

Exhibit No. (BNW-1T)
Docket No. UE-03 _____
2003 PP&L Rate Case
Witness: Bruce N. Williams

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

vs.

PACIFICORP dba Pacific Power & Light
Company,

Respondent.

Docket No. UE-03 _____

PACIFICORP

DIRECT TESTIMONY OF BRUCE N. WILLIAMS

December 2003

1 **Q. Please state your name, business address and present position with
2 PacificCorp (the Company).**

3 A. My name is Bruce N. Williams. My business address is PacifiCorp, 825 NE
4 Multnomah, Suite 1900, Portland, Oregon 97232. I was elected Treasurer by the
5 Board of Directors in February, 2000. Prior to my election as Treasurer, I served
6 as Assistant Treasurer for several years.

7 **Qualifications**

8 **Q. Mr. Williams, please briefly describe your education and business
9 experience.**

10 A. I received a Bachelor of Science degree in Business Administration with a
11 concentration in Finance from Oregon State University in June 1980. I also
12 received the Chartered Financial Analyst designation upon passing the
13 examination in September 1986. I have been employed by PacifiCorp for 18
14 years. My business experience has included financing of PacifiCorp's electric
15 operations and non-utility activities, investment management, investor relations
16 and responsibility for certain non-regulated activities.

17 **Q. Please describe your present duties.**

18 A. I am responsible for the Company's treasury, pension and other investment
19 management and certain non-regulated affiliate activities. In this proceeding, I
20 am responsible for the preparation of the Company's embedded cost of debt and
21 preferred equity.

1 **Purpose of Testimony**

2 **Q. What is the purpose of your testimony in this proceeding?**

3 A. I will analyze the embedded cost of debt and preferred stock supporting
4 PacifiCorp's electric operations in the State of Washington as of September 30,
5 2003, updated through the middle of the rate year (April 30, 2005). This analysis
6 includes the use of forward interest rates, historic relationships of securities'
7 trading patterns and known and measurable changes to the debt and preferred
8 stock portfolios.

9 **Financing Overview**

10 **Q. How does PacifiCorp finance its electric utility operations?**

11 A. PacifiCorp finances the cash flow requirements of its regulated utility operations
12 utilizing a reasonable mix of debt and equity securities designed to provide a
13 competitive cost of capital and predictable capital market access.

14 **Q. How does PacifiCorp meet its non-common equity financing requirements?**

15 A. PacifiCorp relies on a mix of first mortgage bonds, other secured debt, tax exempt
16 debt, unsecured debt and preferred stock to meet its long-term debt and preferred
17 stock financing requirements.

18 The Company has concluded the majority of its long-term financing
19 utilizing secured first mortgage bonds issued under the PacifiCorp Mortgage
20 Indenture dated January 9, 1989. Exhibit No. ____ (BNW-2) shows that, as of
21 April 30, 2005, PacifiCorp is projected to have approximately \$3 billion of first
22 mortgage bonds outstanding, with an average cost of 7.078 percent and average
23 maturity of 11.18 years. Presently, all of PacifiCorp's first mortgage bonds bear

1 interest at fixed rates. Proceeds from the issuance of the first mortgage bonds
2 (and other financing instruments) are used to finance the combined utility
3 operation and are not allocated on a divisional basis.

4 Prior to the Utah Power & Light and Pacific Power & Light merger in
5 1989, each company had its own first mortgage indentures. Those indentures
6 were assumed by PacifiCorp and, in addition, a new PacifiCorp indenture was
7 established at the time of the merger. In 1996, PacifiCorp's Treasury Department
8 restructured the mortgage arrangements, which led to the extinguishment of the
9 Pacific Power and Utah Power mortgages. This action reduced administrative
10 requirements and associated expense and greatly simplified the Company's
11 mortgage financing arrangements.

12 Another important source of financing has been the tax-exempt financing
13 associated with certain qualifying equipment at PacifiCorp's power generation
14 plants. Under arrangements with local counties and other tax-exempt entities,
15 PacifiCorp borrows the proceeds and guarantees the repayment of the long-term
16 debt in order to take advantage of their tax-exempt status in financings. As of
17 April 30, 2005, PacifiCorp's tax-exempt portfolio is projected to be \$736 million
18 in principal amount with an average cost of 4.138 percent (which includes the cost
19 of issuance and credit enhancement).

