# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-20\_\_\_\_\_

DOCKET NO. UG-20\_\_\_\_\_

EXH. AMM-10

ADRIEN M. MCKENZIE

REPRESENTING AVISTA CORPORATION

## **CURRENT BOND YIELD**

Current Equity Risk Premium		
(a) Avg. Yield over Study Period	8.10%	
(b) Average Utility Bond Yield	<u>3.01%</u>	
Change in Bond Yield	-5.09%	
(c) Risk Premium/Interest Rate Relationship	<u>-0.4210</u>	
Adjustment to Average Risk Premium	2.14%	
(a) Average Risk Premium over Study Period	<u>3.76%</u>	
Adjusted Risk Premium	5.90%	

## **Implied Cost of Equity**

9.27%
5.90%
3.37%

- (a) Exh. AMM-10, page 3.
- (b) Average bond yield on all utility bonds and Baa subset for the six-months ending Sep. 2020 based on data from Moody's Investors Service at www.credittrends.com.

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

### PROJECTED BOND YIELD

<u>Current Equity Risk Premium</u>	
(a) Avg. Yield over Study Period	8.10%
(b) Average Utility Bond Yield 2021-2025	<u>4.43%</u>
Change in Bond Yield	-3.67%
(c) Risk Premium/Interest Rate Relationship	<u>-0.4210</u>
Adjustment to Average Risk Premium	1.55%
(a) Average Risk Premium over Study Period	<u>3.76%</u>
Adjusted Risk Premium	5.31%
Implied Cost of Equity	

Risk Premium Cost of Equity	10.10%
Adjusted Equity Risk Premium	5.31%
(b) Baa Utility Bond Yield 2021-2025	4.79%
<u>Implieu Cost of Equity</u>	

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

(b) Yields on all utility bonds and Baa subset based on data from IHS Markit, Long-Term Macro Forecast -Baseline (Jun. 29, 2020); Energy Information Administration, Annual Energy Outlook 2020 (Jan. 29, 2020); & Moody's Investors Service at www.credittrends.com.

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

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### **AUTHORIZED RETURNS**

	(a)	<b>(b)</b>	
	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	12.55%	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	11.66%	7.00%	4.66%
1999	10.77%	7.55%	3.22%
2000	11.43%	8.09%	3.34%
2000	11.09%	7.72%	3.37%
2002	11.16%	7.53%	3.63%
2002	10.97%	6.61%	4.36%
2003	10.75%	6.20%	4.55%
2004	10.54%	5.67%	4.87%
2005	10.34%	6.08%	4.26%
2000	10.32%	6.11%	4.20%
2007	10.32%	6.65%	4.21%
2008	10.52%	6.28%	4.24%
2009			
2010	10.29%	5.56%	4.73%
	10.19%	5.13%	5.06%
2012	10.02%	4.26%	5.76%
2013	9.82%	4.55%	5.27%
2014	9.76%	4.41%	5.35%
2015	9.60%	4.37%	5.23%
2016	9.60%	4.11%	5.49%
2017	9.68%	4.07%	5.61%
2018	9.56%	4.34%	5.22%
2019	9.64%	3.86%	5.78%
Average	11.86%	8.10%	3.76%

(a) Major Rate Case Decisions, *Regulatory Focus*, Regulatory Research Associates ("RRA"); *UtilityScope Regulatory Service*, Argus. Data for "general" rate cases (excluding limited-issue rider cases) beginning in 2006 (the first year such data presented by RRA).

<sup>(</sup>b) Moody's Investors Service.

### REGRESSION RESULTS



#### SUMMARY OUTPUT

Regression S	tatistics				
Multiple R	0.936629767				
R Square	0.87727532				
Adjusted R Square	0.874486122				
Standard Error	0.004786234				
Observations	46				
ANOVA	df	SS	MS	F	Significance F
Regression	1	0.007205175	0.007205175	314.5260916	1.15178E-21
Residual	44	0.001007954	2.2908E-05		
Total	45	0.008213129			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.071731079	0.00204844	35.01742055	9.02999E-34	0.06760272	0.075859439	0.06760272	0.075859439
X Variable 1	-0.4210	0.023740031	-17.73488347	1.15178E-21	-0.46887158	-0.373181801	-0.46887158	-0.373181801