



February 7, 2005

Oregon Public Utility Commission
550 Capitol Street NE, Ste 215
Salem, OR 97301-2551

Attn: Vikie Bailey-Goggins, Administrator
Regulatory and Technical Support

Re: PacifiCorp's Supplemental Direct Testimony in Docket No. UE-170

Enclosed for filing is an original and 20 copies of PacifiCorp's Supplemental Direct Testimony and Exhibits in Docket UE-170. Copies of this filing have also been served on the UE-170 Service List.

It is respectfully requested that all formal correspondence and Staff requests regarding this matter be addressed to:

By E-mail (preferred): datarequest@pacificorp.com.

By Fax: (503) 813-6060

By regular mail: Data Request Response Center
PacifiCorp
825 NE Multnomah, Suite 800
Portland, OR 97232

Informal inquiries may be directed to Laura Beane, Regulatory Manager at (503) 813-5542.

Very truly yours,

D. Douglas Larson
Vice President, Regulation

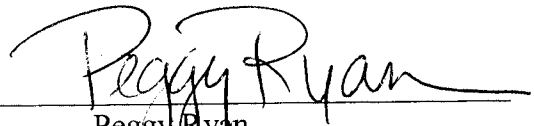
Enclosures

CERTIFICATE OF SERVICE

I hereby certify that I have by overnight mail or by electronic mail, to parties to which an electronic mail address has been provided, this 7th day of February, 2005, served a true copy upon all parties of record in this proceeding to the following parties or attorneys of parties:

RATES & REGULATORY AFFAIRS PORTLAND GENERAL ELECTRIC RATES & REGULATORY AFFAIRS 121 SW SALMON STREET, 1WTC0702 PORTLAND OR 97204 pge.opuc.filings@pgn.com	JIM ABRAHAMSON -- CONFIDENTIAL COMMUNITY ACTION DIRECTORS OF OREGON 4035 12TH ST CUTOFF SE STE 110 SALEM OR 97302 jim@cado-oregon.org
EDWARD BARTELL KLAMATH OFF-PROJECT WATER USERS, INC. 30474 SPRAGUE RIVER ROAD SPRAGUE RIVER OR 97639	KURT J BOEHM -- CONFIDENTIAL BOEHM KURTZ & LOWRY 36 E SEVENTH ST - STE 1510 CINCINNATI OH 45202 kboehm@bkllawfirm.com
LOWREY R BROWN -- CONFIDENTIAL CITIZENS' UTILITY BOARD OF OREGON 610 SW BROADWAY, SUITE 308 PORTLAND OR 97205 lowrey@oregoncub.org	PHIL CARVER OREGON OFFICE OF ENERGY 625 MARION ST NE STE 1 SALEM OR 97301-3742 philip.h.carver@state.or.us
JOAN COTE -- CONFIDENTIAL OREGON ENERGY COORDINATORS ASSOCIATION 2585 STATE ST NE SALEM OR 97301 cotej@mwvcaa.org	MELINDA J DAVISON DAVISON VAN CLEVE PC 333 SW TAYLOR, STE. 400 PORTLAND OR 97204 mail@dvclaw.com
JOHN DEVOE WATERWATCH OF OREGON 213 SW ASH STREET, SUITE 208 PORTLAND OR 97204 john@waterwatch.org	JASON EISDORFER -- CONFIDENTIAL CITIZENS' UTILITY BOARD OF OREGON 610 SW BROADWAY STE 308 PORTLAND OR 97205 jason@oregoncub.org
RANDALL J FALKENBERG RFI CONSULTING INC PMB 362 8351 ROSWELL RD ATLANTA GA 30350 consultrfi@aol.com	EDWARD A FINKLEA -- CONFIDENTIAL CABLE HUSTON BENEDICT HAAGENSEN & LLOYD LLP 1001 SW 5TH, SUITE 2000 PORTLAND OR 97204 efinklea@chbh.com
DAVID HATTON -- CONFIDENTIAL DEPARTMENT OF JUSTICE REGULATED UTILITY & BUSINESS SECTION 1162 COURT ST NE SALEM OR 97301-4096 david.hatton@state.or.us	DAN KEPPE KLAMATH WATER USERS ASSOCIATION 2455 PATTERSON STREET, SUITE 3 KLAMATH FALLS OR 97603
MICHAEL L KURTZ -- CONFIDENTIAL BOEHM, KURTZ & LOWRY 36 E 7TH ST STE 1510 CINCINNATI OH 45202-4454 mkurtz@bkllawfirm.com	JIM MCCARTHY OREGON NATURAL RESOURCES COUNCIL PO BOX 151 ASHLAND OR 97520 jm@onrc.org
KATHERINE A MCDOWELL	MATTHEW W PERKINS

