



Oregon

Theodore R. Kulongoski, Governor

Public Utility Commission

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July 15, 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 172** - In the Matter of PORTLAND GENERAL ELECTRIC
COMPANY 2006 Resource Valuation 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

Lois Meerdink
Regulatory Operations Division
Filing on Behalf of Public Utility Commission Staff
(503) 378-8959
Email: Lois.Meerdink@state.or.us

cc: UE 172 Service List

CASE: UE 172
WITNESS: Maury Galbraith

**PUBLIC UTILITY COMMISSION
OF
OREGON**

STAFF EXHIBIT 100

Direct Testimony

July 15, 2005

1 **Q. PLEASE STATE YOUR NAME AND POSITION.**

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

5

6 **Introduction and Summary**

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

8 A. The purpose of my testimony is to present staff's adjustments to Portland
9 General Electric's (PGE's) forecast of net variable power costs (NVPC) for
10 2006.

11 **Q. PLEASE SUMMARIZE STAFF'S PROPOSED ADJUSTMENTS?**

12 A. Staff proposes two adjustments to PGE's forecast of NVPC in this case.
13 First, staff recommends that the Commission adjust PGE's forecast to
14 protect ratepayers from paying twice for the replacement power costs
15 associated with a planned outage for construction of a fish migration
16 structure at the Sullivan hydroelectric plant. This adjustment would result
17 in a \$2.128 million decrease to the company's final NVPC forecast for
18 2006. Second, staff recommends that the Commission adjust PGE's
19 projected NVPC to remove a mismatch between costs and benefits
20 associated with two capacity tolling contracts. Depending on the outcome
21 of PGE Docket UE 165, this adjustment is either a \$2.866 million decrease,
22 or a \$0.573 million decrease, to the company's final NVPC forecast for
23 2006.

1 **Q. WHAT IS PGE'S PRELIMINARY FORECAST OF NVPC FOR 2006?**

2 A. PGE's filed case includes a MONET power cost forecast of approximately
3 \$644 million for 2006. (PGE/100, Tinker – Niman – Tooman/10.) PGE
4 filed an updated MONET run on June 10, 2005. The updated forecast did
5 not produce a significantly different result.

6

7 **Planned Maintenance Outage at Sullivan Hydro Facility**

8 **Q. DID PGE ADDRESS THIS ISSUE IN ITS DIRECT TESTIMONY?**

9 A. Yes. PGE witnesses Tinker, Niman, and Tooman stated:

10 PGE has significant planned maintenance outages for Sullivan, North
11 Fork, Faraday and River Mill during 2006. The Sullivan facility will be
12 shut-down for 4 months to build fish migration structures...The 2005
13 RVM included a similar shut-down for Sullivan, but the maintenance
14 was postponed until 2006. (PGE/100, Tinker – Niman – Tooman/19,
15 Lines 16-18, 20-21.)

16 **Q. DID STAFF ASK PGE WHETHER INCLUDING THE SULLIVAN**
17 **MAINTENANCE OUTAGE IN THE POWER COST FORECAST IN BOTH**
18 **THE 2005 RVM AND 2006 RVM DOUBLE-COUNTED REPLACEMENT**
19 **POWER COSTS?**

20 A. Yes, in Staff Data Request No. 4. PGE responded that there is no double-
21 count. PGE argues that actual plant maintenance often deviates from
22 forecast maintenance. In particular, PGE indicates that: (1) plant outages
23 may occur at different times and may be shorter or longer than forecast;
24 and (2) the company may need to schedule a plant outage that is not in the
25 original forecast. PGE considers these types of events to be elements of

1 ratemaking. (Staff/102, Galbraith/1-3; PGE Response to Staff Data
2 Request No. 4.)

3 **Q. IS THE POSTPONEMENT OF THE SULLIVAN MAINTENANCE OUTAGE**
4 **THE TYPE OF EVENT THAT SHOULD BE CONSIDERED AN ELEMENT**
5 **OF RATEMAKING?**

6 A. No. The postponement of a planned maintenance outage from one rate
7 period to the next rate period is not an example of the risks and rewards of
8 regulatory lag. The expected 123 day shutdown during July through
9 October of 2005 did not occur at a different time during 2005. It was not
10 longer or shorter than forecast. The need for the outage did not disappear.
11 PGE decided to postpone the Sullivan outage until the next rate period.

