



Oregon

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June 4, 2013 2012

Via Electronic Filing and U.S. Mail

OREGON PUBLIC UTILITY COMMISSION
ATTENTION: FILING CENTER
PO BOX 2148
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**RE: Docket No. UE 264 – In the Matter of PACIFICORP, dba
PACIFIC POWER, 2014 Transition Adjustment Mechanism.**

Enclosed for electronic filing in the above-captioned docket is the Public
Utility Commission Joint Staff's Opening Testimony,

/s/ Kay Barnes

Kay Barnes

Utility Program

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c: UE 264 Service List (parties)

**PUBLIC UTILITY COMMISSION
OF OREGON**

UE 264

**JOINT STAFF
OPENING TESTIMONY OF**

**JOHN CRIDER
JORGE ORDONEZ**

**In the Matter of
PACIFICORP, dba PACIFIC POWER,
2014 Transition Adjustment Mechanism.**

**REDACTED
June 4, 2013**

CASE: UE 264
JOINT WITNESSES: John Crider &
Jorge Ordonez

**PUBLIC UTILITY COMMISSION
OF
OREGON**

JOINT STAFF EXHIBIT 100

Opening Testimony

June 4, 2013

CERTAIN INFORMATION CONTAINED IN JOINT STAFF

EXHIBIT 100 OF UE 264

IS CONFIDENTIAL AND SUBJECT TO

PROTECTIVE ORDER NO. 10-069 in UE 216.

YOU MUST HAVE SIGNED

APPENDIX B OF THE PROTECTIVE ORDER IN

DOCKET UE 216 TO RECEIVE THE

CONFIDENTIAL VERSION

OF THIS EXHIBIT.

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

A. My name is John Crider. I am employed by the Oregon Public Utility Commission (OPUC) as a Senior Utility Analyst in the Energy Resources and Planning Section of the Energy Division. My business address is 550 Capitol Street NE, Suite 215, Salem, Oregon 97301-2551.

My name is Jorge Ordonez. I am employed by the Oregon Public Utility Commission (OPUC) as a Senior Financial Economist in the Energy Resources and Planning Section of the Energy Division. My business address is 550 Capitol Street NE, Suite 215, Salem, Oregon 97301-2551.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. Our Witness Qualification Statements are found in Exhibit Staff/101 and Staff/102

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of our testimony is to first summarize Pacific Power's (Company) 2013 Transition Adjustment Mechanism (TAM) for Net Power Costs (NPC) for the test year of 2014, and then to discuss four specific issues related to the TAM.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. First, we summarize the Company's filing in the Introduction section. Following the introduction summary, we discuss four specific issues regarding the filing: an increase in coal costs; the effect of interruptible power contracts on the

- 1 NPC; proposed changes to the Company's modeling of hydro; and the
- 2 Company's proposed changes related to wind modeling.

I. INTRODUCTION**Q. PLEASE SUMMARIZE PACIFICORP'S 2013 TRANSITION ADJUSTMENT MECHANISM (TAM) FILING.**

A. The Company's March 1, 2013, filing requested an overall decrease of \$15.5 million in NPC for calendar year 2014 over what is currently collected in rates. The Company's total forecasted system-wide NPC is calculated as \$1.457 billion compared to \$1.473 billion currently included in rates. Due to an increase in Oregon load, this translates to a \$0.4 million increase in Oregon allocated NPC from \$362.7 million in 2013 to \$363.1 million in 2014.

Q. WHAT IS THE EFFECT ON OREGON RATES?

A. The slight increase in Oregon load resulted in a corresponding decrease in the overall rate, from \$27.68 per MWh in 2013 to \$27.57 per MWh in 2014. These rates are calculated based on the Oregon load forecast presented by the Company in its current general rate case (UE 263).

Q. WHAT ARE THE MAJOR DRIVERS FOR THE 2014 NPC?

A. The Company explains the major cost drivers as a decrease in overall system load of 0.85 percent and a decrease of purchased power expense of \$69 million, offset by an increase in coal expenses of \$41 million, an increase in natural gas fuel expense of \$6 million, an increase in wheeling, hydro and other expenses of \$10 million, and a decrease in wholesale sales revenue of \$4 million. The overall effect is a decrease of \$16 million in system-wide NPC.

Q. WHAT IS THE PRIMARY COST DRIVER FOR THE \$10 MILLION INCREASE IN WHEELING, HYDRO AND OTHER EXPENSES?

1 A. The increase in this category is due to increases in BPA's transmission rates.

2 New rates are scheduled to go into effect in October of 2013 and will result in

3 increases ranging from 15% to 20%. The Company has estimated the cost

4 increase based on proposed rates and will update these values to reflect BPA's

5 final Record of Decision (ROD), expected in late July 2013.