<p>STOEL RIVES LLP 900 SW FIFTH AVE STE 1600 PORTLAND OR 97204-1268 kamcdowell@stoel.com</p>	<p>DAVISON VAN CLEVE PC 333 SW TAYLOR, STE 400 PORTLAND OR 97204 mwp@dvclaw.com</p>
<p>JANET L PREWITT DEPARTMENT OF JUSTICE 1162 COURT ST NE SALEM OR 97301-4096 janet.prewitt@doj.state.or.us</p>	<p>DOUGLAS C TINGEY PORTLAND GENERAL ELECTRIC 121 SW SALMON 1WTC13 PORTLAND OR 97204 doug.tingey@pgn.com</p>
<p>PAUL M WRIGLEY PACIFIC POWER & LIGHT 825 NE MULTNOMAH STE 800 PORTLAND OR 97232 paul.wrigley@pacificorp.com</p>	



Peggy Ryan
Regulatory Operations Coordinator

Dated: February 7, 2005

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

PACIFICORP

Case UE-170

Supplemental Direct Testimony and Exhibits

February 2005

Case UE 170
PPL Exhibit 604
Witness: Mark T. Widmer

BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON

PACIFICORP

Supplemental Direct Testimony of Mark T. Widmer

February 2005

1 **Q. Are you the same Mark T. Widmer that filed direct testimony with the**
2 **Company's original filing?**

3 A. Yes.

4 **Q. What is the purpose of your supplemental testimony?**

5 A. The purpose of my testimony is to make the Company's original filed net power
6 costs more complete and accurate. The Company decided to make this filing now
7 and outline these adjustments in this formal manner because of the added
8 complexity that the Company's proposal to initiate an RVM-type mechanism adds
9 to the power costs issues in the case. The Company has met with other parties to
10 the case and outlined these adjustments. PacifiCorp understands that the parties
11 have agreed to the filing of this Supplemental Testimony. Individual adjustments
12 go either direction; the adjustments lower Net Power Cost (NPC) by \$10.4 million
13 to \$803.4 million Total Company. The adjustments are summarized on PPL
14 Exhibit 605.

15 **Q. Please explain the "Marginal Units/Variable O&M" adjustment.**

16 A. The Company's original filing incorrectly assigned reserve credits for Cholla 4 to
17 all five West Valley CT units in the commitment decision. A reserve credit is the
18 value credited to the higher cost gas units in the commitment logic when they
19 carry reserves in lieu of reserves being carried on lower cost coal plants. The
20 previous modeling resulted in uneconomic generation because the sum of the
21 reserve carrying capability on the gas plants exceeded the level of reserves carried
22 on coal units. This adjustment also incorporates the incremental cost per MWh of
23 future overhauls for the Gadsby and West Valley units in the commitment

1 decision. The incremental value recognizes that the units have a set number of
2 service hours that they can be operated before a major overhaul is required. It
3 should be noted that the overhaul cost included in the commitment decision is not
4 included in NPC. This correction increases NPC by \$1.5 million.

5 **Q. Please explain the “Deferred Maintenance” adjustment.**

6 A. The Company’s original filing incorrectly assumed deferrable thermal
7 maintenance was performed only during weekend hours. This resulted in GRID
8 producing more coal generation on-peak and less off-peak than occurred during
9 the 48-Month historical period ended March 2004, as shown in PPL Exhibit 606.
10 This correction more accurately reflects the operation of the Company’s thermal
11 facilities and increases NPC by \$4.1 million.