12 **Q. DOES STAFF CHALLENGE THE PRUDENCE OF PGE'S DECISION TO**
13 **POSTPONE CONSTRUCTION OF THE SULLIVAN FISH MIGRATION**
14 **STRUCTURE?**

15 A. No. Staff is challenging the ratemaking treatment of the postponed outage.

16 **Q. PLEASE DESCRIBE STAFF'S RATEMAKING ADJUSTMENT.**

17 A. Staff recommends that the Commission reduce PGE's final NVPC forecast
18 for 2006 by \$2.128 million. This adjustment offsets the final forecast of
19 replacement power costs associated with the construction of the Sullivan
20 fish migration structure during 2006 with the amount of replacement power
21 costs already included in cost-of-service energy rates during 2005.

22 (Staff/102, Galbraith/1-3.) The Commission should adopt this

1 recommendation to protect ratepayers from paying these replacement
2 costs twice, first in the 2005 RVM and again in the 2006 RVM.

3
4 **Ratemaking Treatment of Capacity Tolling Agreements**

5 **Q. DOES PGE INCLUDE THE COST OF ITS CAPACITY TOLLING**
6 **CONTRACTS IN THE MONET MODEL?**

7 A. Yes. The expected cost of the Morgan Stanley Daily On-Peak Tolling
8 Contract, PPM Cold Snap Capacity Contract, and PPM Super Peak
9 Capacity Contract are shown at PGE/101-C, Tinker – Niman – Tooman/5.

10 **Q. DOES PGE EXHIBIT 101-C SHOW THE ENERGY OUTPUT OF THESE**
11 **CONTRACTS?**

12 A. Yes. The expected energy output of the Morgan Stanley Daily On-Peak
13 Tolling Contract is clearly shown at PGE/101-C, Tinker – Niman –
14 Tooman/3. On the other hand, the PPM Cold Snap Capacity Contract, and
15 PPM Super Peak Capacity Contract are not listed on the energy output
16 page of the MONET results. This is because the modeled energy output of
17 these contracts is zero megawatt-hours during 2006.

18 **Q. DOES PGE DISCUSS THE RATEMAKING TREATMENT OF THESE**
19 **CONTRACTS IN ITS DIRECT TESTIMONY?**

20 A. No. However, the ratemaking treatment of these capacity tolling contracts
21 has been a recent topic of discussion in PGE Docket No. UE 165. (See:
22 UE 165 CUB/100, Jenks/9-10 and PGE/900, Lobdell – Niman – Tinker/11-
23 12.)

1 **Q. DID PGE DISCUSS THE PURPOSE OF THESE CAPACITY TOLLING**
2 **AGREEMENTS IN TESTIMONY IN DOCKET NO. UE 165?**

3 A. Yes. PGE witnesses Lobdell, Niman, and Tinker stated:

4 Capacity resources are needed for reliability purposes. Under extreme
5 conditions, it can be necessary to run these resources for short periods
6 of time. High heat rates make them usually uneconomic to run under
7 normal conditions. Their purpose is not to “make money,” but to “keep
8 the lights on.” PGE’s modeling will include the margins of capacity
9 resources if the market clearing heat rates are high enough to provide
10 an economic basis for their dispatch. (UE 165, PGE/900, Lobdell –
11 Niman – Tinker/11, Lines 14-19.)

12 **Q. DOES STAFF AGREE WITH THIS STATED PURPOSE?**

13 A. Not entirely. Capacity resources are needed for reliability purposes. That
14 is, they are needed to hedge the physical risk and economic impact of
15 unserved energy. More frequently however, these resources hedge the
16 price risk of purchasing power in spot markets. (PGE Final Action Plan,
17 2002 Integrated Resource Plan, March 2004, pp. 34-35.)

18 **Q. DOES PGE’S MONET MODELING REALISTICALLY CAPTURE THE**
19 **ECONOMIC MARGINS ASSOCIATED WITH THESE HIGH HEAT RATE**
20 **RESOURCES?**

21 A. No. Contrary to PGE’s claim, the company’s current MONET modeling will
22 not capture the price hedge associated with these contracts because PGE
23 does not model extreme conditions in MONET.

