND EVALUATING AUTOMATIC ADJUSTMENT CLAUSES?

A. Yes. First, staff believes a PCA mechanism should be designed to provide a reasonable amount of risk reduction or earnings stability for the utility. Second, staff believes the PCA mechanism should provide risk reduction and earnings stability without biasing the overall expected level of power cost recovery. Third, the Commission should ensure any proposal does not incent direct-access eligible customers on their choice to go direct access or remain with the company.

Q. PLEASE ELABORATE ON THE REASONABLE RISK REDUCTION CRITERION.

A. The fundamental issue in this docket is the amount of NVPC risk reduction, or conversely earnings stability, that is reasonable to achieve through implementation of a PCA mechanism. It is important to recognize that a PCA mechanism is not the only tool available to the Commission. The Commission has traditionally addressed earnings risk when setting ROE. In addition, in Docket UE 170, the Commission is considering PacifiCorp's request for annual NVPC updates and cost-of-service rate changes to facilitate implementation of Direct Access. If approved these annual updates would likely smooth PacifiCorp's earnings. These tools are not mutually exclusive and their use should be coordinated. In other words, the level of risk reduction to achieve through a PCA mechanism depends on the level of risk mitigation provided by the annual Direct Access process and the level of risk compensation to be provided through ROE.

Staff has consistently argued in recent cases that a PCA mechanism should be used to protect the company from extreme fluctuations in NVPC. Staff believes an extreme event PCAM is a reasonable way to mitigate PacifiCorp's NVPC-related earnings risk. A large deadband serves several purposes. First, it serves to keep PacifiCorp focused on managing NVPC risk. Second, a large deadband serves to keep supplemental ratemaking, such as a PCAM, from becoming the primary form of ratemaking. Supplemental ratemaking should complement normalized test year ratemaking, not supplant it. Staff posits that a deadband that leaves the company with all of the NVPC risk except for plus and minus the projected outer most ten percent of NVPC distribution achieves these goals.

Q. DOES PACIFICORP'S PROPOSED PCA MECHANISM SATISFY THE REASONABLE RISK REDUCTION CRITERION?

A. No. PacifiCorp has not included a deadband in the proposed PCA mechanism. PacifiCorp proposes two sharing bands. Seventy percent of any amount falling within plus or minus $100 million, on a total company basis, would be eligible for deferred accounting. Beyond plus or minus $100 million customers would cover ninety percent of any deviation from the normalized NVPC included in rates. PacifiCorp’s PCAM would shift nearly all of the NVPC risk to customers. Eliminating nearly all NVPC risk is unreasonable and overshoots PacifiCorp's stated goal of bringing NVPC-related earnings risk back in-line with its historic risk profile. PacifiCorp has historically been a bearer of NVPC risk and should retain a significant portion of this risk.

Q. PLEASE ELABORATE ON THE NEUTRAL COST RECOVERY CRITERION.

A. The goal of normalized test year ratemaking is to allow the company to recover its costs on an expected basis, no more, no less. The regulatory goal remains unchanged when normalized test year ratemaking is supplemented with an automatic adjustment clause. The use of an automatic adjustment clause should not result in an expected economic windfall to the utility or to its customers.

Q. DOES PACIFICORP'S PROPOSED PCA MECHANISM SATISFY THE NEUTRAL COST RECOVERY CRITERION?

A. No. The symmetric sharing bands would likely create an expected value windfall for PacifiCorp. PacifiCorp witness Widmer has testified that the company's net power cost exposure is asymmetric. PPL/200, Widmer/2-4. A symmetrically designed PCA mechanism that tracks asymmetric financial impacts can be expected to produce a balancing account balance that favors PacifiCorp.

Q. PLEASE ELABORATE ON THE EQUAL TREATMENT CRITERION.

The Commission shall ensure the provision of direct access to some retail electricity consumers does not cause unwarranted shifting of costs to other retail electricity consumers of the utility. ORS 757.607(1). The

Commission may use transition charges or transition credits to reasonably balance the interests of retail electricity consumers and utility investors. ORS 757.607(2). Staff believes that the underlying intent of ORS 757.607 is to provide the direct access option without providing preferential treatment for any particular class of consumers or the utilities investors. The goal of equal treatment should be extended to supplemental ratemaking. The Commission should ensure any proposal does not incent direct-access eligible customers on their choice to go direct access or remain with the company.

