#### Aquila Networks - MPS and Aquila Networks - L&P

#### Summary of Schedules

Schedule DAM-1 : Aquila Networks – MPS and Aquila Networks - L&P Pro Forma Capital Structure Schedule DAM-2 : Comparison of Common Stock Equity Ratios Schedule DAM-3 : Aguila Networks - MPS Long-term Debt Calculation Schedule DAM-4 : Aquila Networks - L&P Long-term Debt Calculation Schedule DAM-5 : DCF Growth Rate Summary Schedule DAM-6 : Comparison of Dividends per Share Schedule DAM-7 : Comparison of Dividend Payout Ratios Schedule DAM-8 : 52-Week Price Range DCF Using Dividend per Share Growth Rates Schedule DAM-9 : 52-Week Price Range DCF Using Earnings per Share Growth Rates 52-Week Price Range DCF Using Projected Earnings Growth Rates Schedule DAM-10: Schedule DAM-11: Current Price Range DCF Using Dividend per Share Growth Rates Schedule DAM-12: Current Price Range DCF Using Earnings per Share Growth Rates Schedule DAM-13: Current Price Range DCF Using Projected Earnings Growth Rates Schedule DAM-14: Summary of Discounted Cash Flow Schedule DAM-15: Historical Capital Asset Pricing Model Schedule DAM-16: Size Adjusted Capital Asset Pricing Model Schedule DAM-17: Comparison of Bond Yields Comparison of Dow Jones Indices Schedule DAM-18: Schedule DAM-19: Comparison of Average Annual P/E Ratios Schedule DAM-20: Comparison of Value Line's Safety Rank Schedule DAM-21: Comparison of Value Line's Timeliness Rank Aguila Networks - MPS Proposed Capital Structure and Cost of Capital Schedule DAM-22: Schedule DAM-23: Aquila Networks – L&P Proposed Capital Structure and Cost of Capital Schedule DAM-24: After-Tax Times Interest Earned Ratios

Aquila Networks - L&P

Pro Forma Cost of Capital

December 2002

	Ratio
Long-Term Debt	50.00%
Common Equity	50.00%

Total

100.00%

Source: Aquila Networks - MPS and Aquila Networks - L&P Work Papers

## Aquila Networks - L&P

## Comparable Companies

## Comparison of Common Equity Ratios

Company	1999	2000	2001	2002	2003E
Atmos Energy	50.0%	51.9%	45.7%	46.1%	45.0%
New Jersey Resources	51.2%	52.9%	49.9%	49.4%	55.5%
NICOR	64.0%	66.7%	61.7%	65.0%	68.0%
Northwest Natural Gas	49.9%	50.9%	53.2%	50.5%	48.5%
Piedmont Natural Gas	53.8%	53.9%	52.4%	56.1%	58.0%
Southwest Gas	35.5%	35.8%	39.6%	34.3%	36.0%
UGI	19.8%	19.1%	17.4%	21.7%	29.0%
WGL Holdings, Inc.	56.1%	54.8%	56.3%	52.4%	53.0%
Comparable Companies' Averages	47.5%	48.3%	47.0%	46.9%	49.1%

## Embedded Cost of Long-Term Debt

#### December 2002

Assigned Debt	Total Outstanding	Effective Rate	Effective Interest Expenses
15 Yr 9.03%, Due 12/1/05 30 Yr 8.27%, Due 11/15/21 15 Yr 8.2%, Due 1/15/07 30 Yr 8.0%, Due 3/1/23 RHINOS 5.7763%, Due 9/30/02 Sr 6.70%, Due 10/15/06 Sr 6.875%, Due 10/1/04 Wamego 96, Due 3/1/26 Environ Improve, Due 5/1/28 Sanwa Bank Loan, Due 12/9/09 Sr 7.0%, Due 7/15/04 Sr 7.625%, Due 11/15/09 UCT PEPS Loan 9.75%	\$12,863,524.00 \$26,300,000.00 \$16,545,000.00 \$16,800,000.00 \$0.00 \$67,041,515.00 \$109,326,961.00 \$7,300,000.00 \$5,000,000.00 \$5,069,161.87 \$71,257,000.00 \$45,759,000.00 \$0.00	9.48% 8.39% 8.87% 8.05% 3.50% 6.83% 6.97% 3.00% 3.00% 6.99% 7.00% 7.74% 7.39%	\$1,219,462.08 \$2,206,570.00 \$1,467,541.50 \$1,352,400.00 \$4,578,935.47 \$7,620,089.18 \$219,000.00 \$150,000.00 \$354,334.41 \$4,987,990.00 \$3,542,661.78 \$0.00
Total	\$383,262,161.87		\$27,698,984.43
Embedded Cost of Long-Term Debt			7.23%

