

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-17_____

EXH. JDM-3

JOSEPH D. MILLER

REPRESENTING AVISTA CORPORATION

Sumcost
Company Base Case UG-17_____

AVISTA UTILITIES
Cost of Service General Summary
For the Twelve Months Ended December 31, 2016

Natural Gas Utility
Washington Jurisdiction

	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Description					System Total	General Service Sch 101	Large General Service Sch 111/112	High Load Factor Lg. Gen. Service Sch 121/122	Interruptible Service Sch 131/132	Transportation Service Sch 146
Plant In Service										
1 Production Plant					28,217,000	19,164,025	7,693,378	660,264	144,599	554,734
2 Underground Storage Plant					434,954,000	343,411,574	63,847,894	4,789,943	911,657	21,992,931
3 Distribution Plant					25,720,000	22,232,009	2,573,919	175,908	36,153	702,011
4 Intangible Plant					72,393,000	63,110,698	6,910,658	465,282	96,822	1,809,540
5 General Plant					561,284,000	447,918,305	81,025,849	6,091,398	1,189,231	25,059,217
6 Total Plant In Service										
Accum Depreciation										
7 Production Plant					(10,972,000)	-7,451,808	-2,991,521	-256,739	-56,227	-215,705
8 Underground Storage Plant					(141,341,000)	-113,014,410	-19,714,484	-1,490,650	-280,620	-6,840,836
9 Distribution Plant					(6,436,000)	-5,578,530	-634,505	-43,163	-8,905	-170,897
10 Intangible Plant					(22,640,000)	-19,737,077	-2,161,221	-145,511	-30,280	-565,911
11 General Plant					(181,389,000)	(145,781,825)	(25,501,731)	(1,936,064)	(376,032)	(7,793,349)
12 Total Accumulated Depreciation										
13 Net Plant					379,895,000	302,136,480	55,524,118	4,155,335	813,200	17,265,868
14 Accumulated Deferred FIT					(85,497,000)	-68,228,689	-12,342,178	-927,866	-181,148	-3,817,119
15 Miscellaneous Rate Base					25,141,000	19,227,037	4,621,980	373,929	78,073	839,981
16 Total Rate Base					319,539,000	253,134,828	47,803,920	3,601,397	710,125	14,288,730
17 Revenue From Retail Rates					87,219,000	67,621,992	15,462,088	1,024,176	190,168	2,920,576
18 Other Operating Revenues					1,857,000	1,471,063	277,781	20,927	4,125	83,103
19 Total Revenues					89,076,000	69,093,055	15,739,869	1,045,103	194,293	3,003,680
Operating Expenses										
20 Purchased Gas Costs					1,019,000	687,931	271,847	23,042	5,019	31,160
21 Underground Storage Expenses					974,000	661,508	265,562	22,791	4,991	19,148
22 Distribution Expenses					12,693,000	10,429,945	1,640,731	105,012	23,632	493,680
23 Customer Accounting Expenses					6,652,000	6,440,418	187,875	6,138	1,052	16,518
24 Customer Information Expenses					977,000	959,467	17,129	142	12	249
25 Sales Expenses					1,000	982	18	0	0	0
26 Admin & General Expenses					13,718,000	11,923,801	1,336,428	90,174	18,682	348,915
27 Total O&M Expenses					36,034,000	31,104,051	3,719,590	247,299	53,389	909,671
28 Taxes Other Than Income Taxes					6,514,000	5,068,453	1,088,721	77,224	14,682	264,920
29 Depreciation Expense										
30 Underground Storage Plant Depr					529,000	359,279	144,232	12,378	2,711	10,400
31 Distribution Plant Depreciation					10,958,000	8,690,924	1,588,766	116,815	22,618	538,877
32 General Plant Depreciation					5,303,000	4,623,044	506,226	34,083	7,092	132,554
33 Amortization of Intangible Plant					3,672,000	3,191,879	356,331	24,119	4,997	94,675
34 Total Depr & Amort Expense					20,462,000	16,865,126	2,595,555	187,395	37,418	776,505
35 Income Tax					6,402,000	3,350,446	2,619,968	161,852	25,796	243,938
36 Total Operating Expenses					69,412,000	56,388,076	10,023,834	673,771	131,285	2,195,034
37 Net Income					19,664,000	12,704,979	5,716,035	371,332	63,008	808,646
38 Rate of Return					6.15%	5.02%	11.96%	10.31%	8.87%	5.66%
39 Return Ratio					1.00	0.82	1.94	1.68	1.44	0.92
40 Interest Expense					8,979,000	7,113,052	1,343,283	101,199	19,954	401,511

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Company Base Case UG-17_____

AVISTA UTILITIES
Summary by Function with Margin Analysis
For the Twelve Months Ended December 31, 2016

