

Jan-04

**KENTUCKY-AMERICAN WATER COMPANY**

Ex Post Risk Premium	Moody's A-rated Pub Utility	
November-03	6.36%	
December-03	6.27%	
January-04	6.16%	
Average	6.26%	

Risk Premium Utility Stock Index	4.61%	4.6%
Risk Premium SP500	5.22%	5.2%
3-month average A-bond yield	6.26%	6.3%
Risk Premium Range	10.88%	10.9%
Average	11.49%	11.5%
flotation	11.18%	11.2%
Ex Post Risk Premium Cost of Equity	0.25%	0.3%
	11.43%	11.4%

Ex Ante Risk Premium Cost of Equity	
$7.871 - 0.41912 \times 6.16 = 5.29$	
intercept coefficient/(1-serial correlation coefficient =	7.87%
A bond coefficient * current A bond yield =	-2.58%
Sum of above = ex ante risk premium	5.29%
current A bond yield =	6.16%
Ex Ante Risk Premium Cost of Equity = A bond yield plus risk premium =	11.45%

Jan-04

Summary of Results

Water Proxy Group DCF Cost of Equity	10.7%	
LDC Proxy Group DCF Cost of Equity	10.7%	10.7%
Ex Post Risk Premium Cost of Equity	11.4%	11.4%
Ex Ante LDC Risk Premium Cost of Equity	11.4%	11.4%
Average Cost of Equity		11.2%

**KENTUCKY-AMERICAN WATER COMPANY**  
**EXHIBIT\_\_(JVV-1)**  
**SCHEDULE A**  
**SUMMARY OF DISCOUNTED CASH FLOW ANALYSIS**  
**FOR PROXY WATER COMPANY COMPANIES**

Company	11/1/2003 High	11/1/2003 Low	12/1/2003 High	12/1/2003 Low	1/1/2004 High	1/1/2004 Low	DIV1	DIV2	DIV3	DIV4	d1	d2	d3	d4	3-Mo. Ave. Price	Dividend	Value Line Forecasted EPS Growth	January 2004 I/B/E/S	Ave IBES & Value Line	Shares Outstanding	Market Value	Cost of Equity	1+g	1+k	Value Line Safety Rank
Amer. States Water	25.58	23.90	25.43	23.92	26.80	24.92	0.23095	0.23095	0.23095	0.23095	0.221	0.221	0.221	0.221	25.092	0.95271	6%	3%	4.5%	15.20	381	8.5%	1.0450	1.08	3
Aqua America	21.81	18.71	22.40	20.60	22.85	21.70	0.12264	0.12264	0.13140	0.13140	0.112	0.112	0.120	0.120	21.345	0.53009	10%	9%	9.5%	92.43	1,973	12.1%	1.0950	1.12	3
California Water	27.63	25.53	28.00	26.02	29.65	27.22	0.29927	0.29927	0.29927	0.30140	0.281	0.281	0.281	0.283	27.342	1.24882	9%	4%	6.5%	16.93	463	11.3%	1.0650	1.11	2
Middlesex Water	20.77	18.55	21.12	18.95	21.10	19.91	0.17227	0.17227	0.17655	0.17655	0.161	0.161	0.165	0.165	20.067	0.72507		7%	7.0%	10.52	211	10.8%	1.0700	1.11	2
Southwest Water	12.03	10.68	12.37	11.36	15.00	11.88	0.04796	0.04796	0.04796	0.05123	0.044	0.044	0.044	0.047	12.220	0.20268		9%	9.0%	14.64	179	10.7%	1.0900	1.11	3
York Water Company	18.50	17.95	18.65	18.00	20.00	18.00	0.14445	0.14445	0.14445	0.15515	0.135	0.135	0.135	0.145	18.517	0.61072		7%	7.0%	6.41	119	10.5%	1.0700	1.10	NA
Average																						10.7%			3
Market-Weighted Average/Composite																						11.4%			3

**KENTUCKY-AMERICAN WATER COMPANY**  
**EXHIBIT\_\_(JWV-1)**  
**SCHEDULE B**  
**SUMMARY OF DISCOUNTED CASH FLOW ANALYSIS**  
**FOR NATURAL GAS DISTRIBUTION COMPANIES**

