## ANALYSIS OF AUTHORIZED RATES OF RETURN ON EQUITY FOR ELECTRIC UTILITIES

	(a)	(b)	
		AVERAGE	
	ALLOWED	PUBLIC UTILITY	RISK
YEAR	ROE	BOND YIELD	PREMIUM
1974	13.10%	9.27%	3.83%
1975	13.20%	9.88%	3.32%
1976	13.10%	9.17%	3.93%
1977	13.30%	8.58%	4.72%
1978	13.20%	9.22%	3.98%
1979	13.50%	10.39%	3.11%
1980	14.23%	13.15%	1.08%
1981	15.22%	15.62%	-0.40%
1982	15.78%	15.33%	0.45%
1983	15.36%	13.31%	2.05%
1984	15.32%	14.03%	1.29%
1985	15.20%	12.29%	2.91%
1986	13.93%	9.46%	4.47%
1987	12.99%	9.98%	3.01%
1988	12.79%	10.45%	2.34%
1989	12.97%	9.66%	3.31%
1990	12.70%	9.76%	2.94%
1991	12.55%	9.21%	3.34%
1992	12.09%	8.57%	3.52%
1993	11.41%	7.56%	3.85%
1994	11.34%	8.30%	3.04%
1995	11.55%	7.91%	3.64%
1996	11.39%	7.74%	3.65%
1997	11.40%	7.63%	3.77%
1998	11.74%	7.00%_	4.74%
Average		10.14%	3.04%

Regression Out	tput
Constant	0.07877
Std Err of Y Est	0.00551
R Squared	0.82271
No. of Observations	25
Degrees of Freedom	23
X Coefficient(s)	-0.47752
Std Err of Coef.	0.04622

Current Equity Risk Premium	
Avg. Yield over Study Period	10.14%
September 1999 Avg. Utility Bond Yield	7.87%
Change in Bond Yield	-2.27%
Risk Premium/Interest Rate Relationship	-47.75%
Adjustment to Average Risk Premium	1.08%
Average Risk Premium over Study Period	3.04%
Adjusted Risk Premium	4.12%

<sup>(</sup>a) Major Rate Case Decisions, Regulatory Focus, Regulatory Research Associates (January 1999 & January 1990); <u>UtilityScope Regulatory Service</u>, Argus (January 1986).

<sup>(</sup>b) Moody's <u>Public Utility Manual</u> (1998); Moody's <u>Credit Perspectives</u> (various editions).