Natural Gas Utility
Washington Jurisdiction

(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Description	System Total	General Service Sch 101	Large General Service Sch 111/112	High Load Factor Lg. Gen. Service Sch 121/122	Interruptible Service Sch 131/132	Transportation Service Sch 146			
Functional Cost Components at Current Rates									
1 Production	1,063,799	718,176	283,799	24,055	5,240	32,530			
2 Underground Storage	3,911,094	2,140,943	1,560,248	119,675	23,485	66,744			
3 Distribution	53,542,173	40,591,785	10,093,744	653,650	117,007	2,085,988			
4 Common	28,701,934	24,171,089	3,524,298	226,796	44,436	735,315			
5 Total Current Rate Revenue	87,219,000	67,621,992	15,462,088	1,024,176	190,168	2,920,576			
6 Exclude Cost of Gas w / Revenue Exp.	0	0	0	0	0	0			
7 Total Margin Revenue at Current Rates	87,219,000	67,621,992	15,462,088	1,024,176	190,168	2,920,576			
Margin per Therm at Current Rates									
8 Production	\$0.00526	\$0.00603	\$0.00594	\$0.00587	\$0.00584	\$0.00106			
9 Underground Storage	\$0.01932	\$0.01800	\$0.03259	\$0.02913	\$0.02611	\$0.00218			
10 Distribution	\$0.26454	\$0.34126	\$0.21087	\$0.15912	\$0.13009	\$0.06808			
11 Common	\$0.14026	\$0.20083	\$0.07305	\$0.05476	\$0.04897	\$0.02375			
12 Total Current Margin Melded Rate per Therm	\$0.42937	\$0.56613	\$0.32245	\$0.24887	\$0.21100	\$0.09507			
Functional Cost Components at Uniform Current Return									
13 Production	1,067,684	720,798	284,835	24,143	5,259	32,648			
14 Underground Storage	3,586,015	2,435,499	977,729	83,911	18,377	70,500			
15 Distribution	53,665,072	44,167,615	6,738,497	474,365	94,641	2,189,954			
16 Common	28,900,229	25,111,289	2,812,612	190,914	39,539	745,876			
17 Total Uniform Current Cost	87,219,000	72,435,201	10,813,673	773,333	157,816	3,038,977			
18 Exclude Cost of Gas w / Revenue Exp.	0	0	0	0	0	0			
19 Total Uniform Current Margin	87,219,000	72,435,201	10,813,673	773,333	157,816	3,038,977			
Margin per Therm at Uniform Current Return									
20 Production	\$0.00526	\$0.00603	\$0.00594	\$0.00587	\$0.00584	\$0.00106			
21 Underground Storage	\$0.01765	\$0.02039	\$0.02039	\$0.02039	\$0.02039	\$0.00229			
22 Distribution	\$0.26418	\$0.36977	\$0.14053	\$0.11527	\$0.10501	\$0.07129			
23 Common	\$0.14227	\$0.21023	\$0.05866	\$0.04639	\$0.04387	\$0.02428			
24 Total Current Uniform Margin Melded Rate per Therm	\$0.42937	\$0.60642	\$0.22551	\$0.18792	\$0.17510	\$0.09893			
25 Margin to Cost Ratio at Current Rates	1.00	0.93	1.43	1.32	1.20	0.96			
Functional Cost Components at Proposed Rates									
26 Production	1,067,648	720,774	284,826	24,142	5,259	32,647			
27 Underground Storage	4,512,781	2,530,142	1,747,155	133,775	26,394	75,315			
28 Distribution	59,650,482	45,298,456	11,175,558	724,603	129,825	2,322,041			
29 Common	30,257,089	25,483,620	3,720,549	238,656	46,690	767,574			
30 Total Proposed Rate Revenue	95,488,000	74,032,992	16,928,088	1,121,176	208,168	3,197,576			
31 Exclude Cost of Gas w / Revenue Exp.	0	0	0	0	0	0			
32 Total Margin Revenue at Proposed Rates	95,488,000	74,032,992	16,928,088	1,121,176	208,168	3,197,576			
Margin per Therm at Proposed Rates									
33 Production	\$0.00526	\$0.00603	\$0.00594	\$0.00587	\$0.00583	\$0.00106			
34 Underground Storage	\$0.02222	\$0.02118	\$0.03644	\$0.03251	\$0.02929	\$0.00245			
35 Distribution	\$0.29365	\$0.37924	\$0.23306	\$0.17607	\$0.14405	\$0.07559			
36 Common	\$0.14895	\$0.21335	\$0.07759	\$0.05799	\$0.05181	\$0.02499			
37 Total Proposed Margin Melded Rate per Therm	\$0.47007	\$0.61980	\$0.35302	\$0.27244	\$0.23097	\$0.10409			
Functional Cost Components at Uniform Proposed Return									
38 Production	1,067,648	720,774	284,826	24,142	5,259	32,647			
39 Underground Storage	4,157,037	2,823,318	1,133,418	97,273	21,303	81,726			
40 Distribution	59,586,103	48,803,004	7,636,284	541,418	107,483	2,497,914			
41 Common	30,677,211	26,638,592	2,996,285	203,704	42,149	796,482			
42 Total Uniform Proposed Cost	95,488,000	78,985,688	12,050,813	866,537	176,194	3,408,769			
43 Exclude Cost of Gas w / Revenue Exp.	0	0	0	0	0	0			
44 Total Uniform Proposed Margin	95,488,000	78,985,688	12,050,813	866,537	176,194	3,408,769			
Margin per Therm at Uniform Proposed Return									
45 Production	\$0.00526	\$0.00603	\$0.00594	\$0.00587	\$0.00583	\$0.00106			
46 Underground Storage	\$0.02046	\$0.02364	\$0.02364	\$0.02364	\$0.02364	\$0.00266			
47 Distribution	\$0.29333	\$0.40858	\$0.15925	\$0.13156	\$0.11926	\$0.08131			
48 Common	\$0.15102	\$0.22302	\$0.06249	\$0.04950	\$0.04677	\$0.02593			
49 Total Proposed Uniform Margin Melded Rate per Therm	\$0.47007	\$0.66126	\$0.25131	\$0.21056	\$0.19550	\$0.11096			
50 Margin to Cost Ratio at Proposed Rates	1.00	0.94	1.40	1.29	1.18	0.94			
51 Current Margin to Proposed Cost Ratio	0.91	0.86	1.28	1.18	1.08	0.86			