Company	11/1/2003 High	11/1/2003 Low	12/1/2003 High	12/1/2003 Low	1/1/2004 High	1/1/2004 Low	DIV1	DIV2	DIV3	DIV4	d1	d2	d3	d4	3-Mo. Ave. Price	Dividend	January 2004 I/B/E/S	Shares Outstanding	Market Value	Cost of Equity	1+g	1+k	Value LineSafety Rank
AGL Resources	28.72	27.50	29.35	28.25	30.63	28.60	0.28272	0.29319	0.29319	0.29319	0.270	0.280	0.280	0.280	28.842	1.20084	4.71%	64.3	1,854	9.1%	1.0471	1.09	2
Atmos Energy	24.89	24.27	25.00	23.92	25.96	24.30	0.31701	0.31701	0.31701	0.32229	0.300	0.300	0.300	0.305	24.723	1.32593	5.67%	51.5	1,274	11.3%	1.0567	1.11	3
Energen Corp.	39.04	36.62	42.00	38.55	44.72	40.72	0.19260	0.19260	0.19795	0.19795	0.180	0.180	0.185	0.185	40.275	0.80706	7.00%	36.1	1,456	9.1%	1.0700	1.09	2
Equitable Resources	41.60	39.95	43.42	41.34	44.92	42.34	0.18658	0.21950	0.32925	0.32925	0.170	0.200	0.300	0.300	42.262	1.10497	9.75%	62.3	2,631	12.5%	1.0975	1.13	2
KeySpan Corp.	35.45	33.64	37.09	34.86	37.26	35.72	0.47108	0.47108	0.47108	0.47108	0.445	0.445	0.445	0.445	35.670	1.96479	5.86%	159.1	5,674	11.7%	1.0586	1.12	2
New Jersey Resources	39.25	36.45	39.54	37.55	39.49	37.75	0.32860	0.32860	0.34450	0.34450	0.310	0.310	0.325	0.325	38.338	1.39407	6.00%	27.2	1,044	9.8%	1.0600	1.10	2
NICOR Inc.	34.45	32.03	34.65	32.86	34.24	32.49	0.48281	0.48281	0.48281	0.48281	0.465	0.465	0.465	0.465	33.453	2.00315	3.83%	44.0	1,473	10.1%	1.0383	1.10	2
Northwest Nat. Gas	30.85	28.91	31.30	29.50	31.97	29.95	0.32814	0.32814	0.33855	0.33855	0.315	0.315	0.325	0.325	30.413	1.37680	4.17%	25.9	786	8.9%	1.0417	1.09	2
Peoples Energy	40.90	38.82	42.64	40.06	43.26	41.37	0.55650	0.55650	0.55650	0.55650	0.530	0.530	0.530	0.530	41.175	2.31518	5.00%	36.7	1,511	10.9%	1.0500	1.11	1
Southwest Gas	23.15	22.01	23.18	22.05	24.05	22.39	0.21593	0.21593	0.21593	0.21593	0.205	0.205	0.205	0.205	22.805	0.89375	5.33%	34.0	776	9.5%	1.0533	1.09	3
UGI Corp.	32.69	30.57	34.20	32.10	34.35	31.40	0.30304	0.30304	0.30304	0.30304	0.285	0.285	0.285	0.285	32.552	1.25846	6.33%	42.8	1,394	10.4%	1.0633	1.10	3
WGL Holdings Inc.	28.16	26.20	28.55	26.63	28.70	27.15	0.33235	0.33235	0.33235	0.33235	0.320	0.320	0.320	0.320	27.565	1.37398	3.86%	48.6	1,340	9.1%	1.0386	1.09	1
Market Weighted Average																				10.7%			2

**KENTUCKY-AMERICAN WATER COMPANY**  
**EXHIBIT\_\_(JVV-1)**  
**SCHEDULE D**  
**COMPARATIVE RETURNS ON S&P 500 STOCK INDEX**  
**AND MOODY'S A-RATED BONDS 1937 – 2003**

