

Exhibit No. ___ (SCH-5)
Docket No. UE-03 _____
2003 PP&L Rate Case
Witness: Samuel C. Hadaway

**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 SAMUEL C. HADAWAY**

Discounted Cash Flow Analysis

December 2003

PacifiCorp Washington
Discounted Cash Flow Analysis
Summary Of DCF Model Results

Company	Constant Growth DCF Model	Nonconstant Growth Market Price DCF Model	Low Near-Term Growth Two-Stage Growth DCF Model
1 Ameren	9.1%	9.7%	11.2%
2 CINERGY	9.7%	11.3%	10.9%
3 Con. Edison	8.7%	8.9%	10.9%
4 DPL Inc.	12.8%	15.5%	11.1%
5 DTE Energy Co.	11.2%	16.6%	10.9%
6 Energy East Corp.	8.9%	8.8%	10.6%
7 FPL Group, Inc.	9.4%	8.2%	9.6%
8 Great Plains Energy	10.7%	8.7%	10.9%
9 Northeast Utilities	12.0%	14.7%	9.8%
10 NSTAR	9.7%	7.5%	10.3%
11 Pinnacle West	8.9%	9.8%	11.1%
12 P.S. Enterprise Gp.	10.8%	10.1%	10.7%
13 SCANA Corp.	9.4%	9.1%	10.2%
14 Sempra Energy	9.9%	8.9%	8.9%
15 Southern Co.	10.5%	11.4%	10.6%
16 Vectren Corp.	11.5%	12.5%	10.6%
GROUP AVERAGE	10.2%	10.7%	10.5%
GROUP MEDIAN	9.8%	9.8%	10.7%

PacifiCorp Washington
Discounted Cash Flow Analysis
Constant Growth DCF Model

Company	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Recent Price(P0)	Next Year's Div(D1)	Dividend Yield	Projected Growth Rate Analysis										Average Growth (Cols 9-11)	ROE K=Div Yld+G (Cols 3+12)
				Year 2007 "BR" Growth Rate Calculation					B+R						
				DPS	EPS	Retention Rate (B)	NBV	ROE (R)	B* R	Growth	Zacks	Value Line	20 year GDP Growth		
1 Ameren	42.59	2.54	5.96%	2.62	3.30	20.61%	29.40	11.22%	2.31%	3.20%	1.00%	6.00%	3.13%	9.1%	
2 CENERGY	34.88	1.88	5.39%	2.00	3.05	34.43%	25.40	12.01%	4.13%	4.00%	3.00%	6.00%	4.28%	9.7%	
3 Con. Edison	40.47	2.26	5.58%	2.32	3.20	27.50%	32.60	9.82%	2.70%	2.90%	1.00%	6.00%	3.15%	8.7%	
4 DPL Inc.	15.61	0.94	6.02%	0.94	1.85	49.19%	9.05	20.44%	10.06%	5.00%	6.00%	6.00%	6.76%	12.8%	
5 DTE Energy Co.	36.11	2.06	5.70%	2.10	4.25	50.59%	36.50	11.64%	5.89%	4.70%	5.50%	6.00%	5.52%	11.2%	
6 Energy East Corp.	21.11	1.04	4.93%	1.16	2.00	42.00%	21.00	9.52%	4.00%	4.80%	1.00%	6.00%	3.95%	8.9%	
7 FPL Group, Inc.	62.83	2.48	3.95%	2.72	5.70	52.28%	52.20	10.92%	5.71%	5.10%	5.00%	6.00%	5.45%	9.4%	
8 Great Plains Energy	28.89	1.66	5.75%	1.66	2.50	33.60%	16.75	14.93%	5.01%	4.00%	5.00%	6.00%	5.00%	10.7%	
9 Northeast Utilities	17.03	0.62	3.64%	0.78	2.00	61.00%	21.15	9.46%	5.77%	3.60%	18.00%	6.00%	8.34%	12.0%	
10 NSTAR	45.39	2.21	4.87%	2.33	4.00	41.75%	30.25	13.22%	5.52%	4.50%	3.50%	6.00%	4.88%	9.7%	
11 Pinnacle West	35.10	1.83	5.21%	2.13	3.30	35.45%	35.10	9.40%	3.33%	4.80%	0.50%	6.00%	3.66%	8.9%	
12 P.S. Enterprise Gp.	41.70	2.20	5.28%	2.32	4.50	48.44%	27.00	16.67%	8.07%	4.40%	3.50%	6.00%	5.49%	10.8%	
13 SCANA Corp.	33.73	1.46	4.33%	1.70	3.00	43.33%	26.00	11.54%	5.00%	4.30%	5.00%	6.00%	5.08%	9.4%	
14 Sempra Energy	28.81	1.00	3.47%	1.00	3.25	69.23%	24.25	13.40%	9.28%	5.80%	4.50%	6.00%	6.39%	9.9%	
15 Southern Co.	28.78	1.42	4.93%	1.58	2.35	32.77%	15.15	15.51%	5.08%	4.60%	6.50%	6.00%	5.55%	10.5%	
16 Vectren Corp.	23.34	1.15	4.93%	1.27	2.20	42.27%	17.75	12.39%	5.24%	6.00%	9.00%	6.00%	6.56%	11.5%	
GROUP AVERAGE			5.00%						5.44%	4.48%	4.88%	6.00%	5.20%	10.2%	
GROUP MEDIAN			5.07%											9.8%	