Source: Aquila Networks - MPS Work Papers

## Embedded Cost of Long-Term Debt

#### December 2002

Assigned Debt	Total Outstanding	Effective Rate	Cost of Debt
Poll Cntrl Bonds 5.85%, Due 2/1/13 20 Yr MTN 7.13%, Due 11/29/13 20 Yr MTN 7.16%, Due 11/29/13 30 Yr MTN 7.17%, Due 12/1/23 30 Yr MTN 7.33%, Due 11/30/23 10 Yr MTN 8.36%, Due 3/15/05 Sr 7.625%, Due 11/15/09	5,600,000.00 1,000,000.00 9,000,000.00 7,000,000.00 3,000,000.00 20,000,000.00 86,900,000.00	5.85% 7.13% 7.16% 7.17% 7.33% 8.36% 7.74%	327,600.00 71,300.00 644,400.00 501,900.00 219,900.00 1,672,000.00 6,727,798.00
Total	132,500,000.00		10,164,898.00

Embedded Cost of Long-Term Debt

7.67%

Source: Aquila Networks - L&P Work Papers

#### Aquila Networks - L&P

#### Comparable Gas Companies

#### Growth Rate Summary

				Value Line		Projections			
	1998 T	O 2007 E	Estimate	Five	Year Histo	rical	Value Line		S & P
	EPS	DPS	Book Value	EPS	DPS	Book Value	EPS	DPS	EPS
Atmos Energy	5.8%	2.5%	2.5%	-0.5%	4.0%	5.0%	9.0%	2.0%	6.0%
New Jersey Resources	8.1%	2.8%	9.5%	7.0%	2.5%	5.0%	8.5%	3.0%	7.0%
NICOR	4.2%	4.8%	2.3%	5.5%	5.0%	3.0%	3.5%	4.5%	5.0%
Northwest Natural Gas	5.4%	1.0%	3.3%	0.5%	1.0%	4.0%	6.5%	1.5%	5.0%
Piedmont Natural Gas	5.8%	4.5%	4.5%	3.5%	6.0%	5.5%	8.0%	4.0%	5.0%
Southwest Gas	6.4%	0.0%	4.0%	18.5%	0.0%	2.0%	8.5%	0.0%	5.0%
UGI	13.1%	3.7%	10.4%	15.5%	2.0%	-2.5%	11.5%	4.0%	6.0%
WGL Holdings, Inc.	4.5%	1.2%	3.5%	-1.5%	2.0%	4.5%	7.0%	1.0%	4.0%
Comparable Companies' Averages	6.67%	2.54%	5.00%	6.06%	2.81%	3.31%	7.81%	2.50%	5.38%

Sources: Value Line Investment Survey Standard & Poor's Earnings Guide

#### Aquila Networks - L&P

#### **Comparable Companies**

#### Comparison of Dividends per Share

Company	1999	2000	2001	2002	2003E	Growth '99-'03
Atmos Energy	1.10	1.14	1.16	1.18	1.20	2.04%
New Jersey Resources	1.12	1.15	1.17	1.20	1.24	2.44%
NICOR	1.54	1.66	1.76	1.84	1.84	4.77%
Northwest Natural Gas	1.23	1.24	1.25	1.26	1.27	0.80%
Piedmont Natural Gas	1.36	1.44	1.52	1.60	1.66	5.20%
Southwest Gas	0.82	0.82	0.82	0.82	0.82	0.00%
UGI	0.98	1.02	1.05	1.08	1.13	3.38%
WGL Holdings, Inc.	1.22	1.24	1.26	1.27	1.28	1.20%
Comparable Companies' Averages	1.17	1.21	1.25	1.28	1.31	2.48%