Q. DOES PACIFICORP'S PROPOSED PCA MECHANISM SATISFY THE EQUAL TREATMENT CRITERION?

A. Yes, but not in a totally satisfactory manner. PacifiCorp proposes to apply PCAM sur-charges and sur-credits to all customer classes, including customers on Direct Access schedules. In a strict sense this satisfies the equal treatment criterion. However, it does so at the expense of the direct access program and market based rate options. Direct access provides non-residential customers the potential to obtain a fixed energy price from an Energy Service Supplier (ESS). Applying the PCAM sur-charges and sur-credits to Direct Access customers eliminates the potential for a fixed rate. Market-based rate options provide non-residential customers the ability to obtain market-indexed rates from the utility. Applying the PCAM sur-charges and sur-credits eliminates this possibility. In other words, applying PCAM sur-charges and sur-credits to these customers would eliminate the potential benefits of the programs.

Q. SHOULD THE COMMISSION REJECT PACIFICORP'S PROPOSED PCAM PROPOSAL?

A. Yes. PacifiCorp's PCAM proposal fails to satisfy important automatic adjustment clause criteria.

<u>Staff's Long Term PCA Mechanism</u>

Q. PLEASE SUMMARIZE STAFF'S RECOMMENDATION FOR ADDRESSING PACIFICORP'S INCREASED NVPC-RELATED EARNINGS RISK.

A. Staff recommends that PacifiCorp use stochastic power cost modeling in its next general rate case. This modeling should be used to jointly determine the NVPC component of PacifiCorp's revenue requirement and the deadband parameters of an extreme event PCA mechanism. Staff's recommended solution has the following attributes:

1. PacifiCorp should file a PCAM tariff that tracks, for extreme excursions only, the annual difference between actual cost-of-service NVPC and the normalized NVPC included in cost-of-service rates. Staff recommends the following formula for calculating this difference: ((Adjusted Actual NVPC/ Actual System Load) – (Normalized NVPC in Rates/ Normalized Load in Rates)) x (Normalized Load in Rates).

2. The definition of NVPC should be broadened to include natural gas sales for resale.
3. The PCAM deadband should be set: (1) to exclude a reasonable range of normal variation from triggering the PCA mechanism, and (2) to be neutral on an expected recovery basis. For example, a deadband set at the 10^{th} and 90^{th} percentiles of the NVPC distribution would likely satisfy these criteria.
4. Annual amounts falling outside the deadband should be shared ten percent to PacifiCorp and ninety percent to customers. Ninety percent of all prudently incurred amounts exceeding the deadband would be allocated to Oregon and placed in a balancing account for later amortization.
5. The PCAM sur-charges or sur-credits should be calculated using a one-year amortization period and the balance collected from, or paid to, customers over the subsequent year.
6. The PCAM sur-charges or sur-credits should be applied to all customers that were charged cost-of-service rates during the PCAM year.
7. The forecast cost-of-service NVPC and the PCAM deadband should be reset annually via the Transition Adjustment process.

Q. WHY DOES STAFF RECOMMEND STOCHASTIC POWER COST MODELING?

A. Staff recommends stochastic power cost modeling for two reasons. First, stochastic modeling can provide for a more realistic simulation of PacifiCorp's system operations. It can provide a realistic representation of the variability, and any interactions, associated with retail loads, natural gas and electricity market prices, hydroelectric generation, and thermal unit availability. Second, stochastic power cost modeling provides a distribution of NVPC that can be used to design a PCA mechanism that satisfies the reasonable risk reduction and expected value recovery criteria. This modeling will improve normalization of NVPC and assessment of NVPC risk.

Q. ARE THERE INSTANCES WHERE STOCHASTIC POWER COST MODELING HAS BEEN USED IN PROCEEDINGS BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON?