12 **Q. Please explain the “Thermal Ramping” adjustment.**

13 A. The Company’s original filing overstated coal generation because thermal
14 availability rates assume that coal units are available at full load when the units
15 are being shut down for maintenance and when restarted after maintenance and
16 forced outages. In reality, the units are not available at full load when ramping
17 down for maintenance and ramping up from outages due to the physical
18 capabilities of the units. As such, generation is lost while a unit ramps to the
19 minimum level required for synchronizing with the grid and when a unit is being
20 shut down for maintenance. This adjustment corrects the Equivalent Forced
21 Outage Rates (EFOR) to account for the lost generation and increases NPC by
22 \$2.4 million. It should be noted that this adjustment is conservative because the
23 Company does not have this data for plants that are operated by shared owners.

1 **Q. Please explain the “Quick Start Availability” adjustment.**

2 A. The Company’s original filing incorrectly assumed quick start reserves can be
3 carried on all Gadsby CT units. The Gadsby CTs are restricted to one unit on
4 average due to temperature and humidity conditions and because the Questar
5 Pipeline is a low pressure pipeline. This adjustment removes quick start
6 capability from two Gadsby CT units and increases NPC by \$2.2 million.

7 **Q. Please explain the “Station Service” adjustment.**

8 A. The Company’s original filing overstated coal generation because station service
9 for coal plants that are offline was not captured. Station service is the electricity
10 that the plant uses onsite. Station service is not captured in energy sales or
11 revenue calculations either. This adjustment corrects coal generation and
12 increases net power costs by \$2.7 million. It should be noted that the adjustment
13 is conservative because the Company does not have station service data for
14 (1) plants that are operated by shared owners and (2) Jim Bridger, because of the
15 metering configuration.

16 **Q. Please explain the “Colorado Transmission” adjustment.**

17 A. At the time of the filing, negotiations were underway for transmission contracts
18 between our Colorado resources and the Company’s Utah transmission area. The
19 Company’s original filing estimated the configuration of this transmission based
20 on conversations with UAMPS and WAPA. These contracts provide transmission
21 to move Craig and Hayden generation to the Utah area. The capability was
22 forecasted in the original filing. This correction incorporates the agreed upon
23 configuration and decreases NPC by \$1.0 million.

1 **Q. Please explain the “West Side Transfer” adjustment.**

2 A. Scheduling personnel recently indicated that to the extent transmission is
3 available on Path C, up to 100 MW of operating reserves may be held in the
4 western control area (PACW) for the eastern control area (PACE), by
5 rescheduling some of the Bridger generation southbound. The Company’s
6 original filing did not model this assumption. This adjustment corrects the
7 Company’s modeling and decreases NPC by \$6.3 million.

8 **Q. Please explain the “Hydro Generation” adjustment.**

9 A. This adjustment corrects various hydro modeling deficiencies. The Klamath
10 River VISTA generation included in the Company’s original filing did not include
11 the US Bureau of Reclamation’s operating strategies. Those strategies are
12 impacted by endangered species act requirements, fishery obligations, and tribal
13 trust responsibilities. In addition, other environmental considerations in the upper
14 Klamath Basin and on the Klamath River below Iron Gate dam have increased the
15 pressures on water supply. To help ensure full delivery of water to Klamath
16 Irrigation Project farmers, the US Bureau of Reclamation has routinely directed
17 the amount of flow through the Company’s hydro facilities. These actions have
18 reduced the Company’s hydro operating flexibility and operating effectiveness.
19 These operating constraints are now included in VISTA simulations to reflect the
20 US Bureau of Reclamation’s water management policies and flow directives. The
21 adjustment also includes runner upgrades at JC Boyle on the Klamath River, the
22 expected Swift 2 turbine efficiency improvement, adjusts Swift 1 reserve carrying
23 capability for January 2006, and corrects a data input error for Fall Creek Hydro.

