

Northwest Natural Gas Co.
Risk Premium Analysis

	MOODY'S AVERAGE PUBLIC UTILITY BOND YIELD (1)	AUTHORIZED GAS COMPANY RETURNS (2)	INDICATED RISK PREMIUM
1980	13.15%	14.05%	0.90%
1981	15.62%	15.11%	-0.51%
1982	15.33%	15.62%	0.29%
1983	13.31%	15.25%	1.94%
1984	14.03%	15.31%	1.28%
1985	12.29%	14.75%	2.46%
1986	9.46%	13.46%	4.00%
1987	9.98%	12.74%	2.76%
1988	10.45%	12.85%	2.40%
1989	9.66%	12.88%	3.22%
1990	9.76%	12.67%	2.91%
1991	9.21%	12.46%	3.25%
1992	8.57%	12.01%	3.44%
1993	7.56%	11.35%	3.79%
1994	8.30%	11.35%	3.05%
1995	7.91%	11.43%	3.52%
1996	7.74%	11.19%	3.45%
1997	7.63%	11.29%	3.66%
1998	7.00%	11.51%	4.51%
1999	7.55%	10.66%	3.11%
2000	8.14%	11.39%	3.25%
2001	7.72%	10.95%	3.23%
2002	7.50%	11.03%	3.53%
2003 (9/03)	6.67%	11.10%	4.43%
AVERAGES	9.77%	12.60%	2.83%

INDICATED COST OF EQUITY

CURRENT MOODY'S AVG UTILITY BOND YIELD	6.63%
MOODY'S AVG ANNUAL YIELD DURING STUDY	9.77%
INTEREST RATE DIFFERENCE	-3.14%
INTEREST RATE CHANGE COEFFICIENT	-42.89%
ADJUSTMENT TO AVG RISK PREMIUM	1.35%
BASIC RISK PREMIUM	2.83%
INTEREST RATE ADJUSTMENT	1.35%
EQUITY RISK PREMIUM	4.18%
CURRENT MOODY'S SINGLE-A UTILITY BOND YIELD	6.64%
INDICATED EQUITY RETURN	10.8%

Sources:

(1) Moody's Investors Service

(2) Regulatory Focus, Regulatory Research Associates, Inc.

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