<u>Year</u>	<u>S&amp;P 500 Stock Price</u>	<u>Stock Dividend Yield</u>	<u>Stock Return</u>	<u>A-rated Bond Price</u>	<u>Bond Return</u>
2003	895.84	0.0180		\$62.26	
2002	1,140.21	0.0138	-20.05%	\$57.44	15.35%
2001	1,335.63	0.0116	-13.47%	\$56.40	8.93%
2000	1,425.59	0.0118	-5.13%	\$52.60	14.82%
1999	1,248.77	0.0130	15.46%	\$63.03	-10.20%
1998	963.35	0.0162	31.25%	\$62.43	7.38%
1997	766.22	0.0195	27.68%	\$56.62	17.32%
1996	614.42	0.0231	27.02%	\$60.91	-0.48%
1995	465.25	0.0287	34.93%	\$50.22	29.26%
1994	472.99	0.0269	1.05%	\$60.01	-9.65%
1993	435.23	0.0288	11.56%	\$53.13	20.48%
1992	416.08	0.0290	7.50%	\$49.56	15.27%
1991	325.49	0.0382	31.65%	\$44.84	19.44%
1990	339.97	0.0341	-0.85%	\$45.60	7.11%
1989	285.41	0.0364	22.76%	\$43.06	15.18%
1988	250.48	0.0366	17.61%	\$40.10	17.36%
1987	264.51	0.0317	-2.13%	\$48.92	-9.84%
1986	208.19	0.0390	30.95%	\$39.98	32.36%
1985	171.61	0.0451	25.83%	\$32.57	35.05%
1984	166.39	0.0427	7.41%	\$31.49	16.12%
1983	144.27	0.0479	20.12%	\$29.41	20.65%
1982	117.28	0.0595	28.96%	\$24.48	36.48%
1981	132.97	0.0480	-7.00%	\$29.37	-3.01%
1980	110.87	0.0541	25.34%	\$34.69	-3.81%
1979	99.71	0.0533	16.52%	\$43.91	-11.89%
1978	90.25	0.0532	15.80%	\$49.09	-2.40%
1977	103.80	0.0399	-9.06%	\$50.95	4.20%
1976	96.86	0.0380	10.96%	\$43.91	25.13%
1975	72.56	0.0507	38.56%	\$41.76	14.75%
1974	96.11	0.0364	-20.86%	\$52.54	-12.91%
1973	118.40	0.0269	-16.14%	\$58.51	-3.37%
1972	103.30	0.0296	17.58%	\$56.47	10.69%
1971	93.49	0.0332	13.81%	\$53.93	12.13%
1970	90.31	0.0356	7.08%	\$50.46	14.81%
1969	102.00	0.0306	-8.40%	\$62.43	-12.76%
1968	95.04	0.0313	10.45%	\$66.97	-0.81%
1967	84.45	0.0351	16.05%	\$78.69	-9.81%
1966	93.32	0.0302	-6.48%	\$86.57	-4.48%
1965	86.12	0.0299	11.35%	\$91.40	-0.91%
1964	76.45	0.0305	15.70%	\$92.01	3.68%
1963	65.06	0.0331	20.82%	\$93.56	2.61%
1962	69.07	0.0297	-2.84%	\$89.60	8.89%
1961	59.72	0.0328	18.94%	\$89.74	4.29%
1960	58.03	0.0327	6.18%	\$84.36	11.13%
1959	55.62	0.0324	7.57%	\$91.55	-3.49%
1958	41.12	0.0448	39.74%	\$101.22	-5.60%
1957	45.43	0.0431	-5.18%	\$100.70	4.49%
1956	44.15	0.0424	7.14%	\$113.00	-7.35%

1955	35.60	0.0438	28.40%	\$116.77	0.20%
1954	25.46	0.0569	45.52%	\$112.79	7.07%
1953	26.18	0.0545	2.70%	\$114.24	2.24%
1952	24.19	0.0582	14.05%	\$113.41	4.26%
1951	21.21	0.0634	20.39%	\$123.44	-4.89%
1950	16.88	0.0665	32.30%	\$125.08	1.89%
1949	15.36	0.0620	16.10%	\$119.82	7.72%
1948	14.83	0.0571	9.28%	\$118.50	4.49%
1947	15.21	0.0449	1.99%	\$126.02	-2.79%
1946	18.02	0.0356	-12.03%	\$126.74	2.59%
1945	13.49	0.0460	38.18%	\$119.82	9.11%
1944	11.85	0.0495	18.79%	\$119.82	3.34%
1943	10.09	0.0554	22.98%	\$118.50	4.49%
1942	8.93	0.0788	20.87%	\$117.63	4.14%
1941	10.55	0.0638	-8.98%	\$116.34	4.55%
1940	12.30	0.0458	-9.65%	\$112.39	7.08%
1939	12.50	0.0349	1.89%	\$105.75	10.05%
1938	11.31	0.0784	18.36%	\$99.83	9.94%
1937	17.59	0.0434	-31.36%	\$103.18	0.63%