20 **Q. Does the Company have plans to refinance debt at this time?**

21 A. The Company's financing plan is dynamic and is subject to change to reflect
22 market conditions not anticipated at this time. While the Company regularly
23 evaluates its refinancing opportunities, presently the Company has no plans to

1 refinance debt prior to stated maturity.

2 **Calculation Methodologies**

3 **Q. How did you determine the amount of debt and preferred stock to be
4 included in your calculation of the Company's embedded costs of debt and
5 preferred stock?**

6 A. For long-term debt, based upon those series outstanding at September 30, 2003, I
7 made a corresponding reduction to the outstanding balances for maturities,
8 principal amortization and sinking fund requirements which are expected to occur
9 during the period ending April 30, 2005. The total long-term debt maturities and
10 principal amortized over this period is \$439.8 million. Finally, I assumed that the
11 total amount of long-term debt would remain unchanged from September 30,
12 2003, and added back a total of \$439.8 million of new long-term debt.

13 For preferred stock, I started with the balance outstanding at September
14 30, 2003, and made a reduction of \$3.8 million of preferred stock to reflect the
15 sinking fund requirements of the \$7.48 Series No Par Serial Preferred stock. This
16 sinking fund payment will occur on June 15, 2004.

17 **Q. Why have you chosen April 30, 2005 as the date for determining cost of debt
18 and preferred stock?**

19 A. Through discussion with Commission Staff it was agreed that the mid-point of the
20 rate year should be used as the date to determine cost of debt and preferred stock.
21 The Company's practice is to calculate the cost of debt and preferred stock as of a
22 month-end date. April 30, 2005, is the closest month-end to that date.

1 **Q. Upon review of the Company's debt portfolio, a portion of those securities**
2 **bear variable rates. What is the basis for the projected interest rates**
3 **provided by the Company?**

4 A. The majority of the Company's variable rate debt is in the form of tax-exempt
5 debt. Exhibit No. ____ (BNW-3) shows that these securities have been trading at
6 approximately 106 percent of the 30-day LIBOR (London Inter Bank Offer Rate).
7 Therefore, the Company has applied a factor of 106 percent to the forward 30-day
8 LIBOR Rate and added the respective credit enhancement and remarketing fees
9 for each floating rate tax-exempt bond. Credit enhancement and remarketing fees
10 are included in the interest component because these are costs which contribute
11 directly to the interest rate on the securities.

12 **Q. How did you calculate the Company's embedded costs of long-term debt and**
13 **preferred stock?**

14 A. The embedded costs of debt and preferred stock were calculated utilizing the
15 methodology used in the Company's previous rate case.

16 **Q. Please explain the cost of debt calculation.**

17 A. I calculated the cost of debt by issue, based on each debt series' interest rate and
18 net proceeds at the issuance date, to produce a bond yield to maturity for each
19 series of debt. It should be noted that in the event a bond was issued to refinance
20 a higher cost bond, the pre-tax premium and unamortized costs, if any, associated
21 with the refinancing were subtracted from the net proceeds of the bonds that were
22 issued. The bond yield was then multiplied by the principal amount outstanding of
23 each debt issue resulting in an annualized cost of each debt issue. Aggregating

1 the annual cost of each debt issue produces the total annualized cost of debt
2 which, when divided by the total principal amount of debt outstanding, produces
3 the weighted average cost for all debt issues and is the Company's embedded cost
4 of long-term debt.

5 **Q. Regarding the \$439.8 million of replacement debt mentioned above, how did**
6 **you determine the interest rate for this new long-term debt?**

7 A. I assumed the debt would be issued at the Company's estimated September 30,
8 2003, credit spreads over the projected twenty-year Treasury rates as of April 30,
9 2005. Finally, I added in the effect of the issuance costs. This reflects the
10 Company's best estimate of the cost to replace the maturing debt as of the date
11 when new rates become effective, assuming the Company's senior secured long-
12 term debt ratings remain unchanged. Currently the Company's senior secured
13 long-term debt is rated A and A3 by Standard & Poor's and Moody's
14 respectively.