6 **Q. ARE ANY SIGNIFICANT SYSTEM CHANGES MODELED IN THIS YEAR'S**
7 **TAM?**

8 A. Yes. The 2014 TAM incorporates the benefits and power costs for the

9 Company's new 637 MW Lake Side 2 natural gas plant. The plant will come

10 online in the second quarter of 2014. The TAM includes the variable costs and

11 benefits of Lake Side 2 from June 2014 forward.

12 **Q. DID THE COMPANY INTRODUCE ANY OTHER CHANGES INTO THE**
13 **MODELING FOR THIS YEAR'S TAM?**

14 A. Yes. The Company incorporated modeling changes in accordance with

15 Commission Order 12-409 issued in last year's TAM proceeding (UE 245).

16 **Q. PLEASE EXPLAIN THE CHANGES OUTLINED IN ORDER NO. 12-409.**

17 A. Order No. 12-409 included four specific modeling changes which the Company
18 has included in this year's TAM.

19 a) Market Caps – wholesale market caps were kept in the modeling, but the
20 caps are now calculated based on the highest of the four most recently
21 available averages for each trading hub

22 b) Arbitrage and Revenue Credit – no adjustment is made to impute revenue

1 c) Third Party Wind Integration – the cost of integrating third-party wind is
2 included.

3 d) Hydro Forced Outages – The Commission did not have a specific
4 requirement regarding this issue, but urged the Company and Parties in UE
5 245 to review the modeling and make necessary changes. The Company
6 has proposed a corresponding revision of their modeling of hydro outages
7 that is consistent with Order No. 12-409.

8 **Q. IN THIS FILING DID THE COMPANY COMPLY WITH ORDER NO. 10-414**
9 **(DOCKET UM 1355), WHICH DIRECTED THE COMPANY TO CALCULATE**
10 **FORCED OUTAGE RATES ACCORDING TO A SPECIFIC**
11 **METHODOLOGY?**

12 A. Yes. Order No. 10-414 prescribed the method for calculating forced outage
13 rates for coal plants. Staff examined the documentation that PacifiCorp
14 provided for its coal plant forced outage rate calculations and determined that
15 the methodology used in this filing is consistent with Order No. 10-414.

16 **Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?**

17 A. There are four specific issues that Staff presents testimony on in this
18 proceeding. The second part of our testimony explores each of these issues in
19 more detail.

II. DISCUSSION OF ISSUES

Q. WHAT ARE THE FOUR ISSUES DISCUSSED IN THIS SECTION?

A. Staff provides testimony on the following four specific issues in this TAM. The four issues discussed below include:

- A. Increase in Coal Costs
- B. Effect of Interruptible Power Contracts
- C. Hydro Modeling Changes
- D. Wind Modeling Changes

SECTION A – INCREASE IN COAL COSTS

Q. PLEASE DESCRIBE THE INCREASE IN COAL COSTS.

A. The Company proposes an overall increase of \$53.5 million in coal costs for the test year. This total includes \$16.5 million increase in third-party coal costs, and a \$37 million increase in captive¹ mine costs.

Q. WHAT ARE THE PRIMARY COST DRIVERS FOR THE THIRD-PARTY COAL CONTRACTS?

A. Contract price re-openers are responsible for increases of \$[REDACTED] at Wyodak and \$[REDACTED] at Cholla. Higher diesel and equipment operating costs have increased costs at the Kemmerer mine (which serves the Naughton power plant) by \$[REDACTED]. The remaining increases in third-party contract costs are due to increases in consumer price index, production taxes and royalties.

¹ "Captive coal mine" refers to a coal mine that satisfies the needs of a mine owner rather than for open market sale.

Source: www.teachmefinance.com/Scientific_Terms/Captive_coal.html

1 **Q. WHAT ARE THE COST INCREASES RELATED TO THE COMPANY'S**
2 **CAPTIVE MINES?**

3 A. The Company has ownership of two captive mines with significant cost
4 increases in this TAM. Bridger Coal Company, which serves Jim Bridger plant,
5 has an increase of \$[REDACTED] over 2013 expenses, and Deer Creek mine
6 which serves several plants, has an increase of \$[REDACTED]. These increases
7 are partially offset by a \$[REDACTED] cost reduction at the Trapper and Prep
8 Plant plants for a net increase of \$[REDACTED] in captive mine cost.