#### Aquila Networks - L&P

## Comparable Companies

#### Comparison of Dividend Payout Ratios

Company	1999	2000	2001	2002	2003E	Five Year Average	Forecast '06-'08
Atmos Energy	136%	112%	79%	82%	77%	97.2%	60.0%
New Jersey Resources	67%	63%	59%	56%	52%	59.4%	44.0%
NICOR	60%	56%	58%	63%	74%	62.2%	62.0%
Northwest Natural Gas	74%	70%	67%	78%	71%	72.0%	57.0%
Piedmont Natural Gas	72%	71%	75%	83%	79%	76.0%	60.0%
Southwest Gas	64%	67%	71%	70%	56%	65.6%	38.0%
UGI	111%	95%	75%	60%	53%	78.8%	53.0%
WGL Holdings, Inc.	82%	69%	67%	112%	64%	78.8%	56.0%
Comparable Companies' Averages	83.2%	75.4%	68.9%	75.5%	65.8%	73.7%	53.8%

#### Aquila Networks - L&P

#### Comparable Gas Companies

#### 52 Week Cost of Capital

	Share P	Share Prices		52 Week	52 Week Yields		2006-08E	Growth	Cost of C	Cost of Capital	
	Low	High	Dividend	Low	High	Dividend	Dividend	Rate	Low	High	
Atmos Energy	17.56	24.31	1.20	4.94%	6.83%	1.06	1.32	2.50%	7.44%	9.34%	
New Jersey Resources	24.35	34.79	1.24	3.56%	5.09%	1.09	1.40	2.79%	6.35%	7.88%	
NICOR	18.09	49.00	1.84	3.76%	10.17%	1.47	2.24	4.77%	8.52%	14.94%	
Northwest Natural Gas	23.46	30.70	1.27	4.14%	5.41%	1.22	1.33	0.96%	5.10%	6.38%	
Piedmont Natural Gas	27.35	38.00	1.66	4.37%	6.07%	1.28	1.90	4.46%	8.82%	10.53%	
Southwest Gas	18.09	24.74	0.82	3.31%	4.53%	0.82	0.82	0.00%	3.31%	4.53%	
UGI	17.11	32.55	1.13	3.47%	6.60%	0.97	1.34	3.70%	7.17%	10.30%	
WGL Holdings, Inc.	19.25	27.50	1.28	4.65%	6.65%	1.20	1.33	1.18%	5.84%	7.83%	
Comparable Companies' Averages	20.66	32.70	1.31	4.03%	6.42%	1.14	1.46	2.54%	6.57%	8.96%	

#### Aquila Networks - L&P

#### Comparable Gas Companies

#### 52 Week Cost of Capital

	Share Prices 2003		52 Week	52 Week Yields		2006-08E	Growth	Cost of Capital		
	Low	High	Dividend	Low	High	EPS	EPS	Rate	Low	High
Atmos Energy	17.56	24.31	1.20	4.94%	6.83%	1.33	2.20	5.75%	10.69%	12.59%
New Jersey Resources	24.35	34.79	1.24	3.56%	5.09%	1.56	3.15	8.10%	11.66%	13.19%
NICOR	18.09	49.00	1.84	3.76%	10.17%	2.48	3.60	4.24%	8.00%	14.41%
Northwest Natural Gas	23.46	30.70	1.27	4.14%	5.41%	1.49	2.40	5.41%	9.55%	10.83%
Piedmont Natural Gas	27.35	38.00	1.66	4.37%	6.07%	1.89	3.15	5.84%	10.21%	11.91%
Southwest Gas	18.09	24.74	0.82	3.31%	4.53%	1.23	2.15	6.40%	9.72%	10.93%
UGI	17.11	32.55	1.13	3.47%	6.60%	0.89	2.70	13.12%	16.60%	19.73%
WGL Holdings, Inc.	19.25	27.50	1.28	4.65%	6.65%	1.62	2.40	4.46%	9.12%	11.11%
Comparable Companies' Averages	20.66	32.70	1.31	4.03%	6.42%	1.56	2.72	6.67%	10.69%	13.09%

