

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

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

EXH. JDM-9

JOSEPH D. MILLER

REPRESENTING AVISTA CORPORATION

Sumcost Company Base Case UG-19	AVISTA UTILITIES Cost of Service General Summary For the Twelve Months Ended December 31, 2018					Natural Gas Utility Washington Jurisdiction		
(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Description				System Total	General Service Sch 101	Large General Service Sch 111/112	Interruptible Service Sch 131/132	Transportation Service Sch 146
Plant In Service								
1 Production Plant								
2 Underground Storage Plant				29,042,000	19,734,146	8,550,079	150,740	607,035
3 Distribution Plant				494,596,000	392,371,610	75,575,363	937,748	25,711,259
4 Intangible Plant				33,135,000	28,799,771	3,384,134	41,868	909,227
5 General Plant				105,780,000	92,581,114	10,375,348	128,316	2,695,221
6 Total Plant In Service				<u>662,553,000</u>	<u>533,486,641</u>	<u>97,884,945</u>	<u>1,258,673</u>	<u>29,922,741</u>
Accum Depreciation								
7 Production Plant								
8 Underground Storage Plant				(11,482,000)	-7,802,061	-3,380,346	-59,597	-239,996
9 Distribution Plant				(148,333,000)	-118,631,617	-21,958,128	-272,404	-7,470,851
10 Intangible Plant				(10,461,000)	-9,103,536	-1,060,914	-13,125	-283,425
11 General Plant				(24,728,000)	-21,642,520	-2,425,426	-29,996	-630,057
12 Total Accumulated Depreciation				<u>(195,004,000)</u>	<u>(157,179,735)</u>	<u>(28,824,815)</u>	<u>(375,121)</u>	<u>(8,624,329)</u>
13 Net Plant				467,549,000	376,306,906	69,060,131	883,552	21,298,412
14 Accumulated Deferred FIT				(89,888,000)	-72,377,677	-13,279,967	-170,763	-4,059,593
15 Miscellaneous Rate Base				21,330,000	17,327,992	3,464,075	58,280	481,652
16 Total Rate Base				<u>398,991,000</u>	<u>321,257,221</u>	<u>59,244,238</u>	<u>769,069</u>	<u>17,720,472</u>
17 Revenue From Retail Rates				91,987,000	71,131,818	17,418,557	201,030	3,235,587
18 Other Operating Revenues				2,053,000	1,691,772	259,781	2,949	98,498
19 Total Revenues				<u>94,040,000</u>	<u>72,823,587</u>	<u>17,678,338</u>	<u>203,979</u>	<u>3,334,096</u>
Operating Expenses								
20 Purchased Gas Costs				999,000	674,600	287,197	4,964	32,239
21 Underground Storage Expenses				1,532,000	1,041,000	451,027	7,952	32,022
22 Distribution Expenses				12,998,000	10,781,868	1,669,639	20,599	525,893
23 Customer Accounting Expenses				7,097,000	6,880,848	199,687	945	15,520
24 Customer Information Expenses				1,259,000	1,235,218	23,461	15	305
25 Sales Expenses				1,000	981	19	0	0
26 Admin & General Expenses				15,631,000	13,645,284	1,561,671	19,291	404,754
27 Total O&M Expenses				<u>39,517,000</u>	<u>34,259,800</u>	<u>4,192,701</u>	<u>53,766</u>	<u>1,010,733</u>
28 Taxes Other Than Income Taxes				7,929,000	6,186,443	1,394,189	16,950	341,418
29 Depreciation Expense								
30 Underground Storage Plant Depr				426,000	289,469	125,416	2,211	8,904
31 Distribution Plant Depreciation				11,827,000	9,443,538	1,771,253	21,878	590,331
32 General Plant Depreciation				5,584,000	4,887,247	547,702	6,774	142,278
33 Amortization of Intangible Plant				6,890,000	6,172,599	405,413	5,015	106,974
34 Total Depr & Amort Expense				<u>24,527,000</u>	<u>20,792,852</u>	<u>2,849,784</u>	<u>35,878</u>	<u>848,487</u>
35 Income Tax				1,832,000	516,154	1,198,655	12,038	105,153
36 Total Operating Expenses				<u>73,805,000</u>	<u>61,755,249</u>	<u>9,825,329</u>	<u>118,631</u>	<u>2,305,791</u>
37 Net Income				20,235,000	11,068,338	8,053,010	85,348	1,028,304
38 Rate of Return				5.07%	3.45%	13.59%	11.10%	5.80%
39 Return Ratio				1.00	0.68	2.68	2.19	1.14
40 Interest Expense				10,254,000	8,256,255	1,522,567	19,765	455,413