15 **Q. What is the resulting estimated interest rate for this new long-term debt?**

16 A. The Company's estimated September 30, 2003 credit spread for twenty-year notes
17 was 1 percent. The forward twenty-year Treasury rate for April 30, 2005, is 5.71
18 percent. Issuance costs for this type of note add approximately 8 basis points (i.e.,
19 .08 percent) to the all-in cost. Therefore the projected cost of replacement debt is
20 $(1.00\% + 5.71\% + 0.08\%) = 6.79\%$ percent.

21 **Q. How does this compare the cost of the maturing debt?**

22 A. The \$439.8 million of maturing debt has an average cost of 7.56 percent.

- 1 **Q. Why did you assume the Company would issue replacement debt with a**
2 **twenty-year maturity?**
- 3 A. Approximately \$3 billion of the Company's existing long-term debt will mature
4 in the twenty-year period beginning September 30, 2003. However, only \$769
5 million will mature in the ten-year period beginning September 30, 2023. The
6 Company's exposure to refinancing and interest rate risk could be increased if we
7 issued debt with less than a twenty-year maturity. A twenty-year maturity is a
8 reasonable approximation of the average maturity the Company would likely
9 issue to reduce this exposure to refinancing and interest rate risk
- 10 **Q. How did you calculate the embedded cost of preferred stock?**
- 11 A. The embedded cost of preferred stock was calculated by first determining the cost
12 of money for each issue. The cost of money for each issue was calculated by
13 dividing the annual dividend rate by the per share net proceeds for each series of
14 preferred stock. The cost associated with each series was then multiplied by the
15 stated value or principal amount outstanding for each issue to yield the annualized
16 cost for each issue. The sum of annualized costs for each issue produces the total
17 annual cost for the entire preferred stock portfolio. I then divided the total annual
18 cost by the total amount of preferred stock outstanding to produce the weighted
19 average cost of all issues. This is the Company's embedded cost of preferred
20 stock.
- 21 **Forecast Embedded Cost of Long-Term Debt**
- 22 **Q. What is the Company's embedded cost of long-term debt?**
- 23 A. The embedded cost of long-term debt at April 30, 2005 is 6.507 percent. (See

1 Exhibit No. ____(BNW-2)).

2 **Forecast Embedded Cost of Preferred Stock**

3 **Q. What is the Company's embedded cost of preferred stock?**

4 A. The embedded cost of preferred stock at April 30, 2005 is 6.715 percent. (See
5 Exhibit No. ____(BNW-4)).

6 **Q. Does this conclude your testimony?**

7 A. Yes.

Exhibit No. (BNW-2)
Docket No. UE-03 _____
2003 PP&L Rate Case
Witness: Bruce N. Williams

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

vs.

PACIFICORP dba Pacific Power & Light
Company,

Respondent.

Docket No. UE-03 _____

PACIFICORP

EXHIBIT OF BRUCE N. WILLIAMS

Cost of Long-Term Debt, as of Pro Forma April 30, 2005

December 2003

Cost of Debt Summary
As of Pro Forma April 30, 2005

DESCRIPTION	AMOUNT CURRENTLY OUTSTANDING	ISSUANCE EXPENSES	REDEMPTION EXPENSES	NET PROCEEDS TO COMPANY	ANNUAL DEBT SERVICE COST	SEGMENT	Coupon	Weighted Average Maturity
Subtotal - First Mortgage Bonds	\$1,965,317,000	(\$22,763,964)	(\$11,935,639)	\$1,930,617,397	\$133,783,209	6.807%	6.540%	12.13
Subtotal - Medium-Term Notes	\$1,085,224,000	(\$12,142,277)	(\$31,242,748)	\$1,041,838,975	7.569%	7.135%	9.46	
Total First Mortgage Bonds	\$3,050,541,000	(\$34,906,240)	(\$43,178,387)	\$2,972,456,373	\$215,923,090	7.078%	6.752%	11.18
Subtotal - Pollution Control Obligations secured by First Mortgage Bonds	\$398,411,475	(\$10,560,810)	(\$9,550,194)	\$378,300,472	\$17,163,776	4.308%	3.626%	16.80
Subtotal - Pollution Control Revenue Bonds	\$337,900,000	(\$4,213,027)	(\$7,621,229)	\$326,065,743	\$13,306,304	3.938%	3.015%	11.30
Total PCRB	\$736,311,475	(\$14,773,837)	(\$17,171,423)	\$704,366,215	\$30,470,080	4.138%	3.346%	14.28
Total Cost of Long Term Debt	\$3,786,852,475	(\$49,680,077)	(\$60,349,810)	\$3,676,822,588	\$246,393,170	6.507%	6.090%	11.78