#### Aquila Networks - L&P

#### Comparable Gas Companies

#### 52 Week Cost of Capital

	Share Prices		2003	52 Week	52 Week Yields		EPS Estimates		Capital
	Low	High	Dividend	Low	High	Value Line	S&P	Low	High
Atmos Energy	17.56	24.31	1.20	4.94%	6.83%	9.00%	6.00%	10.94%	15.83%
New Jersey Resources	24.35	34.79	1.24	3.56%	5.09%	8.50%	7.00%	10.56%	13.59%
NICOR	18.09	49.00	1.84	3.76%	10.17%	3.50%	5.00%	7.26%	15.17%
Northwest Natural Gas	23.46	30.70	1.27	4.14%	5.41%	6.50%	5.00%	9.14%	11.91%
Piedmont Natural Gas	27.35	38.00	1.66	4.37%	6.07%	8.00%	5.00%	9.37%	14.07%
Southwest Gas	18.09	24.74	0.82	3.31%	4.53%	8.50%	5.00%	8.31%	13.03%
UGI	17.11	32.55	1.13	3.47%	6.60%	11.50%	6.00%	9.47%	18.10%
WGL Holdings, Inc.	19.25	27.50	1.28	4.65%	6.65%	7.00%	4.00%	8.65%	13.65%
Comparable Companies' Averages	20.66	32.70	1.31	4.03%	6.42%	7.81%	5.38%	9.21%	14.42%

Sources: Value Line Investment Survey Standard & Poor's Earnings Guide

#### Aquila Networks - L&P

#### Comparable Gas Companies

#### Current Cost of Capital

	Share F	Share Prices		Current Yields		1997-99	2006-08E	Growth	Cost of Capital	
	Low	High	Dividend	Low	High	Dividend	Dividend	Rate	Low	High
Atmos Energy	22.31	22.62	1.20	5.31%	5.38%	1.06	1.32	2.50%	7.81%	7.88%
New Jersey Resources	33.81	34.46	1.24	3.60%	3.67%	1.09	1.40	2.79%	6.38%	6.45%
NICOR	29.64	30.23	1.84	6.09%	6.21%	1.47	2.24	4.77%	10.85%	10.97%
Northwest Natural Gas	25.38	25.77	1.27	4.93%	5.00%	1.22	1.33	0.96%	5.89%	5.97%
Piedmont Natural Gas	36.84	37.41	1.66	4.44%	4.51%	1.28	1.90	4.46%	8.89%	8.96%
Southwest Gas	20.15	20.62	0.82	3.98%	4.07%	0.82	0.82	0.00%	3.98%	4.07%
UGI	30.81	31.52	1.13	3.58%	3.67%	0.97	1.34	3.70%	7.28%	7.36%
WGL Holdings, Inc.	26.81	27.23	1.28	4.70%	4.78%	1.20	1.33	1.18%	5.88%	5.96%
Comparable Companies' Averages	28.22	28.73	1.31	4.58%	4.66%	1.14	1.46	2.54%	7.12%	7.20%