24 **Q. DOES PGE PROPOSE TO INCLUDE THE CAPACITY CHARGES**
25 **ASSOCIATED WITH THE PPM COLD SNAP AND PPM SUPER PEAK**
26 **CONTRACTS IN CUSTOMER RATES EVEN THOUGH THE MONET**

1 **MODEL DOES NOT SHOW ANY ENERGY OUTPUT OR ECONOMIC**
2 **BENEFIT FROM THESE CONTRACTS DURING 2006?**

3 A. Yes. PGE proposes to include \$2.866 million in capacity charges for these
4 two contracts in cost-of-service energy rates.

5 **Q. IS STAFF CONVINCED THAT ON AN EXPECTED BASIS THE**
6 **DISPATCH AND ASSOCIATED MARGINS FROM THESE CAPACITY**
7 **TOLLING AGREEMENTS IS ZERO?**

8 A. No. Staff is not convinced because PGE has not provided power cost
9 modeling that reflects system operations under a range of operating
10 conditions, including extreme load and market price conditions.

11 **Q. DOES STAFF CHALLENGE THE PRUDENCE OF PGE'S DECISION TO**
12 **SIGN THE PPM COLD SNAP AND PPM SUPER PEAK CONTRACTS?**

13 A. No. Staff is challenging the ratemaking treatment of these capacity tolling
14 agreements.

15 **Q. PLEASE DESCRIBE STAFF'S RATEMAKING ADJUSTMENT.**

16 A. Staff's recommendation is contingent on the outcome of PGE's Docket No.
17 UE 165. If the Commission does not approve the proposed System
18 Dispatch Power Cost Adjustment Mechanism (SD-PCAM) for 2006, then
19 staff recommends that the Commission reduce PGE's final NVPC forecast
20 for 2006 by \$2.866 million. The Commission should adopt this
21 recommendation to match the costs and benefits of these contracts in
22 customer rates.

1 If the Commission does approve the proposed System Dispatch
2 Power Cost Adjustment Mechanism (SD-PCAM) for 2006, then staff
3 recommends that the Commission reduce PGE's final NVPC forecast for
4 2006 by \$0.573 million. This amount reflects the 80/20 percent sharing
5 between customers and shareholders outside the SD-PCAM deadband.

6 **Q. IN DOCKET NO. UE 165, STAFF HAS RECOMMENDED THE USE OF**
7 **'ALL-IN' EXPECTED VALUE POWER COST MODELING IN PGE'S**
8 **NEXT GENERAL RATE CASE. (UE 165, STAFF/100, GALBRAITH/20-**
9 **25.) WOULD EXPECTED VALUE POWER COST MODELING RESOLVE**
10 **THIS ISSUE OF THE RATEMAKING TREATMENT OF CAPACITY**
11 **TOLLING CONTRACTS?**

12 A. Yes.

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

14 A. Yes.

CASE: UE 172
WITNESS: Maury Galbraith

**PUBLIC UTILITY COMMISSION
OF
OREGON**

STAFF EXHIBIT 101

Witness Qualifications Statement

July 15, 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 172
WITNESS: Maury Galbraith

**PUBLIC UTILITY COMMISSION
OF
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STAFF EXHIBIT 102

**Exhibits in Support of
Direct Testimony**

July 15, 2005

June 17, 2005

TO: Vikie Bailey-Goggins
OPUC

FROM: Patrick Hager
Manager, Regulatory Affairs

**PORTLAND GENERAL ELECTRIC
UE-172
PGE Response to Staff Data Request
Dated June 3, 2005
Question 004**

Request:

At Tinker – Niman – Tooman/19 lines 11-13 the company indicates that a shut-down at the Sullivan plant included in the 2005 RVM was postponed and is now included in the 2006 RVM.

- a. Please indicate the timing and duration of the Sullivan shut-down included in the 2005 RVM.**
- b. Please quantify the replacement power costs associated with the Sullivan shut-down in the 2005 RVM.**
- c. Please indicate the timing and duration of the Sullivan shut-down included in the 2006 RVM.**
- d. Please quantify the replacement power costs associated with the Sullivan shut-down in the 2006 RVM.**
- e. Given that the Sullivan maintenance outage was included in the 2005 RVM and postponed, does including a similar outage in the 2006 RVM double-count the replacement power costs? If no, why not?**

Response:

- a. The entire Sullivan plant is shut down for all days in July through October for construction of fish migration structure. This amounts to 123 days.**

- b. Replacement power cost is \$2.128 million, based on running MONET with and without the shutdown.