Sources: Value Line Investment Survey, Electric Utility (East), Sep 5, 2003;
Electric Utility (Central), Jul 4, 2003; Electric Utility (West) Group, Aug 15, 2003

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN

PacifiCorp Washington
Discounted Cash Flow Analysis
Nonconstant Growth
Market Price DCF Model

Company	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
	Next Year's Div	2007 Div	Annual Change to 2007	Average P/E Ratio	2007 EPS	2007 Price	Recent Price	CASH FLOWS				ROE=Internal Rate of Return (Cols 21-25)
								Year 1 Div	Year 2 Div	Year 3 Div	Year 4 Div+Price	
1 Ameren	2.54	2.62	0.03	15.1	3.30	49.83	-42.59	2.54	2.57	2.59	52.45	9.7%
2 CINERGY	1.88	2.00	0.04	14.6	3.05	44.38	-34.88	1.88	1.92	1.96	46.38	11.3%
3 Con. Edison	2.26	2.32	0.02	14.5	3.20	46.40	-40.47	2.26	2.28	2.30	48.72	8.9%
4 DPL Inc.	0.94	0.94	0.00	12.5	1.85	23.03	-15.61	0.94	0.94	0.94	23.97	15.5%
5 DTE Energy Co.	2.06	2.10	0.01	13.2	4.25	56.10	-36.11	2.06	2.07	2.09	58.20	16.6%
6 Energy East Corp.	1.04	1.16	0.04	12.3	2.00	24.60	-21.11	1.04	1.08	1.12	25.76	8.8%
7 FPL Group, Inc.	2.48	2.72	0.08	13.1	5.70	74.39	-62.83	2.48	2.56	2.64	77.11	8.2%
8 Great Plains Energy	1.66	1.66	0.00	13.1	2.50	32.75	-28.89	1.66	1.66	1.66	34.41	8.7%
9 Northeast Utilities	0.62	0.78	0.05	13.0	2.00	26.00	-17.03	0.62	0.67	0.73	26.78	14.7%
10 NSTAR	2.21	2.33	0.04	12.6	4.00	50.40	-45.39	2.21	2.25	2.29	52.73	7.5%
11 Pinnacle West	1.83	2.13	0.10	12.7	3.30	41.91	-35.10	1.83	1.93	2.03	44.04	9.8%
12 P.S. Enterprise Gp.	2.20	2.32	0.04	11.3	4.50	50.85	-41.70	2.20	2.24	2.28	53.17	10.1%
13 SCANA Corp.	1.46	1.70	0.08	13.6	3.00	40.65	-33.73	1.46	1.54	1.62	42.35	9.1%
14 Sempra Energy	1.00	1.00	0.00	11.1	3.25	35.91	-28.81	1.00	1.00	1.00	36.91	8.9%
15 Southern Co.	1.42	1.58	0.05	15.9	2.35	37.25	-28.78	1.42	1.47	1.53	38.83	11.4%
16 Vectren Corp.	1.15	1.27	0.04	14.4	2.20	31.57	-23.34	1.15	1.19	1.23	32.84	12.5%
GROUP AVERAGE												10.7%
GROUP MEDIAN												9.8%

Sources: Value Line Investment Survey, Electric Utility (East), Sep 5, 2003;
Electric Utility (Central), Jul 4, 2003; Electric Utility (West) Group, Aug 15, 2003

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN

PacifiCorp Washington
Discounted Cash Flow Analysis
Low Near-Term Growth
Two-Stage Growth DCF Model