Sources: Value Line Investment Survey Yahoo! FINANCE

#### Aquila Networks - L&P

#### Comparable Gas Companies

#### Current Cost of Capital

	Share F	Share Prices		Current \	Current Yields		2006-08E	Growth	Cost of C	Capital
	Low	High	Dividend	Low	High	EPS	EPS	Rate	Low	High
Atmos Energy	22.31	22.62	1.20	5.31%	5.38%	1.33	2.20	5.75%	11.06%	11.13%
New Jersey Resources	33.81	34.46	1.24	3.60%	3.67%	1.56	3.15	8.10%	11.69%	11.76%
NICOR	29.64	30.23	1.84	6.09%	6.21%	2.48	3.60	4.24%	10.33%	10.45%
Northwest Natural Gas	25.38	25.77	1.27	4.93%	5.00%	1.49	2.40	5.41%	10.34%	10.42%
Piedmont Natural Gas	36.84	37.41	1.66	4.44%	4.51%	1.89	3.15	5.84%	10.28%	10.35%
Southwest Gas	20.15	20.62	0.82	3.98%	4.07%	1.23	2.15	6.40%	10.38%	10.47%
UGI	30.81	31.52	1.13	3.58%	3.67%	0.89	2.70	13.12%	16.71%	16.79%
WGL Holdings, Inc.	26.81	27.23	1.28	4.70%	4.78%	1.62	2.40	4.46%	9.16%	9.24%
Comparable Companies' Averages	28.22	28.73	1.31	4.58%	4.66%	1.56	2.72	6.67%	11.24%	11.33%

Sources: Value Line Investment Survey Yahoo! FINANCE

#### Aquila Networks - L&P

#### Comparable Gas Companies

#### Current Cost of Capital

	Share F	Prices	Current	Current	rields	EPS Esti	mates	Cost of C	Capital
	Low	High	Dividend	Low	High	Value Line	S&P	Low	High
Atmos Energy	22.31	22.62	1.20	5.31%	5.38%	9.00%	6.00%	11.31%	14.38%
New Jersey Resources	33.81	34.46	1.24	3.60%	3.67%	8.50%	7.00%	10.60%	12.17%
NICOR	29.64	30.23	1.84	6.09%	6.21%	3.50%	5.00%	9.59%	11.21%
Northwest Natural Gas	25.38	25.77	1.27	4.93%	5.00%	6.50%	5.00%	9.93%	11.50%
Piedmont Natural Gas	36.84	37.41	1.66	4.44%	4.51%	8.00%	5.00%	9.44%	12.51%
Southwest Gas	20.15	20.62	0.82	3.98%	4.07%	8.50%	5.00%	8.98%	12.57%
UGI	30.81	31.52	1.13	3.58%	3.67%	11.50%	6.00%	9.58%	15.17%
WGL Holdings, Inc.	26.81	27.23	1.28	4.70%	4.78%	7.00%	4.00%	8.70%	11.78%
Comparable Companies' Averages	28.22	28.73	1.31	4.58%	4.66%	7.81%	5.38%	9.76%	12.66%

Sources:

Value Line Investment Survey Standard & Poor's Earnings Guide Yahoo! FINANCE

Aquila Networks - L&P

Comparable Gas Companies

Summary of Discounted Cash Flow Analysis

	DCF Range		
	Low	High	
DCF Using Earnings and Current Share Prices			
Comparable Companies' Averages	11.24%	11.33%	
DCF Using Projected Growth Rates and Current Shar	e Prices		
Comparable Companies' Averages	9.76%	12.66%	

Sources: Schedules DAM-15 and DAM-16

#### Aquila Networks - L&P

#### Comparable Gas Companies

#### Cost of Equity : Historical Capital Asset Pricing Model

		Long-Term				Aaa	
	Market	Corporate			Adjusted	Corporate	Cost
	Total	Bonds	Risk		Risk	Bonds	of
	Returns	Return	Premium	Beta	Premium	Return	Equity
Atmos Energy	14.55%	6.20%	8.35%	0.60	5.01%	5.74%	10.75%
New Jersey Resources	14.55%	6.20%	8.35%	0.65	5.43%	5.74%	11.17%
Nicor	14.55%	6.20%	8.35%	0.90	7.52%	5.74%	13.26%
Northwest Natural Gas	14.55%	6.20%	8.35%	0.60	5.01%	5.74%	10.75%
Piedmont	14.55%	6.20%	8.35%	0.65	5.43%	5.74%	11.17%
Southwest Gas	14.55%	6.20%	8.35%	0.70	5.85%	5.74%	11.59%
UGI Corp	14.55%	6.20%	8.35%	0.75	6.26%	5.74%	12.00%
WGL Holdings, Inc.	14.55%	6.20%	8.35%	0.65	5.43%	5.74%	11.17%
Comparable Companies' Average	14.55%	6.20%	8.35%	0.69	5.74%	5.74%	11.48%