A. Yes. PacifiCorp first used stochastic modeling of NVPC in its 2003 Integrated Resource Plan (IRP, Docket LC 31). The Commission in Order No. 03-508 acknowledged PacifiCorp's 2003 IRP. PacifiCorp refined its stochastic modeling for its 2004 IRP (Docket LC 39). PacifiCorp filed its Draft 2004 Integrated Resource Plan with the Commission on January 20, 2005. PacifiCorp has modeled the uncertainty associated with retail loads, natural gas prices, electricity prices, hydroelectric generation, and thermal unit availability. Stochastic model runs that vary all of these parameters are referred to as 'All-in' analysis. Model runs that vary only natural gas and electricity prices are referred to as 'Spark Spread' analysis.

PacifiCorp's Draft 2004 IRP can be located on PacifiCorp's web site (www.pacificorp.com). Relevant sections include: Chapter 4: Risks and Uncertainties (pp. 61-69); Chapter 8: Results (pp. 138-154); and Appendix G: Risk Assessment Modeling Methodology.

Q. IS IT APPROPRIATE TO TRANSFER THESE STOCHASTIC MODELING TECHNIQUES FROM THE RESOURCE PLANNING ARENA TO THE RATEMAKING ARENA?

A. Yes. The elements that PacifiCorp has modeled stochastically for purposes of IRP are the same elements that have traditionally been, and currently are, normalized in the determination of test year revenue requirements. Portfolio risk is an important consideration in both resource planning and ratemaking. In each arena, sound decision-making requires the best possible measurement and assessment of the relevant portfolio risks. In the IRP arena, the company and Commission evaluate the risks associated with alternative portfolios comprised of existing resources and resource additions. The goal is to select the least-cost and least-risk resource portfolio. In the ratemaking arena, the company and Commission need to consider the risks of the existing resource portfolio and evaluate alternative forms of regulation. The goal is to select ratemaking methods that allocate risk fairly and provide the company with the opportunity to earn the allowed rate-of-return. Staff recommends that the Commission employ a consistent approach when considering portfolio risk. It is inconsistent to use sophisticated risk modeling when making IRP decisions, only to revert to point-estimate modeling when making ratemaking decisions.

Q. DOES SIMPLY SWITCHING TO STOCHASTIC POWER COST MODELING OBVIATE THE NEED FOR A SUPPLEMENTAL AUTOMATIC ADJUSTMENT CLAUSE?

A. No. Stochastic power cost modeling does not represent a ratemaking response for treating the volatility of power costs around the baseline forecast. In other words, it does not address the earnings risk associated with power cost variability. Staff believes a properly designed PCA mechanism can be a reasonable means to mitigate PacifiCorp's earnings risk posed by large NVPC excursions.

Q. WHY DOES STAFF RECOMMEND A PCAM FORMULA THAT TRACKS THE DIFFERENCE BETWEEN AVERAGE ACTUAL NVPC AND AVERAGE NORMALIZED NVPC AND THEN MULTIPLIES THE DIFFERENCE (IN $/MWH) BY THE NORMALIZED LOADS USED TO SET COST-OF-SERVICE RATES?

A. This proposed tracking formula maintains the traditional allocation of load risk. PacifiCorp’s investors currently bear the risk that reduced loads can result in less than full fixed cost coverage. Investors also benefit from greater than full fixed cost coverage when loads are above those reflected in rates. This formula accounts for the offsetting impacts of load variation on fixed cost coverage and NVPC. With increased load, greater than full recovery of fixed costs mitigates or offsets the additional power costs incurred to meet the additional load. With decreased load, the savings in power costs mitigates or offsets the less than full recovery of fixed costs.

Q. WHY DOES STAFF RECOMMEND INCLUDING NATURAL GAS SALES FOR RESALE IN THE DEFINITION OF NVPC?

A. Natural gas sales for resale are part of the complex interaction of system resources. Natural gas purchased in advance to support expected thermal resource dispatch is often sold when expectations change. For example, if hydro output is greater than expected, then natural gas-fired resources may be backed- down and the fuel resold in the wholesale market. In the past, these resale revenues have been addressed in ratemaking as part of Other Revenue. Staff recommends updating the revenues associated with natural gas sales for resale annually through the Transition Adjustment process and capturing them in any authorized automatic adjustment clause.