9 **Q. WHAT ARE THE MAJOR COST DRIVERS FOR THE INCREASE IN**
10 **BRIDGER COAL COSTS?**

11 A. Most of the increase is associated with funds for reclamation activities which
12 totals approximately \$[REDACTED] dollars.

13 **Q. WHAT ARE THE MAJOR COST DRIVERS FOR THE DEER CREEK MINE?**

14 A. The primary reason for the cost increase is the shortened life span of the mine.
15 Originally, the mine was estimated to remain in operation through 2021 but
16 recent drilling results have concluded that the operational life of the mine will
17 be reduced two years to 2019. The increase in depreciation expense and post-
18 retirement expenses account for \$[REDACTED] of the total. The remaining
19 increase in cost is due to an increase in royalty costs.

20 **Q. DOES STAFF HAVE ANY ADJUSTMENTS TO THE CAPTIVE COAL MINE**
21 **COSTS?**

22 A. Yes. In previous dockets Staff has identified and Commission has allowed rate-
23 case type adjustments to certain itemized O&M costs related to the captive

1 mines. Specifically, reductions in management overtime, bonuses, donations,
2 fines and meal expenses have been allowed^{2, 3}. Staff proposes similar
3 adjustments to the cost calculations for the Bridger and Deer Creek mines.

4 **Q. PLEASE EXPLAIN THE O&M ADJUSTMENTS STAFF PROPOSES FOR**
5 **THE BRIDGER AND DEER CREEK MINE COSTS.**

6 A. Based on similar adjustments authorized by the Commission in Orders No. 07-
7 527⁴ and 99-697⁵, Staff proposes a total reduction estimated at \$[REDACTED] on an
8 Oregon basis for certain O&M items. This value is based on Company 2013
9 cost estimates and includes the following reductions:

- 10 a) 100% reduction of management overtime costs
11 b) 100% reduction of fines
12 c) 50% reduction of bonuses
13 d) 50% reduction in meal costs

14 The costs related to Bridger were adjusted based on costs supplied by the
15 Company.⁶ The adjustments to Deer Creek were estimated in a similar
16 manner as the Bridger costs. These estimated values are subject to future

² In UE 197, the Commission adopted Staff's principle that costs for meals and entertainment are discretionary and should be shared equally by ratepayers and shareholders. (Order 09-020 at 20-21)

³ 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)

⁴ Docket UW-120

⁵ Docket UG-132

⁶ Crane workpapers

1 revision based on the Company's outstanding responses to pending data
2 requests from Staff.

3 **SECTION B – EFFECT OF INTERRUPTIBLE CONTRACTS**

4 **Q. PLEASE DESCRIBE THE INTERRUPTIBLE CONTRACTS.**

5 A. The Company currently has contracts with three large industrial customers that
6 give the Company the ability to curtail the customer's load for economic
7 purposes. Two of these contracts are due to expire at the end of 2013; the third
8 will continue through 2014. The Company is planning to renegotiate the two
9 expiring contracts and plans for them to be in place for 2014.

10 **Q. HOW HAS THE COMPANY PROPOSED TO MODEL THESE CONTRACTS**
11 **IN THIS TAM?**

12 A. The Company has assumed that these three contacts will remain in place at
13 current prices and curtailment levels for the 2014 test year. It is possible that
14 the updated contracts would call for a change in curtailed load, which would in
15 turn impact the net system load used to calculate NPC. The revised contract
16 terms may also impact the inter-jurisdictional allocation factors. Incorporating
17 either of these changes would require an exception to the TAM guidelines⁷.
18 The Company proposes that this exception be allowed.

19 **Q. DOES STAFF AGREE WITH THE COMPANY'S PROPOSAL REGARDING**
20 **THESE CONTRACTS?**

21 A. No. Any significant changes to the contracts may have unanticipated changes
22 to the modeling outcome and calculation of NPC. If introduced late in the

⁷ See Order No. 09-274 (UE 199) which adopts the TAM guidelines limiting the nature and scope of modeling updates

1 proceedings, as proposed by the Company, parties will not be given the
2 opportunity to perform proper discovery regarding this issue. Staff agrees with
3 the Company's original decision to assume that the contracts remain in place
4 with known and agreed-upon contract terms and parameters for the purpose of
5 calculating NPC. Therefore, Staff recommends that the Commission not allow
6 the Company's requested exception to the TAM guidelines.