Return 1937--2003	Stocks	11.42%
	Bonds	6.19%
Risk Premium		5.22%

**KENTUCKY-AMERICAN WATER COMPANY**  
**EXHIBIT\_\_(JVV-1)**  
**SCHEDULE E**  
**COMPARATIVE RETURNS ON S&P UTILITIES STOCK INDEX**  
**AND MOODY'S A-RATED BONDS 1937—2003**

<u>Year</u>	<u>Utility Stock Price</u>	<u>Stock Dividend Yield</u>	<u>Stock Return</u>	<u>A-rated Bond Price</u>	<u>Bond Rate of Return</u>
2003	160.67			\$62.26	
2002	142.14	0.0475	17.79%	\$57.44	15.35%
2002	243.79	0.0362		\$57.44	
2001	307.70	0.0287	-17.90%	\$56.40	8.93%
2000	239.17	0.0413	32.78%	\$52.60	14.82%
1999	253.52	0.0394	-1.72%	\$63.03	-10.20%
1998	228.61	0.0457	15.47%	\$62.43	7.38%
1997	201.14	0.0492	18.58%	\$56.62	17.32%
1996	202.57	0.0454	3.83%	\$60.91	-0.48%
1995	153.87	0.0584	37.49%	\$50.22	29.26%
1994	168.70	0.0496	-3.83%	\$60.01	-9.65%
1993	159.79	0.0537	10.95%	\$53.13	20.48%
1992	149.70	0.0572	12.46%	\$49.56	15.27%
1991	138.38	0.0607	14.25%	\$44.84	19.44%
1990	146.04	0.0558	0.33%	\$45.60	7.11%
1989	114.37	0.0699	34.68%	\$43.06	15.18%
1988	106.13	0.0704	14.80%	\$40.10	17.36%
1987	120.09	0.0588	-5.74%	\$48.92	-9.84%
1986	92.06	0.0742	37.87%	\$39.98	32.36%
1985	75.83	0.0860	30.00%	\$32.57	35.05%
1984	68.50	0.0925	19.95%	\$31.49	16.12%
1983	61.89	0.0948	20.16%	\$29.41	20.65%
1982	51.81	0.1074	30.20%	\$24.48	36.48%
1981	52.01	0.0978	9.40%	\$29.37	-3.01%
1980	50.26	0.0953	13.01%	\$34.69	-3.81%
1979	50.33	0.0893	8.79%	\$43.91	-11.89%
1978	52.40	0.0791	3.96%	\$49.09	-2.40%
1977	54.01	0.0714	4.16%	\$50.95	4.20%
1976	46.99	0.0776	22.70%	\$43.91	25.13%
1975	38.19	0.0920	32.24%	\$41.76	14.75%
1974	48.60	0.0713	-14.29%	\$52.54	-12.91%
1973	60.01	0.0556	-13.45%	\$58.51	-3.37%
1972	60.19	0.0542	5.12%	\$56.47	10.69%
1971	63.43	0.0504	-0.07%	\$53.93	12.13%
1970	55.72	0.0561	19.45%	\$50.46	14.81%
1969	68.65	0.0445	-14.38%	\$62.43	-12.76%
1968	68.02	0.0435	5.28%	\$66.97	-0.81%
1967	70.63	0.0392	0.22%	\$78.69	-9.81%
1966	74.50	0.0347	-1.72%	\$86.57	-4.48%
1965	75.87	0.0315	1.34%	\$91.40	-0.91%
1964	67.26	0.0331	16.11%	\$92.01	3.68%
1963	63.35	0.0330	9.47%	\$93.56	2.61%
1962	62.69	0.0320	4.25%	\$89.60	8.89%
1961	52.73	0.0358	22.47%	\$89.74	4.29%
1960	44.50	0.0403	22.52%	\$84.36	11.13%
1959	43.96	0.0377	5.00%	\$91.55	-3.49%
1958	33.30	0.0487	36.88%	\$101.22	-5.60%