Sumcost  
Company Base Case UG-19\_\_\_\_\_

AVISTA UTILITIES  
Summary by Function with Margin Analysis  
For the Twelve Months Ended December 31, 2018

Natural Gas Utility  
Washington Jurisdiction

(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Description	System Total	General Service Sch 101	Large General Service Sch 111/112	Interruptible Service Sch 131/132	Transportation Service Sch 146			
<b>Functional Cost Components at Current Rates</b>								
1 Production	1,048,467	708,004	301,418	5,210	33,836			
2 Underground Storage	4,180,242	2,269,867	1,798,921	28,180	83,274			
3 Distribution	53,535,058	39,813,405	11,300,473	121,381	2,299,799			
4 Common	33,223,233	28,340,539	4,017,745	46,260	818,689			
5 <b>Total Current Rate Revenue</b>	<b>91,987,000</b>	<b>71,131,816</b>	<b>17,418,557</b>	<b>201,030</b>	<b>3,235,597</b>			
6 Exclude Cost of Gas w / Revenue Exp.	0	0	0	0	0			
7 <b>Total Margin Revenue at Current Rates</b>	<b>91,987,000</b>	<b>71,131,816</b>	<b>17,418,557</b>	<b>201,030</b>	<b>3,235,597</b>			
<b>Margin per Therm at Current Rates</b>								
8 Production	\$0.00473	\$0.00549	\$0.00539	\$0.00529	\$0.00095			
9 Underground Storage	\$0.01888	\$0.01760	\$0.03219	\$0.02860	\$0.00234			
10 Distribution	\$0.24173	\$0.30866	\$0.20221	\$0.12320	\$0.06459			
11 Common	\$0.15002	\$0.21972	\$0.07189	\$0.04695	\$0.02299			
12 <b>Total Current Margin Melded Rate per Therm</b>	<b>\$0.41536</b>	<b>\$0.55147</b>	<b>\$0.31169</b>	<b>\$0.20404</b>	<b>\$0.09087</b>			
<b>Functional Cost Components at Uniform Current Return</b>								
13 Production	1,048,467	708,004	301,418	5,210	33,836			
14 Underground Storage	3,784,376	2,571,497	1,114,135	19,643	79,101			
15 Distribution	53,212,222	44,285,333	6,681,123	80,844	2,164,922			
16 Common	33,941,935	30,056,442	3,050,973	37,768	796,752			
17 <b>Total Uniform Current Cost</b>	<b>91,987,000</b>	<b>77,621,277</b>	<b>11,147,649</b>	<b>143,464</b>	<b>3,074,610</b>			
18 Exclude Cost of Gas w / Revenue Exp.	0	0	0	0	0			
19 <b>Total Uniform Current Margin</b>	<b>91,987,000</b>	<b>77,621,277</b>	<b>11,147,649</b>	<b>143,464</b>	<b>3,074,610</b>			
<b>Margin per Therm at Uniform Current Return</b>								
20 Production	\$0.00473	\$0.00549	\$0.00539	\$0.00529	\$0.00095			
21 Underground Storage	\$0.01709	\$0.01994	\$0.01994	\$0.01994	\$0.00222			
22 Distribution	\$0.24027	\$0.34333	\$0.11955	\$0.08205	\$0.06080			
23 Common	\$0.15328	\$0.23302	\$0.05459	\$0.03833	\$0.02238			
24 <b>Total Current Uniform Margin Melded Rate per Therm</b>	<b>\$0.41536</b>	<b>\$0.60178</b>	<b>\$0.19948</b>	<b>\$0.14561</b>	<b>\$0.08635</b>			