PACIFIC CORP
Electric Operations
Cost of Long-Term Debt
Pro Forma April 30, 2005

LINE NO.	BOND RATE	DESCRIPTION	MATURITY DATE	PRINCIPAL AMOUNT		ISSUANCE EXPENSES	REDEMPTION EXPENSES	NET PROCEEDS TO COMPANY		ANNUAL DEBT SERVICE COST	LINE NO.
				ORIGINAL LIFE	CURRENTLY OUTSTANDING			TOTAL PER \$100	PRINCIPAL AMOUNT	(BOND TABLE BASIS)	
First Mortgage Bonds											
1	5.650%	Series due November 2006	11/01/06	8	\$200,000,000	\$200,000,000	\$6,855,966	\$193,144,034	\$0	96.572%	1
2	6.900%	Series due Nov 2011	11/15/11	10	\$500,000,000	\$500,000,000	(\$5,538,849)	\$494,661,151	\$0	98.932%	2
3	7.700%	Series due Nov 2031	11/15/31	30	\$300,000,000	\$300,000,000	(\$3,701,310)	\$296,298,690	\$0	98.766%	3
4	4.300%	Series due Sep 2008	09/15/08	5	\$200,000,000	\$200,000,000	(\$1,488,000)	\$192,544,181	\$0	96.272%	4
5	5.450%	Series due Sep 2013	09/15/13	10	\$200,000,000	\$200,000,000	(\$1,532,000)	\$192,500,181	\$0	96.250%	5
6	8.271%	C-IU Series due Oct 2010 (a)	10/01/10	18	\$48,972,000	\$23,599,000	\$0	\$23,599,000	\$0	100.000%	6
7	7.978%	C-IU Series due Oct 2011 (a)	10/01/11	19	\$4,422,000	\$2,308,000	\$0	\$2,308,000	\$0	100.000%	7
8	8.493%	C-IU Series due Oct 2012 (a)	10/01/12	20	\$19,772,000	\$11,430,000	\$0	\$11,430,000	\$0	100.000%	8
9	8.797%	C-IU Series due Oct 2013 (a)	10/01/13	21	\$16,203,000	\$10,099,000	\$0	\$10,099,000	\$0	100.000%	9
10	8.734%	C-IU Series due Oct 2014 (a)	10/01/14	22	\$28,218,000	\$18,529,000	\$0	\$18,529,000	\$0	100.000%	10
11	8.294%	C-IU Series due Oct 2015 (a)	10/01/15	23	\$46,946,000	\$31,821,000	\$0	\$31,821,000	\$0	100.000%	11
12	8.635%	C-IU Series due Oct 2016 (a)	10/01/16	24	\$18,750,000	\$13,373,000	\$0	\$13,373,000	\$0	100.000%	12
13	8.470%	C-IU Series due Oct 2017 (a)	10/01/17	25	\$19,609,000	\$14,405,000	\$0	\$14,405,000	\$0	100.000%	13
14	6.710%	Pro forma due April 2015	04/30/25	20	\$439,753,000	\$439,753,000	(\$3,847,839)	\$439,905,161	\$0	\$29,863,626	14
15	6.540%	Subtotal - First Mortgage Bonds			\$1,965,317,000	(\$22,763,964)	(\$11,935,639)	\$1,920,617,397	\$0	6.807%	15
16											16
17											17

(a) Principal amortizes every October.

Exhibit No. ____ (BNW-3)
Docket No. UE-03 ____
2003 PP&L Rate Case
Witness: Bruce N. Williams

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

vs.

**PACIFICORP dba Pacific Power & Light
Company,**

Respondent.