1957	32.32	0.0487	7.90%	\$100.70	4.49%
1956	31.55	0.0472	7.16%	\$113.00	-7.35%
1955	29.89	0.0461	10.16%	\$116.77	0.20%
1954	25.51	0.0520	22.37%	\$112.79	7.07%
1953	24.41	0.0511	9.62%	\$114.24	2.24%
1952	22.22	0.0550	15.36%	\$113.41	4.26%
1951	20.01	0.0606	17.10%	\$123.44	-4.89%
1950	20.20	0.0554	4.60%	\$125.08	1.89%
1949	16.54	0.0570	27.83%	\$119.82	7.72%
1948	16.53	0.0535	5.41%	\$118.50	4.49%
1947	19.21	0.0354	-10.41%	\$126.02	-2.79%
1946	21.34	0.0298	-7.00%	\$126.74	2.59%
1945	13.91	0.0448	57.89%	\$119.82	9.11%
1944	12.10	0.0569	20.65%	\$119.82	3.34%
1943	9.22	0.0621	37.45%	\$118.50	4.49%
1942	8.54	0.0940	17.36%	\$117.63	4.14%
1941	13.25	0.0717	-28.38%	\$116.34	4.55%
1940	16.97	0.0540	-16.52%	\$112.39	7.08%
1939	16.05	0.0553	11.26%	\$105.75	10.05%
1938	14.30	0.0730	19.54%	\$99.83	9.94%
1937	24.34	0.0432	-36.93%	\$103.18	0.63%

Return 1937--2003	Stocks	10.81%
	Bonds	6.19%
Risk Premium		4.61%

S&P Utilities Index discontinued December 2001.

Return for 2002 based on new electric utilities index.

S&P Replaced Utilities stock index in December 2001 with separate indices for electric and natural gas utilities.

Returns for 2002 and following based on electric utilities index.

**KENTUCKY-AMERICAN WATER COMPANY  
EXHIBIT\_\_(JVW-1)  
SCHEDULE F**

**AVERAGE CAPITAL STRUCTURE OF PROXY WATER COMPANY GROUP**

Company Name	Short-Term Debt	Long-Term Debt	Preferred Equity	Equity	Total Capital	% Short-Term Debt	% Long-Term Debt	% Equity	
1 Amer. States Water	48.3	231.1	0.0	383.9	663.3	7.28%	34.84%	0.00%	57.88%
2 Aqua America	149.4	582.9	0.2	2,009.6	2,742.1	5.45%	21.26%	0.01%	73.29%
3 California Water	24.8	250.4	3.5	461.4	740.1	3.35%	33.83%	0.47%	62.34%
4 Middlesex Water	13.5	97.5	4.1	211.2	326.3	4.14%	29.88%	1.26%	64.72%
5 Southwest Water	2.6	75.4	0.5	179.0	257.5	1.01%	29.29%	0.19%	69.51%
6 York Water Company	4.5	32.6	0.0	118.6	155.7	2.89%	20.94%	0.00%	76.17%
7 Average	243.1	1,269.9	8.3	3,363.6	4,884.9	4.98%	26.00%	0.17%	68.86%

**AVERAGE CAPITAL STRUCTURE OF PROXY LDC GROUP**

Company Name	Short-Term Debt	Long-Term Debt	Preferred Equity	Equity	Total Capital	% Short-Term Debt	% Long-Term Debt	% Preferred Equity	% Equity
1 AGL Resources	419	994	0	1,836	3,249	12.89%	30.60%	0.00%	56.51%
2 Atmos Energy	128	864	0	1,274	2,265	5.65%	38.13%	0.00%	56.22%
3 KeySpan Corp.	927	5,224	84	5,825	12,060	7.69%	43.32%	0.69%	48.30%
4 Energen Corp.	136	513	0	1,513	2,162	6.29%	23.73%	0.00%	69.98%
5 Equitable Resources	146	572	0	2,714	3,432	4.26%	16.67%	0.00%	79.07%
6 New Jersey Resources	87	371	0	1,025	1,483	5.85%	24.99%	0.02%	69.14%
7 NICOR Inc.	415	396	4	1,460	2,275	18.24%	17.41%	0.19%	64.16%
8 Northwest Nat. Gas	90	446	8	778	1,322	6.79%	33.72%	0.63%	58.86%
9 Peoples Energy	378	554	0	1,571	2,503	15.10%	22.14%	0.00%	62.77%
10 Southwest Gas	62	1,092	60	783	1,997	3.09%	54.70%	3.01%	39.20%
11 UGI Corp.	205	1,127	20	1,362	2,713	7.54%	41.54%	0.74%	50.18%
12 WGL Holdings Inc.	179	637	28	1,375	2,219	8.06%	28.69%	1.27%	61.98%
13 Total	3,171	12,790	205	21,514	37,680	8.41%	33.94%	0.54%	57.10%