25 <b>Margin to Cost Ratio at Current Rates</b>	<b>1.00</b>	<b>0.92</b>	<b>1.56</b>	<b>1.40</b>	<b>1.05</b>			
<b>Functional Cost Components at Proposed Rates</b>								
26 Production	1,048,055	707,726	301,300	5,208	33,822			
27 Underground Storage	4,929,008	2,735,213	2,066,393	32,333	95,088			
28 Distribution	62,637,507	46,710,149	13,105,086	141,106	2,681,166			
29 Common	38,307,430	30,981,727	4,394,778	50,384	880,641			
30 <b>Total Proposed Rate Revenue</b>	<b>104,922,000</b>	<b>81,134,816</b>	<b>19,867,557</b>	<b>229,030</b>	<b>3,690,597</b>			
31 Exclude Cost of Gas w / Revenue Exp.	0	0	0	0	0			
32 <b>Total Margin Revenue at Proposed Rates</b>	<b>104,922,000</b>	<b>81,134,816</b>	<b>19,867,557</b>	<b>229,030</b>	<b>3,690,597</b>			
<b>Margin per Therm at Proposed Rates</b>								
33 Production	\$0.00473	\$0.00549	\$0.00539	\$0.00529	\$0.00095			
34 Underground Storage	\$0.02226	\$0.02121	\$0.03698	\$0.03282	\$0.00267			
35 Distribution	\$0.28283	\$0.36213	\$0.23450	\$0.14322	\$0.07530			
36 Common	\$0.16394	\$0.24019	\$0.07864	\$0.05114	\$0.02473			
37 <b>Total Proposed Margin Melded Rate per Therm</b>	<b>\$0.47377</b>	<b>\$0.62902</b>	<b>\$0.35551</b>	<b>\$0.23245</b>	<b>\$0.10365</b>			
<b>Functional Cost Components at Uniform Proposed Return</b>								
38 Production	1,048,055	707,726	301,300	5,208	33,822			
39 Underground Storage	4,497,290	3,055,925	1,324,020	23,343	94,002			
40 Distribution	62,307,389	51,464,976	8,097,267	98,418	2,646,728			
41 Common	37,069,266	32,806,180	3,346,705	41,441	874,940			
42 <b>Total Uniform Proposed Cost</b>	<b>104,922,000</b>	<b>88,034,807</b>	<b>13,069,291</b>	<b>168,410</b>	<b>3,649,492</b>			
43 Exclude Cost of Gas w / Revenue Exp.	0	0	0	0	0			
44 <b>Total Uniform Proposed Margin</b>	<b>104,922,000</b>	<b>88,034,807</b>	<b>13,069,291</b>	<b>168,410</b>	<b>3,649,492</b>			
<b>Margin per Therm at Uniform Proposed Return</b>								
45 Production	\$0.00473	\$0.00549	\$0.00539	\$0.00529	\$0.00095			
46 Underground Storage	\$0.02031	\$0.02369	\$0.02369	\$0.02369	\$0.00264			
47 Distribution	\$0.28134	\$0.39900	\$0.14489	\$0.09989	\$0.07433			
48 Common	\$0.16738	\$0.25434	\$0.05989	\$0.04206	\$0.02457			
49 <b>Total Proposed Uniform Margin Melded Rate per Therm</b>	<b>\$0.47377</b>	<b>\$0.68251</b>	<b>\$0.23386</b>	<b>\$0.17093</b>	<b>\$0.10249</b>			
50 <b>Margin to Cost Ratio at Proposed Rates</b>	<b>1.00</b>	<b>0.92</b>	<b>1.52</b>	<b>1.36</b>	<b>1.01</b>			
51 <b>Current Margin to Proposed Cost Ratio</b>	<b>0.88</b>	<b>0.81</b>	<b>1.33</b>	<b>1.19</b>	<b>0.89</b>			

