

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-19 \_\_\_\_\_

DOCKET NO. UG-19 \_\_\_\_\_

EXH. AMM-10

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REPRESENTING AVISTA CORPORATION

## ELECTRIC UTILITY RISK PREMIUM

Exh. AMM-10

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### CURRENT BOND YIELD

#### Current Equity Risk Premium

(a) Avg. Yield over Study Period	8.19%
(b) Average Utility Bond Yield	<u>4.47%</u>
Change in Bond Yield	-3.72%
(c) Risk Premium/Interest Rate Relationship	<u>-0.4304</u>
Adjustment to Average Risk Premium	1.60%
(a) Average Risk Premium over Study Period	<u>3.75%</u>
<b>Adjusted Risk Premium</b>	<b>5.35%</b>

#### Implied Cost of Equity

(b) Baa Utility Bond Yield	4.87%
Adjusted Equity Risk Premium	<u>5.35%</u>
<b>Risk Premium Cost of Equity</b>	<b>10.22%</b>

(a) Exh. AMM-10, page 3.

(b) Average bond yield on all utility bonds and Baa subset for the six-months ending Mar. 2019 based on data from Moody's Investors Service at [www.credittrends.com](http://www.credittrends.com).

(c) Exh. AMM-10, page 4.

## ELECTRIC UTILITY RISK PREMIUM

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### PROJECTED BOND YIELD

#### Current Equity Risk Premium

(a) Avg. Yield over Study Period	8.19%
(b) Average Utility Bond Yield 2019-2020	<u>5.45%</u>
Change in Bond Yield	-2.74%
(c) Risk Premium/Interest Rate Relationship	<u>-0.4304</u>
Adjustment to Average Risk Premium	1.18%
(a) Average Risk Premium over Study Period	<u>3.75%</u>
<b>Adjusted Risk Premium</b>	<b>4.93%</b>

#### Implied Cost of Equity

(b) Baa Utility Bond Yield 2019-2020	5.85%
Adjusted Equity Risk Premium	<u>4.93%</u>
<b>Risk Premium Cost of Equity</b>	<b>10.78%</b>

(a) Exh. AMM-10, page 3.

(b) Yields on all utility bonds and Baa subset based on data from IHS Global Insight, Long-Term Macro Forecast - Baseline (Jan. 10, 2019).; Energy Information Administration, Annual Energy Outlook 2019 (Jan. 24, 2019).; & Moody's Investors Service at [www.credittrends.com](http://www.credittrends.com).

(c) Exh. AMM-10, page 4.

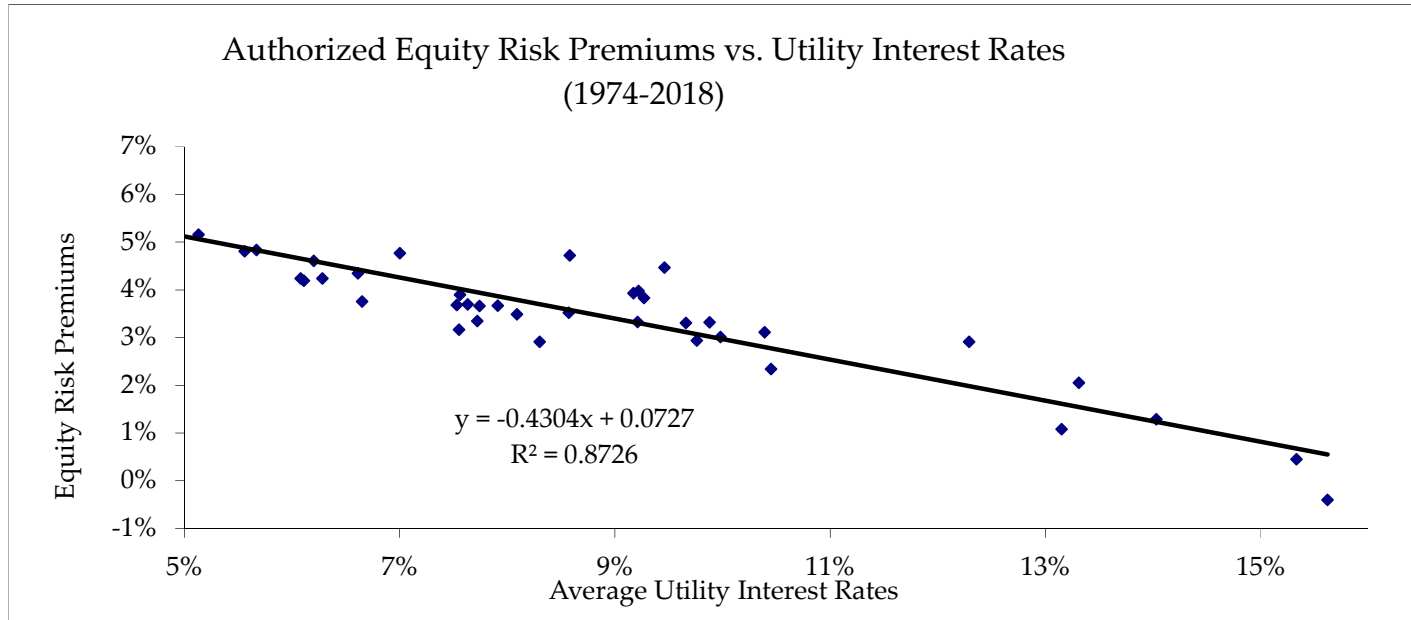
AUTHORIZED RETURNS

Year	(a)	(b)	Risk
	Allowed ROE	Average Utility 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	12.54%	9.21%	3.33%
1992	12.09%	8.57%	3.52%
1993	11.46%	7.56%	3.90%
1994	11.21%	8.30%	2.91%
1995	11.58%	7.91%	3.67%
1996	11.40%	7.74%	3.66%
1997	11.33%	7.63%	3.70%
1998	11.77%	7.00%	4.77%
1999	10.72%	7.55%	3.17%
2000	11.58%	8.09%	3.49%
2001	11.07%	7.72%	3.35%
2002	11.21%	7.53%	3.68%
2003	10.96%	6.61%	4.35%
2004	10.81%	6.20%	4.61%
2005	10.51%	5.67%	4.84%
2006	10.32%	6.08%	4.24%
2007	10.30%	6.11%	4.19%
2008	10.41%	6.65%	3.76%
2009	10.52%	6.28%	4.24%
2010	10.37%	5.56%	4.81%
2011	10.29%	5.13%	5.16%
2012	10.17%	4.26%	5.91%
2013	10.03%	4.55%	5.48%
2014	9.91%	4.41%	5.50%
2015	9.85%	4.37%	5.48%
2016	9.77%	4.11%	5.66%
2017	9.74%	4.07%	5.67%
2018	9.59%	4.34%	5.25%
<b>Average</b>	<u>11.94%</u>	<u>8.19%</u>	<u>3.75%</u>

(a) Major Rate Case Decisions, *Regulatory Focus*, Regulatory Research Associates; *UtilityScope Regulatory Service*, Argus.

(b) Moody's Investors Service.

REGRESSION RESULTS



SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.93411169
R Square	0.87256465
Adjusted R Square	0.869601037
Standard Error	0.004940916
Observations	45

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.007187719	0.007187719	294.4259957	7.49233E-21
Residual	43	0.001049744	2.44127E-05		
Total	44	0.008237463			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.07274209	0.002183289	33.31766219	2.40029E-32	0.068339068	0.077145112	0.068339068	0.077145112
X Variable 1	-0.430359598	0.025080917	-17.15884599	7.49233E-21	-0.480940089	-0.379779108	-0.480940089	-0.379779108