1 This adjustment increases NPC by \$1.5 million.

2 **Q. Please explain the “Gas Related Adjustments” adjustment.**

3 A. Natural gas consumption at gas-fired plants is influenced by interaction of other
4 resources, gas prices and market prices. This adjustment incorporates the sale of
5 excess gas resulting from the revised dispatch of Utah gas generation units, which
6 in part, is predicated upon updates discussed above. Also, this adjustment
7 corrects the calculation of the pipeline reservation fees included in the NPC. This
8 adjustment decreases NPC by \$17.5 million.

9 **Q. Does this conclude your supplemental testimony?**

10 A. Yes.

Case UE 170
PPL Exhibit 605
Witness: Mark T. Widmer

BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON

PACIFICORP

Exhibit Accompanying Supplemental Direct Testimony of Mark T. Widmer
Oregon Update Adjustment Summary

February 2005

Oregon NPC CY2006 Gold			813,904,335
Step	Name	Description	\$
1	Marginal Units/Variable O&M	Marginal Unit/Maintenance Overhaul	1,470,662
2	Deferred Maintenance	Correct on/off split	4,090,531
3	Thermal Ramping	Capture lost generation	2,400,500
4	Quick Start Availability	Remove quick start on Gadsby 4 and 5	2,186,227
5	Station Service	Capture station service	2,734,752
6	Colorado Transmission	Final Contract Terms	(1,037,955)
7	West Side Transfer	C&T Update	(6,274,391)
8	Hydro Generation	Miscellaneous Hydro	1,501,478
9	Gas Related Adjustments	Gas Sales/Gas Pipeline	(17,533,915)
Total Updates			(10,462,110)
Oregon NPC CY2006 Update			803,442,226

Case UE 170
PPL Exhibit 606
Witness: Mark T. Widmer

BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON

PACIFICORP

Exhibit Accompanying Supplemental Direct Testimony of Mark T. Widmer
Coal Generation Analysis

February 2005

Coal Generation (MWh)

Hunter 1 Outage Normalized

PPL Exhibit-606-1

Actual Generation - 48 Months Ending March 2004

Oregon CY2006 Updated NPC
Without Deferrable Maintenance,
Thermal Ramping, or Station Service

	Actual		Delta	
	Generation ⁽¹⁾	Ratio	Generation	Ratio
HLLH	25,457,452	56.52%	534,958	0.95%
LLH	19,585,901	43.48%	(349,275)	-0.95%
Total	45,043,352	100.00%	185,682	0.00%

Oregon CY2006 Updated NPC

	Delta	
	Generation	Ratio
	25,682,774	56.97%
	19,395,539	43.03%
	45,078,312	100.00%
	34,960	0.00%

Footnote

- 1 Hunter Unit 1 2001 outage removed, average generation based on remaining number of days
- 2 Includes reduction of 67,177 MWh for Station Service

PPL/606
Widmer/1

On & Off Peak Outage Summary - Deferred Maintenance **48 Months Ending March 2004**

PPL Exhibit 606-2

UNIT	TOTAL ON - OFF Peak Hours	
	ON	OFF
CHO-4	4.70	4.07
COL-3	124.42	154.47
COL-4	218.20	192.97
CRB-1	147.30	142.55
CRB-2	507.34	511.91
CRG-1	86.25	71.78
DJ-1	56.83	57.32
DJ-2	105.97	79.53
DJ-3	738.95	552.63
DJ-4	552.48	434.34
HDN-1	296.28	254.73
HDN-2	145.13	152.93
HTG-1	40.08	60.40
HTG-2	48.00	50.73
HTR-1	432.03	430.62
HTR-2	676.55	644.85
HTR-3	267.50	213.22
JB-1	142.03	151.73
JB-2	81.82	78.52
JB-3	68.93	116.25
JB-4	110.38	167.70
NTN-1	128.63	126.27
NTN-2	401.60	525.63
NTN-3	550.30	535.90
WYO-1	451.00	303.35
	-----	-----
Total	6,382.71	6,014.39
Percentage	51.49%	48.51%