Sumcost Company Base Case UG-19_____	AVISTA UTILITIES Summary by Classification with Unit Cost Analysis For the Twelve Months Ended December 31, 2018				Natural Gas Utility Washington Jurisdiction			
(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Description				System Total	General Service Sch 101	Large General Service Sch 111/112	Interruptible Service Sch 131/132	Transportation Service Sch 146
<b>Cost by Classification at Current Return by Schedule</b>								
1 Commodity				19,135,184	10,161,827	7,661,049	85,171	1,227,137
2 Demand				18,798,753	10,218,386	6,724,270	92,826	1,763,271
3 Customer				54,053,063	50,751,603	3,033,239	23,033	245,189
4 Total Current Rate Revenue				91,987,000	71,131,816	17,418,557	201,030	3,235,597
Revenue per Therm at Current Rates								
5 Commodity				\$0.08640	\$0.07878	\$0.13709	\$0.08644	\$0.03446
6 Demand				\$0.08488	\$0.07922	\$0.12032	\$0.09421	\$0.04952
7 Customer				\$0.24407	\$0.39347	\$0.05428	\$0.02338	\$0.00689
8 Total Revenue per Therm at Current Rates				\$0.41536	\$0.55147	\$0.31169	\$0.20404	\$0.09087
Cost per Unit at Current Rates								
9 Commodity Cost per Therm				\$0.08640	\$0.07878	\$0.13709	\$0.08644	\$0.03446
10 Demand Cost per Peak Day Therms				\$11.88	\$9.69	\$18.04	\$15.99	\$11.63
11 Customer Cost per Customer per Month				\$27.32	\$26.14	\$82.26	\$959.72	\$510.81
<b>Cost by Classification at Uniform Current Return</b>								
12 Commodity				17,519,330	11,368,995	4,920,433	62,231	1,167,671
13 Demand				17,476,222	11,629,480	4,110,679	64,035	1,672,029
14 Customer				58,991,448	54,622,802	2,116,538	17,198	234,910
15 Total Uniform Current Cost				91,987,000	77,621,277	11,147,649	143,464	3,074,610
Cost per Therm at Current Return								
16 Commodity				\$0.07911	\$0.08814	\$0.08805	\$0.06316	\$0.03279
17 Demand				\$0.07891	\$0.09016	\$0.07356	\$0.06499	\$0.04696
18 Customer				\$0.25734	\$0.42348	\$0.03787	\$0.01746	\$0.00660
19 Total Cost per Therm at Current Return				\$0.41536	\$0.60178	\$0.19948	\$0.14561	\$0.08635
Cost per Unit at Uniform Current Return								
20 Commodity Cost per Therm				\$0.07911	\$0.08814	\$0.08805	\$0.06316	\$0.03279
21 Demand Cost per Peak Day Therms				\$11.03	\$11.03	\$11.03	\$11.03	\$11.03
22 Customer Cost per Customer per Month				\$28.80	\$28.13	\$57.40	\$718.59	\$488.40
23 Margin to Cost Ratio at Current Rates				1.00	0.92	1.56	1.40	1.05
<b>Cost by Classification at Proposed Return by Schedule</b>								
24 Commodity				22,246,641	12,023,789	8,731,332	96,327	1,395,193
25 Demand				22,268,727	12,395,539	7,745,175	106,832	2,021,180
26 Customer				60,406,632	56,715,488	3,391,050	25,870	274,224
27 Total Proposed Rate Revenue				104,922,000	81,134,816	19,867,557	229,030	3,690,597
Revenue per Therm at Proposed Rates								
28 Commodity				\$0.10045	\$0.09322	\$0.15624	\$0.09777	\$0.03918
29 Demand				\$0.10055	\$0.09610	\$0.13859	\$0.10843	\$0.05676
30 Customer				\$0.27276	\$0.43970	\$0.06068	\$0.02626	\$0.00770
31 Total Revenue per Therm at Proposed Rates				\$0.47377	\$0.62902	\$0.35551	\$0.23245	\$0.10365
Cost per Unit at Proposed Rates								
32 Commodity Cost per Therm				\$0.10045	\$0.09322	\$0.15624	\$0.09777	\$0.03918
33 Demand Cost per Peak Day Therms				\$14.05	\$11.76	\$20.78	\$18.40	\$13.33
34 Customer Cost per Customer per Month				\$30.53	\$29.21	\$91.96	\$1,077.93	\$571.30
<b>Cost by Classification at Uniform Proposed Return</b>								
35 Commodity				20,519,745	13,307,324	5,760,241	72,170	1,380,010
36 Demand				20,882,089	13,895,900	4,911,791	76,514	1,997,883
37 Customer				63,520,166	60,831,583	2,397,258	19,728	271,599
38 Total Uniform Proposed Cost				104,922,000	88,034,807	13,069,291	168,410	3,649,492
Cost per Therm at Proposed Return								
39 Commodity				\$0.09265	\$0.10317	\$0.10307	\$0.07325	\$0.03876
40 Demand				\$0.09429	\$0.10773	\$0.08789	\$0.07766	\$0.05611
41 Customer				\$0.28682	\$0.47161	\$0.04290	\$0.02002	\$0.00763
42 Total Cost per Therm at Proposed Return				\$0.47377	\$0.68251	\$0.23386	\$0.17093	\$0.10249
Cost per Unit at Uniform Proposed Return								
43 Commodity Cost per Therm				\$0.09265	\$0.10317	\$0.10307	\$0.07325	\$0.03876
44 Demand Cost per Peak Day Therms				\$13.18	\$13.18	\$13.18	\$13.18	\$13.18
45 Customer Cost per Customer per Month				\$32.10	\$31.33	\$65.01	\$821.90	\$565.63
46 Margin to Cost Ratio at Proposed Rates				1.00	0.92	1.52	1.36	1.01
47 Current Revenue to Proposed Cost Ratio				0.88	0.81	1.33	1.19	0.89

