Exh. AMM-10
WUTC DOCKET: 190334 EXHIBIT: AMM-10 ADMIT ☑ W/D ☐ REJECT ☐
BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
DOCKET NO. UE-19
DOCKET NO. UG-19
EXH. AMM-10
ADRIEN M. MCKENZIE
REPRESENTING AVISTA CORPORATION

ELECTRIC UTILITY RISK PREMIUM

Exh. AMM-10 Page 1 of 4

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%
S C	

(a) Average Risk Premium over Study Period

Adjusted Risk Premium

5.35%

Implied Cost of Equity

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

⁽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.

⁽c) Exh. AMM-10, page 4.

ELECTRIC UTILITY RISK PREMIUM

Exh. AMM-10 Page 2 of 4

5.85%

4.93%

10.78%

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	-0.4304
Adjustment to Average Risk Premium	1.18%
(a) Average Risk Premium over Study Period	<u>3.75%</u>
Adjusted Risk Premium	4.93%
Implied Cost of Equity	

Risk Premium Cost of Equity

(b) Baa Utility Bond Yield 2019-2020

Adjusted Equity Risk Premium

⁽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.

⁽c) Exh. AMM-10, page 4.

AUTHORIZED RETURNS

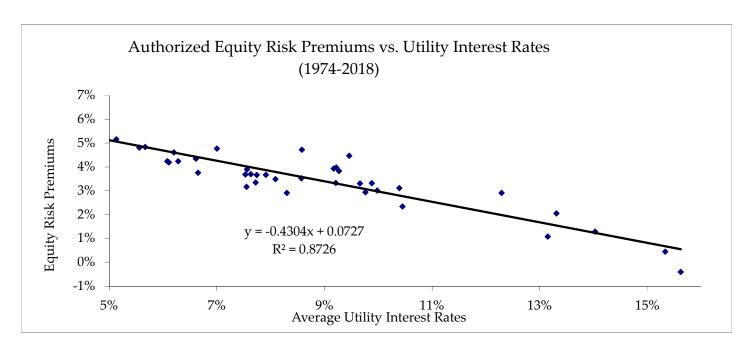
	(a)	(b)	D: 1	
Allowed		Average Utility	Risk	
Year	ROE	Bond Yield	Premium	
1974	13.10%	9.27%	3.83%	
1975	13.20%	9.88%	3.32%	
1976	13.10%	9.17%	3.93%	
1977	13.30%	8.58%	4.72%	
1978	13.20%	9.22%	3.98%	
1979	13.50%	10.39%	3.11%	
1980	14.23%	13.15%	1.08%	
1981	15.22%	15.62%	-0.40%	
1982	15.78%	15.33%	0.45%	
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	12.54%	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%	
2013	9.91%	4.41%	5.50%	
2014	9.85%	4.41%	5.48%	
2015	9.77%		5.66%	
		4.11%		
2017	9.74%	4.07%	5.67%	
2018 Average	9.59%	4.34% 8.19%	5.25% 3.75%	

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

⁽b) Moody's Investors Service.

ELECTRIC UTILITY RISK PREMIUM

REGRESSION RESULTS



SUMMARY OUTPUT

Regression Statistics						
Multiple R	0.93411169					
R Square	0.87256465					
Adjusted R Square	0.869601037					
Standard Error	0.004940916					
Observations	45					

ANOVA

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

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	<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