Docket No. UE-03 ____

PACIFICORP

EXHIBIT OF BRUCE N. WILLIAMS

Projected Interest Rate for Variable-Rate Debt

December 2003

**Washington Rate Case
Indicative Forward PCRB Variable Rates
For April 30, 2005**

	30 Day LIBOR (a)	Floating Rate PCRBs (b)	PCRB / LIBOR (b)/(a)
Feb-02	1.85%	1.57%	85%
Mar-02	1.89%	1.69%	90%
Apr-02	1.86%	1.83%	98%
May-02	1.84%	1.86%	101%
Jun-02	1.84%	1.77%	96%
Jul-02	1.83%	1.70%	93%
Aug-02	1.80%	1.70%	95%
Sep-02	1.82%	1.87%	102%
Oct-02	1.80%	2.02%	112%
Nov-02	1.44%	1.86%	129%
Dec-02	1.42%	1.75%	123%
Jan-03	1.36%	1.59%	117%
Feb-03	1.34%	1.61%	120%
Mar-03	1.30%	1.53%	118%
Apr-03	1.31%	1.68%	128%
May-03	1.32%	1.72%	130%
Jun-03	1.16%	1.38%	119%
Jul-03	1.11%	1.12%	101%
Aug-03	1.11%	1.16%	105%
Sep-03	1.12%	1.21%	108%

Average (24 mo) 106%

Forward 30 Day LIBOR* (1)	Historical Floating Rate PCRB / 30 Day LIBOR (2)	Forecast Floating Rate PCRB (1) * (2)
April 29, 2005	2.74%	106%

Exhibit No. ___(BNW-4)
Docket No. UE-03 ___
2003 PP&L Rate Case
Witness: Bruce N. Williams

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

vs.

PACIFICORP dba Pacific Power & Light
Company,

Respondent.

Docket No. UE-03 ___

PACIFICORP

EXHIBIT OF BRUCE N. WILLIAMS

Cost of Preferred Stock, as of Pro Forma April 30, 2005

December 2003

Line No.	Description of Issue	Issuance Date	Shares Issued and Outstanding	Total Book Value	Net Premium and (Expense)	Net Proceeds to Company	Annual Dividend Requirement	Cost of Money to Company	Annualized Cost	Line No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	5% Preferred Stock, \$100 Par Value	(a)	126,243	\$12,624,300	(\$98,049)	\$12,526,251	\$631,215	5.04%	636,156	1
2										2
3	Serial Preferred, \$100 Par Value									3
4	4.52% Series	Nov-55	2,065	\$206,500	(\$9,676)	\$196,824	\$9,334	4.74%	9,793	4
5	7.00% Series	(b)	18,046	\$1,804,600	(c)	\$1,804,600	\$126,322	7.00%	126,322	5
6	6.00% Series	(b)	5,930	\$593,000	(c)	\$593,000	\$35,580	6.00%	35,580	6
7	5.00% Series	(b)	41,908	\$4,190,800	(c)	\$4,190,800	\$209,540	5.00%	209,540	7
8	5.40% Series	(b)	65,559	\$6,595,900	(c)	\$6,595,900	\$356,179	5.40%	356,179	8
9	4.72% Series	Aug-63	69,890	\$6,989,000	(\$30,349)	\$6,958,651	\$329,881	4.74%	331,320	9
10	4.56% Series	Feb-65	84,592	\$8,459,200	(\$49,071)	\$8,410,129	\$385,740	4.59%	387,990	10
11										11
12	No Par Serial Preferred, \$25 Stated Value									12
13	Unamortized expense (e)	May-95							67,955	13
14	Unamortized expense (f)	1995							84,019	14
15										15
16	No Par Serial Preferred, \$100 Stated Value									
17	\$7.48 Series (d)	Jun-92	562,500	56,250,000	(630,324)	\$55,619,676	\$4,207,500	7.67%	4,316,153	16
18										17
19										18
20		TOTAL			<u>\$97,713,300</u>	<u>(\$817,470)</u>	<u>\$96,895,830</u>	<u>\$6,291,290</u>	<u>6,561,006</u>	19
21										20
22										21
23										22
24										23
25										24
26										25
27										26
28										27
29										28
30										29
31										30
32										31
								Cost of Preferred Stock =	<u>6.715%</u>	