Q. WHY DOES STAFF RECOMMEND AN ANNUAL UPDATE OF THE PCA DEADBAND?

A. The annual deadband update is intended to address the single-snapshot, or next- year-only, problem. A power cost forecast represents a snapshot taken at a particular point in time. The snapshot reflects the conditions and constraints known at that point in time. The validity of the snapshot depends upon the stability of the conditions and constraints. In other words, a power cost forecast is only valid for as long as the conditions and constraints remain unchanged. Designing an annual deadband update into the PCA process allows parties to debate the stability of these conditions and is superior to a static deadband that could produce economic windfalls for the utility or its customers.

Q. WHY DOES STAFF RECOMMEND SETTING THE PCAM DEADBAND: (1) TO EXCLUDE MOST OF THE RANGE OF NORMAL VARIATION FROM TRIGGERING THE PCA MECHANISM, AND (2) TO BE NEUTRAL ON AN EXPECTED RECOVERY BASIS?

A. First, staff believes that the purpose of a PCA mechanism is to protect the utility from excessive financial impacts associated with power cost variability. The PCAM deadband should serve to exclude a reasonable range of normal variation from triggering the mechanism. For example, a PCAM with a deadband set at the 10^{th} and 90^{th} percentiles of the NVPC distribution can be expected, on average, to provide supplemental ratemaking in 1 out of every 5 years. Supplemental ratemaking should complement normalized test year ratemaking, not supplant it. A large deadband also serves to keep PacifiCorp focused on managing the financial impacts of varying NVPC.

Second, staff believes a PCAM should allocate risk without creating economic windfalls for the company or its customers. Setting base energy rates using stochastic power cost modeling provides an equal risk of over-collecting or under-collecting NVPC in rates. Any asymmetries in the distribution of NVPC outcomes should also be reflected in the PCAM deadband. It may turn out to be the case that the lowest ten percent of

NVPC outcomes fall closer the distribution average than the highest ten percent of NVPC outcomes. Stochastic power cost modeling represents a “fair roll of the dice.” The PCAM deadband should be set to preserve this neutrality.

Q. WHY DOES STAFF RECOMMEND DEFERRAL OF NINETY PERCENT OF ALL AMOUNTS EXCEEDING THE DEADBAND?

A. Staff recommends amounts falling outside the deadband be shared ninety percent to customers and ten percent to PacifiCorp. Keeping a small percentage of NVPC risk with the company aligns the company and customer interests to minimize NVPC.

Q. WHY DOES STAFF RECOMMEND APPLYING THE PCAM SUR-CHARGES AND SUR-CREDITS TO ALL COST-OF-SERVICE CUSTOMERS WHILE EXCLUDING ALL DIRECT ACCESS AND MARKET BASED RATE CUSTOMERS?

A. Direct access provides non-residential customers the potential to obtain a fixed energy price from an ESS. Applying the PCAM sur-charges and sur-credits to direct access customers eliminates the potential for a fixed rate. Market-based rate options provide non-residential customers the ability to obtain market-indexed rates from the utility. Applying the sur-charges and sur-credits to these customers eliminates this possibility. The ability of the customer to disconnect their annual energy expense from regulated cost-of-service ratemaking is the primary benefit of these options. Applying the PCAM adjustment rate to the programs eliminates the benefit.

Q. DOES STAFF RECOMMEND EXEMPTING COST VARIATIONS ASSOCIATED WITH QUALIFYING FACILITIES FROM THE PCAM DEADBAND OR SHARING BAND?

A. No. Staff believes QF cost variation should be treated on par with the cost variation associated with other resources.

Q. DOES STAFF RECOMMEND EXEMPTING CONTRACTS AND RESOURCES PREVIOUSLY INCLUDED IN RATES FROM THE PCAM PRUDENCE REVIEW?

A. No. Staff recommends a prudence review modeled on the one conducted in Docket UM 1039 for Portland General Electric Company (PGE, see Commission Order 03-543.) Staff supports the use of advisory issues lists to help focus the company's direct testimony.

Q. DOES STAFF'S PCA PROPOSAL SATISFY THE THREE IMPORTANT DESIGN CRITERIA?

A. Yes. The large deadband satisfies the rate stability, incentive for good management, and reasonable risk reduction criteria. The potential for an asymmetric deadband, and the annual deadband update, satisfy the neutral cost recovery criterion. Although staff's PCA proposal does not provide equal treatment for cost-of-service and opt-out customers in all instances, the large deadband should provide equality in most years. Only when there are extreme NVPC excursions would these customer groups be treated differently.