7 **SECTION C—HYDRO MODELING CHANGES**

8 **Q. PLEASE DESCRIBE THE COMPANY'S HYDRO MODELING CHANGES**
9 **FOR THIS TAM.**

10 A. The Company has modeled the forced outage of hydro units with storage
11 capability as a flat percentage reduction to the available capacity across all
12 hours of the test period. The reduction to plant capacity is based on a 48-
13 month history of actual forced outages for each individual plant. This is in
14 contrast to the previous method of randomly placing outages based on an
15 average outage expectancy.

16 **Q. DOES STAFF AGREE WITH THE COMPANY'S APPROACH TO HYDRO**
17 **MODELING?**

18 A. Yes. Staff views this implementation as a reasonable approximation as it
19 represents an attempt to smooth the effect of forced outages in a method
20 similar to how the company estimates thermal plant outages.

21 **Q. DOES STAFF HAVE ANY OTHER ISSUES REGARDING THE COMPANY'S**
22 **APPROACH TO HYDRO MODELING?**

1 A. Yes. Staff is generally concerned that the Company's approach to hydro
2 modeling does not reflect normalized hydro conditions. This is a different
3 methodological approach to estimating hydro generation than used by either
4 Idaho Power or Portland General Electric (PGE) in their respective net power
5 cost proceedings.

6 **Q. IN WHAT WAY DOES THE COMPANY'S APPROACH TO HYDRO**
7 **MODELING DIFFER FROM THE APPROACH FOLLOWED BY IDAHO**
8 **POWER OR PGE?**

9 A. Both Idaho Power and PGE form their net power cost calculations using
10 normalized hydro generation. This normalization process includes many years
11 of hydrology data – 84 years for Idaho and 15 years for PGE – and is intended
12 to provide a median baseline, or the expected value, for net power costs. This
13 normalized view of hydro is intended to reduce seasonal and annual volatility in
14 the forecasted hydro generation. Here, Staff finds that the Company
15 significantly alters hydro generation forecasts from year to year, based on
16 single-year hydrology forecasts for the test year.

17 **Q. HOW DOES STAFF COME TO THIS VIEW?**

18 A. This issue is not new with this year's TAM. In UE 207 the Company stated that
19 its modeling attempted to align the test year modeling with actual project
20 projections⁸. Staff has compared the estimated hydro output from the previous
21 two TAM proceedings (UE 207 and UE 216) with the estimates from this
22 docket and has found significant differences in estimated flows from various

⁸ Exhibit Staff/103, Brown/1

1 hydro plants from one year to the next. If the Company was attempting to
2 model a normalized hydro year, one would not see these year-to-year
3 variations.

4 **Q. CAN YOU OFFER AN EXAMPLE OF THE MAGNITUDE OF VARIABILITY IN**
5 **THE HYDRO PROJECTIONS?**

6 A. Yes. In comparing 2012 TAM hydro projections with those for 2013, both
7 Grant Priest Rapids and Grant Wanapum plants see changes of about 30-40%
8 in production, year over year. Similarly, in comparing 2013 projections to 2014,
9 Copco 1 and Copco 2 plants see monthly changes ranging from -35% to +50%
10 in year-over-year changes. These types of significant changes do not reflect a
11 normalization process but one of annual forecasting. Output projections are
12 made by the Company for each plant on a monthly basis. When comparing
13 2013 values to 2014 projections, there are 384 monthly values (12 monthly
14 values for 32 projects) and 66 of these have changes of more than 20%.

15 **Q. WHAT IS STAFF'S RECOMMENDATION REGARDING HYDRO**
16 **NORMALIZATION?**

17 A. Staff recommends that the Company follow a methodology to create a
18 normalized hydro forecast in a similar fashion to Idaho Power and PGE.

19 **SECTION D – WIND MODELING CHANGES**

20 **Q. PLEASE DESCRIBE THE WIND MODELING CHANGES PROPOSED BY**
21 **THE COMPANY.**

22 A. The Company continues to use its "P50" forecast for average wind generation.
23 The P50 method has an equal probability of being higher or lower than

1 forecast, and provides an estimate of average wind energy produced in four-
2 hour blocks. However, the Company proposes to shape the projected wind
3 output on an hourly basis using actual data from 2011. This means that the
4 total energy output of the wind facilities remains unchanged from previous
5 cases, but the output shape has much more variability.