Sumcost  
Company Base Case UG-19\_\_\_\_\_

AVISTA UTILITIES  
Customer Cost Analysis  
For the Twelve Months Ended December 31, 2018

Natural Gas Utility  
Washington Jurisdiction

	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
					System	General	Large General	Interruptible	Transportation
					Total	Service	Service	Service	Service
						Sch 101	Sch 111/112	Sch 131/132	Sch 148
Description									
<b>Meter, Services, Meter Reading &amp; Billing Costs by Schedule at Requested Rate of Return</b>									
<b>Rate Base</b>									
1	Services				185,334,000	\$ 181,185,029	\$ 3,441,358	\$ 8,223	\$ 699,390
2	Services Accum Depr				(61,747,000)	\$ (60,364,704)	\$ (1,146,544)	\$ (2,740)	\$ (233,013)
3	Total Services				123,587,000	120,820,325	2,294,814	5,483	466,377
4	Meters				49,799,000	\$ 43,460,404	\$ 5,673,579	\$ 63,406	\$ 601,611
5	Meters Accum Depr				(11,217,000)	\$ (9,789,260)	\$ (1,277,948)	\$ (14,282)	\$ (135,510)
6	Total Meters				38,582,000	33,671,144	4,395,631	49,124	466,101
7	Total Rate Base				162,169,000	154,491,469	6,690,445	54,607	932,478
8	Return on Rate Base @ 7.52%				12,195,109	11,617,758	503,121	4,106	70,122
9	Tax Benefit of Interest Expense				(1,458,710)	(1,389,651)	(60,181)	(491)	(8,388)
10	Revenue Conversion Factor				0.75512	0.75512	0.75512	0.75512	0.75512
11	Rate Base Revenue Requirement				14,218,173	13,545,046	586,585	4,788	81,755
<b>Expenses</b>									
12	Services Depr Exp				4,222,000	\$ 4,127,484	\$ 78,396	\$ 187	\$ 15,932
13	Meters Depr Exp				1,734,000	\$ 1,513,290	\$ 197,554	\$ 2,208	\$ 20,948
14	Services Maintenance Exp				1,144,000	\$ 1,118,390	\$ 21,242	\$ 51	\$ 4,317
15	Meters Maintenance Exp				1,411,000	\$ 1,231,403	\$ 160,755	\$ 1,797	\$ 17,046
16	Meter Reading				1,942,000	\$ 1,905,317	\$ 36,189	\$ 24	\$ 471
17	Billing				4,535,000	\$ 4,449,336	\$ 84,509	\$ 55	\$ 1,100
18	Total Expenses				14,988,000	14,345,220	578,644	4,321	59,815
19	Revenue Conversion Factor				0.955845	0.955845	0.955845	0.955845	0.955845
20	Expense Revenue Requirement				15,680,367	15,007,893	605,375	4,521	62,578
21	Total Meter, Service, Meter Reading, and Billing Cost				29,898,540	28,552,939	1,191,960	9,308	144,333
22	Total Customer Bills				1,978,875	1,941,495	36,876	24	480
23	Average Unit Cost per Month				\$15.11	\$14.71	\$32.32	\$387.84	\$300.69
<b>Fixed Costs per Customer</b>									
24	Total Customer Related Cost				63,520,166	60,831,583	2,397,258	19,726	271,599
25	Customer Related Unit Cost per Month				\$32.10	\$31.33	\$65.01	\$821.90	\$565.83
26	Other Non-Gas Costs				41,401,834	27,203,224	10,672,033	148,684	3,377,893
27	Other Non-Gas Unit Cost per Month				\$20.92	\$14.01	\$289.40	\$6,195.16	\$7,037.28
28	Total Fixed Unit Cost per Month				\$53.02	\$45.34	\$354.41	\$7,017.07	\$7,603.11