Staff's Interim PCA Mechanism

Q. PLEASE SUMMARIZE STAFF'S INTERIM PCAM PROPOSAL.

A. Staff recommends an interim PCAM for the period February 1, 2005 through December 31, 2006 with the following attributes:

1. PacifiCorp should file a PCAM tariff that tracks the annual difference between actual cost-of-service NVPC and the normalized NVPC included in cost-of-service rates. Staff recommends the following formula for calculating this difference: ((Adjusted Actual NVPC/ Actual System Load) – (Normalized NVPC in Rates/ Normalized Load in Rates)) x (Normalized Load in Rates).
2. The definition of NVPC should be broadened to include natural gas sales for resale.
3. The PCA deadband should be set at plus and minus 250 basis points of ROE.
4. The amount falling outside the deadband should be shared ninety percent to customers and ten percent to PacifiCorp. Ninety percent of all prudently incurred amounts exceeding the deadband should be allocated to Oregon and placed in a balancing account for later amortization.
5. The PCAM sur-charges or sur-credits should be calculated using a one-year amortization period and the balance collected from, or paid to, customers during the following calendar year.

6. The PCA rate should be applied to all customers that were charged cost-of-service rates during the PCAM year.

Q. WHY DOES STAFF RECOMMEND A SYMMETRIC DEADBAND EQUAL TO 250 BASIS POINTS OF ROE?

A. The Commission established a deadband of 250 basis points of ROE around PacifiCorp's baseline NVPC in Docket UM 995. The Commission approved the same deadband around PGE's baseline NVPC in Docket UM 1008/UM 1009 and Idaho Power Company's baseline NVPC in Docket UM 1007. The Commission also used 250 basis points of ROE to benchmark the financial impact of poor hydro in Docket UM 1071. Without an explicit quantification of PacifiCorp's power cost variability we do not have sufficient information to recommend an asymmetric deadband.

Q. DOES THE COMMISSION HAVE THE ABILITY TO APPLY STAFF'S INTERIM PCAM RETROACTIVE TO FEBRUARY 1, 2005?

A. Yes. PacifiCorp filed an application for deferral of costs related to declining hydro generation on February 1, 2005 (Docket UM 1193). PacifiCorp indicated in its initial application that it intended track increased power costs for later incorporation in rates, either through an amortization schedule or as a part of a PCAM. UM 1193 Application, page 1. The UM 1193 application provides the Commission options with respect to the date at which benefits and costs associated with PacifiCorp's proposed PCA mechanism are eligible for deferral. Staff believes the Commission also has the discretion to modify the proposed balancing account formula.

Q. WHY DOES STAFF RECOMMEND THAT ITS INTERIM PCA MECHANISM BE APPLIED RETROACTIVE TO FEBRUARY 1, 2005?

A. Staff recommends the interim PCAM as part of a long-term commitment to the fair allocation of NVPC risk. Staff's interim PCA bridges the gap until a long-term PCAM can be implemented. We believe it is important to maintain this long-term focus. Without further examination of the facts underlying Docket UM 1193, staff is unsure if the 2005 hydro variance warrants deferred accounting on a one-time stand-alone basis. However, we have already noted the similarity between our interim PCA and the Commission's use of 250 basis points of ROE to benchmark the financial impact of poor hydro in Order 04-108.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

CASE: UE 173
WITNESS: Maury Galbraith

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 101

Witness Qualifications Statement

August 19, 2005

WITNESS QUALIFICATION STATEMENT

NAME:	Maury Galbraith
EMPLOYER:	Public Utility Commission of Oregon
TITLE:	Senior Economist, Energy Division
ADDRESS:	550 Capitol Street NE Suite 215 Salem, Oregon 97301-2551
EDUCATION:	Graduate Student in Environmental Studies Program (1995 – 1997) University of Montana Missoula, Montana Master of Arts in Economics (1992) Washington State University Pullman, Washington Bachelor of Science in Economics (1989) University of Oregon Eugene, Oregon
EXPERIENCE:	The Public Utility Commission of Oregon has employed me since April 2000. My primary responsibility is to provide expert analysis of issues related to power supply in the regulation of electric utility rates. From April 1998 through March 2000 I was a Research Specialist with the State of Washington Office of the Administrator for the Courts in Olympia, Washington. From April 1993 through August 1995 I was a Safety Economist with the Pacific Institute for Research and Evaluation in Bethesda, Maryland.