	NVPC (\$000)	
With shutdown	491,304	based on Nov. 15, 2004 Suppl. RVM Case
Without shutdown	<u>489,176</u>	
Difference	2,128	

- c. The entire Sullivan plant is shut down from June 12 through October for construction of fish migration structure. This amounts to 142 days.

- d. Replacement power cost is \$2.725 million, based on running MONET with and without the shutdown.

	NVPC (\$000)	
With shutdown	646,765	based on April 1, 2005 RVM filing
Without shutdown	<u>644,040</u>	
Difference	2,725	

- e. No. The event is an element of ratemaking. PGE prepares its power cost forecasts with the most current and best information available at that time. However, plant maintenance outages seldom perfectly match the forecast. These deviations from the actual power cost forecast can have positive or negative effects on PGE's actual power costs. For example, plant outages may occur at a different time and may be shorter or longer than forecast. In addition, PGE may need to schedule a plant outage that is not in the forecast. PGE does not collect for outages that are unscheduled or last longer than forecasted.

Attachment 004-A is a comparison between the thermal plant maintenance outages forecasted in Monet and actuals from 2003 through May 2005. It demonstrates that forecasts seldom match the actual outages for maintenance. For example, in 2003 the actual outage for Boardman was one day shorter than forecasted (29 days instead of 30 days), while the outage at Beaver was 47 days longer (75 days instead of the forecasted 28 days). For 2005, we reported preliminary actuals through May, as available.

UE-172
Attachment 004-A
Forecasted vs. Actual Planned Outages since 2003

Attachment 004-A

	Planned Outages - Monet Forecast (days)					Actual Planned Outages (days)					
	Docket	Boardman	Colstrip 3	Colstrip 4	Coyote	Beaver	Boardman	Colstrip 3	Colstrip 4	Coyote	Beaver
2003	UE-139	30	0	58	28	28	29	0	56	35	75
2004	UE-149	69	44	0	0	17	72	49	0	4	38
2005	UE-161	32	7	7	9	39	29	0	0	15	n.a.

Through May 2005

UE 172
Service List (Parties)

<p>RATES & REGULATORY AFFAIRS PORTLAND GENERAL ELECTRIC RATES & REGULATORY AFFAIRS 121 SW SALMON STREET, 1WTC0702 PORTLAND OR 97204 pge.opuc.filings@pgn.com</p>	<p>STEPHANIE S ANDRUS -- CONFIDENTIAL DEPARTMENT OF JUSTICE REGULATED UTILITY & BUSINESS SECTION 1162 COURT ST NE SALEM OR 97301-4096 stephanie.andrus@state.or.us</p>
<p>JASON EISDORFER -- CONFIDENTIAL CITIZENS' UTILITY BOARD OF OREGON 610 SW BROADWAY STE 308 PORTLAND OR 97205 jason@oregoncub.org</p>	<p>RANDALL J FALKENBERG -- CONFIDENTIAL RFI CONSULTING INC PMB 362 8351 ROSWELL RD ATLANTA GA 30350 consultrfi@aol.com</p>
<p>ROBERT JENKS -- CONFIDENTIAL CITIZENS' UTILITY BOARD OF OREGON 610 SW BROADWAY STE 308 PORTLAND OR 97205 bob@oregoncub.org</p>	<p>DOUGLAS C TINGEY -- CONFIDENTIAL PORTLAND GENERAL ELECTRIC 121 SW SALMON 1WTC13 PORTLAND OR 97204 doug.tingey@pgn.com</p>
<p>S BRADLEY VAN CLEVE -- CONFIDENTIAL DAVISON VAN CLEVE PC 333 SW TAYLOR, STE 400 PORTLAND OR 97204 mail@dvclaw.com</p>	

CERTIFICATE OF SERVICE

UE 172

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 15th day of July, 2005.

/s/ Lois Meerdink

Lois Meerdink
Public Utility Commission
Regulatory Operations
PO Box 2148
Salem, Oregon 97308-2148
Telephone: (503) 378-8959