6 **Q. DOES STAFF AGREE WITH THIS APPROACH TO WIND MODELING?**

7 A. Staff agrees that the P50 method does not reflect the intra-day variability that is
8 inherent in wind generation and that some method of introducing this variability
9 is reasonable. However, Staff does not agree that the use of one year of actual
10 data provides the needed accuracy. Staff recommends that the Company
11 utilize a much larger dataset in determining a normalized wind profile. The use
12 of a single year of data for introducing variability does not accurately reflect a
13 normalized estimate of the wind since wind generation exhibits annual,
14 seasonal, daily and hourly variability that is not necessarily highly correlated
15 from year to year. The goal of wind modeling should be to produce a
16 reasonable normalized estimate of wind generation not a specific year's
17 forecast. Staff recommends no change to the treatment of wind in the NPC
18 modeling at this time.

19 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.**

20 A. In conclusion, Staff recommends the following adjustments to the Company's
21 filing for this year's TAM:

- 22 a) Coal cost reduction of \$ [REDACTED] on an Oregon-allocated basis
23 b) Disallow changes to current interruptible contract terms

1 c) Instruct the Company to develop a normalized hydro forecast for future NPC
2 proceedings

3 d) Do not adopt the Company's proposed changes to wind modeling at this
4 time

5 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

6 A. Yes

CASE: UE 264
JOINT WITNESSES: John Crider &
Jorge Ordonez

**PUBLIC UTILITY COMMISSION
OF
OREGON**

JOINT STAFF EXHIBIT 101

Witness Qualification Statements

June 4, 2013

WITNESS QUALIFICATION STATEMENT

NAME: JOHN CRIDER

EMPLOYER: PUBLIC UTILITY COMMISSION OF OREGON

TITLE: SENIOR UTILITY ANALYST, ELECTRIC RESOURCES AND
PLANNING

ADDRESS: 550 CAPITOL ST. NE, SALEM, OR 97308-2148

EDUCATION: Bachelor of Science, Engineering, University of Maryland

EXPERIENCE: I have been employed at the Oregon Public Utility Commission (Commission) since August of 2012. My current responsibilities include analysis and technical support for electric power cost recovery proceedings, with an emphasis on variable power costs and purchases from qualifying facilities. Prior to working for the OPUC I was an engineer in the Strategic Planning division for Gainesville Regional Utilities (GRU) in Gainesville, Florida. My responsibilities at GRU included analysis, design and support for generation economic dispatch modeling, wholesale power transactions, net metering, distributed solar generation and fuel (coal and natural gas) planning. Previous to working for GRU, I was a staff design engineer for Eugene Water & Electric Board (EWEB) where my responsibilities included design of control and communications system in support of water and hydro operations. I am a registered professional engineer in both Oregon and Florida.

WITNESS QUALIFICATION STATEMENT

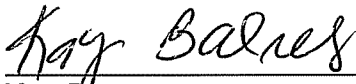
NAME	Jorge D. Ordonez
EMPLOYER	Public Utility Commission of Oregon
TITLE	Senior Financial Economist, Energy Resources and Planning Section
ADDRESS	550 Capitol Street NE, Suite 215, Salem, Oregon 97301-2115
EDUCATION AND TRAINING	<p>Utility Management Certificate Willamette University, Oregon, 2008</p> <p>Certificate in Management of Hydropower Development Swedish International Development Cooperation Agency, Sweden, 2006 & South Africa, 2007</p> <p>Fulbright Scholar, MBA, concentration in finance Willamette University, Oregon, 2005</p> <p>Certificate in Project Appraisal and Management Maastricht School of Management, Netherlands, 2002</p> <p>BS, Mechanical Engineering, thermal power efficiency Electrical & Mechanical Engineering School San Antonio Abad University, Peru, 1998</p>
EXPERIENCE	<p>I received a Bachelors of Science degree in Mechanical Engineering from San Antonio Abad University in Cusco, Peru in 1998. Subsequently, as a Fulbright Scholar, I received an MBA with an emphasis in finance from Willamette University in 2005. From 1999 to 2008, I worked for a Peruvian power generation company and was promoted many times, working as an Engineer, Resource Scheduler, Manager of Economic Planning and Vice-President of Generation, Commercial and Trading. Since January 2009, I have been employed by the Public Utility Commission of Oregon as a Senior Financial Economist, evaluating utilities' issuance of securities, cost of capital, mergers and acquisitions, cost studies, rate spread and rate design, integrated resource plans, and power costs.</p>

CERTIFICATE OF SERVICE

UE 264

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 860-001-0180, to the following parties or attorneys of parties.

Dated this 4th day of June, 2013 at Salem, Oregon

A handwritten signature in cursive script that reads "Kay Barnes". The signature is written in black ink and is positioned above a horizontal line.

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UE 264
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