CASE: UE 173
WITNESS: Bill Wordley

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 200

Direct Testimony

August 19, 2005

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

A. My name is Bill Wordley. My business address is 550 Capitol Street NE, Suite 215, Salem, Oregon 97301. I am a Senior Economist in the Economic Research & Financial Analysis Division of the Utility Program of the Public Utility Commission of Oregon (OPUC).

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE?

A. My witness qualification statement is found in Staff/201, Wordley/1.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. In this testimony I will: (1) comment on the allocation methodology included in the company's proposed Power Cost Adjustment Mechanism (PCAM); and (2) recommend an alternative allocation methodology.

Q. PLEASE DESCRIBE HOW THE COMPANY HAS PROPOSED TO ALLOCATE POWER COST VARIANCES IN ITS PROPOSED PCAM.

A. The company proposes to use separate runs of its Generation and Regulation Initiatives Decision Tools (GRID) model to estimate the cost impacts of actual system-hydro and Mid-Columbia generation output compared to the generation output level assumed in current rates. For the existing Qualifying Facility (QF) contracts, actual QF costs are compared to the costs included in the GRID study used to set current rates. These actual cost impact differences from current rates are then allocated to states using Revised Protocol allocation factors. The remaining actual power cost variance – [total variance less system-hydro, Mid-Columbia, and QFs] - is allocated with the system load-based SG factor. The company asserts that this method is consistent with the initial allocation of costs and benefits under the Revised Protocol.

Q. IS THE COMPANY'S PROPOSED METHOD FOR THE ALLOCATION OF POWER COST VARIANCES CONSISTENT WITH THE REVISED PROTOCOL?

A. No. The Revised Protocol is based on the principal that PacifiCorp is one integrated six-state system, both on a planning and operational basis. This means generally, that future risks – both for the long-term and the short-term are shared equally among the states. Risks of cost impacts caused by market price volatility, load growth and variation, hydro availability and variation, or thermal plant performance are shared proportionately equal among the states. However, the company's proposed PCAM allocation assigns Oregon a proportionately higher share than other states of the operational risk of the company's hydro resources. At the same time, for example, when it comes to thermal plant performance, the company's proposed PCAM allocation assigns the operational risk proportionately the same to all states. This difference allocation of operational risk is not consistent with the principles on which the Revised Protocol is based.

Q. BECAUSE THE REVISED PROTOCOL INCLUDES A HYDRO ENDOWMENT FOR OREGON AND THE OTHER FORMER PACIFIC POWER STATES, WHY SHOULDN'T OREGON BE ALLOCATED A HIGHER PROPORTION OF ANY POWER COST VARIANCE CAUSED

BY HYDRO OUTPUT VARIATION FROM THE LEVEL ASSUMED IN CURRENT RATES?

A. The Revised Protocol was negotiated as a package deal. Changes from the prior cost allocation methodology include a new expanded hydro endowment, state situs assignment of QF contract costs, a new method of assigning the costs of seasonal resources, and the elimination of the Modified Accord hydro endowment and pre-merger plant adjustments. The supporting analysis and modeled cost impacts of these changes, as well as many other potential changes that were considered, but ultimately not included in the final Revised Protocol package, was done on "normalized" data. There was little modeling done that considered the impact of variations in the underlying assumptions. However, participants in the MSP understood that both long-term differences, and short-term or operational variation, in the assumptions will occur. The analysis and modeling used was conducted over a 15 year future period, to support a long-term, sustainable solution. If PacifiCorp wants to assign proportionally more of the costs due to year-to-year operational hydro-related power cost variations to Oregon that's a different deal than was agreed to in the Revised Protocol.