Sources : Value Line Investment Survey Ibbotson Associates 2003 SBBI Yearbook: Valuation Edition Federal Reserve Statistical Release

#### Aquila Networks - L&P

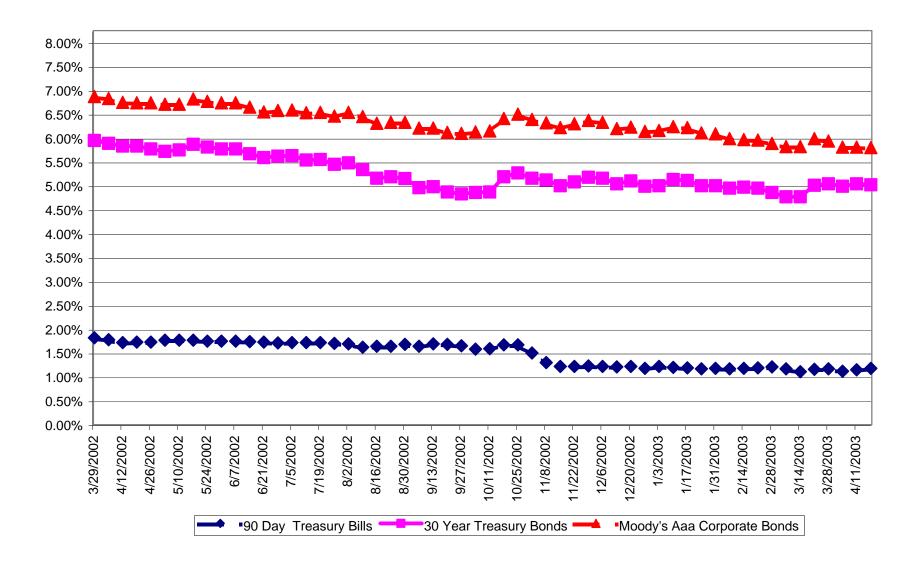
#### Comparable Gas Companies

# Cost of Equity : Size Adjusted Capital Asset Pricing Model

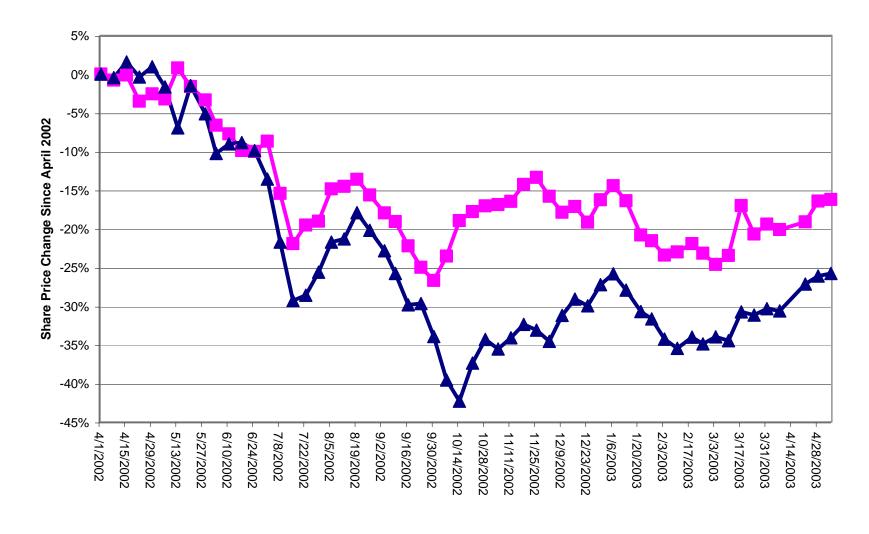
	Risk Free Return	Beta	Equity Risk Premium	Adjusted Equity Risk Premium	Size Premium	Cost of Equity
Atmos Energy	4.99%	0.60	7.00%	4.20%	0.82%	10.01%
New Jersey Resources	4.99%	0.65	7.00%	4.55%	1.52%	11.06%
Nicor	4.99%	0.90	7.00%	6.30%	0.82%	12.11%
Northwest Natural Gas	4.99%	0.60	7.00%	4.20%	1.52%	10.71%
Piedmont	4.99%	0.65	7.00%	4.55%	0.82%	10.36%
Southwest Gas	4.99%	0.70	7.00%	4.90%	1.52%	11.41%
UGI Corp	4.99%	0.75	7.00%	5.25%	0.82%	11.06%
WGL Holdings, Inc.	4.99%	0.65	7.00%	4.55%	0.82%	10.36%
Comparable Companies' Average	4.99%	0.69	7.00%	4.81%	1.08%	10.89%