Company	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	
	Next Year's Div	2007 Div	Annual Change to 2007	Recent Price	CASH FLOWS					Year 5 Div	Year 5-150 Div Growth	ROE=Internal Rate of Return (Yrs 0-150)
					Year 1 Div	Year 2 Div	Year 3 Div	Year 4 Div	Year 5 Div			
1 Ameren	2.54	2.62	0.03	-42.59	2.54	2.57	2.59	2.62	2.78	6.00%	11.2%	
2 CINERGY	1.88	2.00	0.04	-34.88	1.88	1.92	1.96	2.00	2.12	6.00%	10.9%	
3 Con. Edison	2.26	2.32	0.02	-40.47	2.26	2.28	2.30	2.32	2.46	6.00%	10.9%	
4 DPL Inc.	0.94	0.94	0.00	-15.61	0.94	0.94	0.94	0.94	1.00	6.00%	11.1%	
5 DTE Energy Co.	2.06	2.10	0.01	-36.11	2.06	2.07	2.09	2.10	2.23	6.00%	10.9%	
6 Energy East Corp.	1.04	1.16	0.04	-21.11	1.04	1.08	1.12	1.16	1.23	6.00%	10.6%	
7 FPL Group, Inc.	2.48	2.72	0.08	-62.83	2.48	2.56	2.64	2.72	2.88	6.00%	9.6%	
8 Great Plains Energy	1.66	1.66	0.00	-28.89	1.66	1.66	1.66	1.66	1.76	6.00%	10.9%	
9 Northeast Utilities	0.62	0.78	0.05	-17.03	0.62	0.67	0.73	0.78	0.83	6.00%	9.8%	
10 NSTAR	2.21	2.33	0.04	-45.39	2.21	2.25	2.29	2.33	2.47	6.00%	10.3%	
11 Pinnacle West	1.83	2.13	0.10	-35.10	1.83	1.93	2.03	2.13	2.26	6.00%	11.1%	
12 P.S. Enterprise Gp.	2.20	2.32	0.04	-41.70	2.20	2.24	2.28	2.32	2.46	6.00%	10.7%	
13 SCANA Corp.	1.46	1.70	0.08	-33.73	1.46	1.54	1.62	1.70	1.80	6.00%	10.2%	
14 Sempra Energy	1.00	1.00	0.00	-28.81	1.00	1.00	1.00	1.00	1.06	6.00%	8.9%	
15 Southern Co.	1.42	1.58	0.05	-28.78	1.42	1.47	1.53	1.58	1.67	6.00%	10.6%	
16 Vectren Corp.	1.15	1.27	0.04	-23.34	1.15	1.19	1.23	1.27	1.35	6.00%	10.6%	
GROUP AVERAGE											10.5%	
GROUP MEDIAN											10.7%	

Sources: Value Line Investment Survey, Electric Utility (East), Sep 5, 2003;
 Electric Utility (Central), Jul 4, 2003; Electric Utility (West) Group, Aug 15, 2003

NOTE: SEE PAGE 5 OF THIS SCHEDULE FOR FURTHER EXPLANATION OF EACH COLUMN

PacifiCorp Washington
Discounted Cash Flow Analysis
DCF Analysis Column Descriptions

Column 1: 3-Month Average Price per Share	Column 20: Column 18 Multiplied by Column 19
Column 2: 2004 Dividends per Share from Value Line	Column 21: See Column 1
Column 3: Column 2 Divided by Column 1	Column 22: See Column 2
Column 4: Estimated 2007 Dividends per Share from Value Line	Column 23: Column 22 Plus Column 17
Column 5: Estimated 2007 Earnings per Share from Value Line	Column 24: Column 23 Plus Column 17
Column 6: One Minus (Column 4 Divided by Column 5)	Column 25: Column 24 Plus Column 17 Plus Column 20
Column 7: Estimated 2007 Net Book Value per Share from Value Line	Column 26: Internal Rate of Return of the Cash Flows Shown in Columns 21-25
Column 8: Column 5 Divided by Column 7	Column 27: See Column 2
Column 9: Column 6 Multiplied by Column 8	Column 28: See Column 16
Column 10: "Next 5 Years" Company Growth Estimate as Reported by Zacks.com	Column 29: (Column 28 Minus Column 27) Divided by Three
Column 11: "Est'D 00-02 To 06-08" Earnings Growth as Reported by Value Line	Column 30: See Column 1
Column 12: Last 20 Years Average Growth in GDP	Column 31: See Column 27
Column 13: Average of Columns 9-12	Column 32: Column 31 Plus Column 29
Column 14: Column 3 Plus Column 13	Column 33: Column 32 Plus Column 29
Column 15: See Column 2	Column 34: Column 33 Plus Column 29
Column 16: See Column 4	Column 35: Column 34 Increased by the Growth Rate Shown in Column 36
Column 17: (Column 16 Minus Column 15) Divided by Three	Column 36: See Average Growth Rate shown at the Bottom of Column 12
Column 18: Average of Current and Estimated 2007 P/E ratios from Value Line	Column 37: The Internal Rate of Return of the Cash Flows in Columns 30-35 along with the Dividends for the Years 6-150 Implied by the Growth Rates shown in Column 36
Column 19: See Column 5	