Q. IS STAFF CHANGING ITS POSITION REGARDING THE RISK ASSUMED WITH THE HYDRO ENDOWMENT?

A. No. Staff stated clearly in UM 1050

> "The PRP [Revised Protocol] hydro endowment credit is based on the full or embedded cost difference between hydro resources and

> all other resources[1]. The hydro resources are not assigned to the states receiving the credit. All the company's power resources are used to serve all its retail and wholesale loads." (UM 1050, Staff/200, Wordley/7)

The company's hydro resources are used equally by states, and all states are equally responsible for hydro and all other resources output variations, both in the short-term, as in year-to-year operational output, and in the long-term, as in all states paying for the replacement of lost hydro (or thermal) capacity.

Q. WHAT RISKS WERE ACCEPTED BY THE OREGON PARTIES IN THE REVISED PROTOCOL REGARDING HYDRO ENDOWMENT?

A. In Section 5 of the UM 1050 Stipulation, which is part of Order No. 05-021, there is a discussion of two risks that the Oregon Parties did assume regarding the future benefits of the hydro endowment credit. First, is the risk that the future value of the Mid-Columbia contracts may turn out to be less than the costs of situs assignment of the existing QF contracts, and second, is the risk that the level of hydro relicensing costs could cause hydro-electric resources to become more costly than other market opportunities.

Q. ARE THE RISKS YOU JUST DESCRIBED ACTUALLY PART OF THE RISK ALL PARTIES IN THE MSP SHARE?

A. Yes. The accuracy of the MSP modeling is uncertain. However, all parties to the MSP used the modeled results to base their positions on in the negotiating process. To the extent that the assumptions used in the

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[1] The embedded cost of "all other" resources excludes the company's owned system hydro plants, the Mid-C contracts, and the existing Qualifying Facilities contracts (QFs). In the PRP, the costs of existing QF contracts are assigned on a state situs basis.

modeling turn out different, and some will, the anticipated costs and benefits will be different. This is the risk that all parties to the MSP assumed.

Q. WHAT METHOD DOES STAFF RECOMMEND TO ALLOCATE POWER COST VARIANCES IN THE PCAM?

A. Staff recommends the load-based dynamic SG factor be used to allocate any power cost variances. The SG factor allocates costs based on each state's contribution to system load, which is fair and reasonable for this application.

As an alternative, the company's could explore the potential of directly using the allocation method in the Revised Protocol, which uses the Embedded Cost Differential adjustment to appropriately reflect the hydro endowment credit and situs assignment of QF contract costs. This method would not suffer from the inconsistencies in the methodology proposed by the company that was described earlier in this testimony. The company could present their findings regarding the potential use of this allocation approach for the PCAM in rebuttal testimony.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

CASE: UE 173
WITNESS: Bill Wordley

PUBLIC UTILITY COMMISSION
OF
OREGON

STAFF EXHIBIT 201

Witness Qualifications Statement

August 19, 2005

WITNESS QUALIFICATION STATEMENT

NAME:	Bill Wordley
EMPLOYER:	Public Utility Commission of Oregon
TITLE:	Senior Economist, Economic Research & Financial Analysis Division
ADDRESS:	550 Capitol Street NE Suite 215, Salem, Oregon 97301-2115.
EDUCATION:	All course work towards Masters in Economics Portland State University B.S. Portland State University Major: Mathematics
EXPERIENCE:	Since August 2000 I have been employed by the Public Utility Commission of Oregon. Responsibilities include research and providing technical support on a wide range of cost, revenue and policy issues for gas, electric and telephone utilities. From March 1999 to August 2000 I worked as a consultant in the energy field working for electric utilities and utility organizations. Work included load forecasting and operations planning. From 1972 to 1999 I worked for PacifiCorp in various analytical and management positions dealing with long and short-term load, sales, and revenue forecasting, power operations planning, power contract optimization, merger and acquisition support, strategic planning support, market research, retail market planning, load-resource analysis, and power contract administration. Testified in some 30 regulatory proceedings in Oregon, Washington, Idaho, Montana, Wyoming, and California.

CERTIFICATE OF SERVICE

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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 all parties or attorneys of parties.

Dated at Salem, Oregon, this 19th day of August, 2005.

David B. Hatton

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UE 173
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