Sources : Value Line Investment Survey Ibbotson Associates 2003 SBBI Yearbook: Valuation Edition Federal Reserve Statistical Release

# **Comparison of Bond Yields**



**Comparison of Dow Jones Indices** 



DJ Industrials — DJ Utilities

#### Aquila Networks - L&P

## Comparable Companies

## Comparison of Average Annual P/E Ratio

Company	1999	2000	2001	2002	2003	Five Year Average	Forecast '06-'08
Atmos Energy	33.0	18.9	15.6	15.2	13.5	19.2	13.5
New Jersey Resources	15.2	14.7	14.2	14.7	13.6	14.5	15.0
NICOR	14.6	11.9	12.8	13.1	9.7	12.4	13.0
Northwest Natural Gas	14.5	12.4	12.9	17.2	14.5	14.3	12.0
Piedmont Natural Gas	17.7	14.3	16.7	18.4	16.1	16.6	15.5
Southwest Gas	21.1	16.0	19.0	19.8	14.9	18.2	17.0
UGI	15.9	13.6	12.1	11.4	13.3	13.3	11.0
WGL Holdings, Inc.	17.3	14.6	14.7	23.1	12.4	16.4	13.0
Comparable Companies' Averages	18.7	14.6	14.8	16.6	13.5	15.6	13.8

Aquila Networks - L&P

Comparable Local Distribution Companies

Comparison of Value Line's Safety Rank

Safety	
Rank	

3 2 2 2 3 3 1	
2.3	
	2 2 2 3 3 1

#### Aquila Networks - L&P

Comparable Local Distribution Companies

Comparison of Value Line's Timeliness Rank

Timeliness
Rank

Atmos Energy New Jersey Resources NICOR Northwest Natural Gas Piedmont Natural Gas Southwest Gas	3 3 4 3 3
UGI	2
WGL Holdings, Inc.	3
Comparable Companies' Average	3.1

## Proposed Cost of Capital

#### December 2002

	Ratio Cost of Debt	Weighted Cost of Capital Cost of Common Stock
		12.50% 12.25% 12.00%
Long-Term Debt Common Equity	50.00% 7.23% 50.00%	3.61%3.61%3.61%6.25%6.13%6.00%
Total	100.00%	9.86% 9.74% 9.61%

Source: Aquila Networks - MPS Work Papers

## Proposed Cost of Capital

## December 2002

	Ratio	Cost of Debt		Weighted Cost of Capital Cost of Common Stock		
			12.50%	12.25%	12.00%	
Long-Term Debt Common Equity	50.00% 50.00%	7.67%	3.84% 6.25%	3.84% 6.13%	3.84% 6.00%	
Total	100.00%		10.09%	9.96%	9.84%	

Source: Aquila Networks - L&P Work Papers

#### Aquila Networks - L&P

## Comparable Gas Companies

#### Comparison of After-Tax Times Long Term Interest Earned Ratios

Aquila Networks - MPS Aquila Networks - L&P	@12.25% ROE	2.69 2.60
Atmos Energy New Jersey Resources NICOR Northwest Natural Gas Piedmont Natural Gas Southwest Gas		2.45 4.11 3.96 2.45 2.84 1.49
UGI WGL Holdings, Inc.		1.92 2.17
Comparable Companies' Average		2.67