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Company Base Case UG-17_____

AVISTA UTILITIES
Summary by Classification with Unit Cost Analysis
For the Twelve Months Ended December 31, 2016

Natural Gas Utility
Washington Jurisdiction

(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Description	System Total	General Service Sch 101	Large General Service Sch 111/112	High Load Factor Lg. Gen. Service Sch 121/122	Interruptible Service Sch 131/132	Transportation Service Sch 146			
Cost by Classification at Current Return by Schedule									
1 Commodity	18,209,473	10,125,154	6,454,900	504,902	72,061	1,052,456			
2 Demand	17,984,792	10,318,366	5,590,710	438,522	85,422	1,551,771			
3 Customer	51,024,735	47,178,472	3,416,477	80,752	32,685	316,349			
4 Total Current Rate Revenue	87,219,000	67,621,992	15,462,088	1,024,176	190,168	2,920,576			
Revenue per Therm at Current Rates									
5 Commodity	\$0.08964	\$0.08477	\$0.13461	\$0.12269	\$0.07995	\$0.03426			
6 Demand	\$0.08854	\$0.08638	\$0.11659	\$0.10656	\$0.09478	\$0.05051			
7 Customer	\$0.25119	\$0.39498	\$0.07125	\$0.01962	\$0.03627	\$0.01030			
8 Total Revenue per Therm at Current Rates	\$0.42937	\$0.56613	\$0.32245	\$0.24887	\$0.21100	\$0.09507			
Cost per Unit at Current Rates									
9 Commodity Cost per Therm	\$0.08964	\$0.08477	\$0.13461	\$0.12269	\$0.07995	\$0.03426			
10 Demand Cost per Peak Day Therms	\$12.48	\$10.81	\$17.63	\$16.01	\$14.60	\$11.44			
11 Customer Cost per Customer per Month	\$27.12	\$25.54	\$103.58	\$295.79	\$1,361.87	\$659.06			
Cost by Classification at Uniform Current Return									
12 Commodity	17,089,428	11,100,809	4,451,880	381,769	59,835	1,095,135			
13 Demand	17,178,948	11,383,156	3,781,684	326,610	69,782	1,617,717			
14 Customer	52,950,623	49,951,236	2,580,109	64,955	28,198	326,126			
15 Total Uniform Current Cost	87,219,000	72,435,201	10,813,673	773,333	157,816	3,038,977			
Cost per Therm at Current Return									
16 Commodity	\$0.08413	\$0.09294	\$0.09284	\$0.09277	\$0.06639	\$0.03565			
17 Demand	\$0.08457	\$0.09530	\$0.07886	\$0.07936	\$0.07743	\$0.05266			
18 Customer	\$0.26067	\$0.41819	\$0.05381	\$0.01578	\$0.03129	\$0.01062			
19 Total Cost per Therm at Current Return	\$0.42937	\$0.60642	\$0.22551	\$0.18792	\$0.17510	\$0.09893			
Cost per Unit at Uniform Current Return									
20 Commodity Cost per Therm	\$0.08413	\$0.09294	\$0.09284	\$0.09277	\$0.06639	\$0.03565			
21 Demand Cost per Peak Day Therms	\$11.92	\$11.92	\$11.92	\$11.92	\$11.92	\$11.92			
22 Customer Cost per Customer per Month	\$28.15	\$27.04	\$78.23	\$237.93	\$1,174.92	\$679.43			
23 Margin to Cost Ratio at Current Rates	1.00	0.93	1.43	1.32	1.20	0.96			
Cost by Classification at Proposed Return by Schedule									
24 Commodity	20,295,103	11,424,807	7,086,612	552,517	78,862	1,152,304			
25 Demand	20,180,003	11,736,778	6,161,249	481,799	94,124	1,706,053			
26 Customer	55,012,894	50,871,407	3,680,227	86,860	35,181	339,219			
27 Total Proposed Rate Revenue	95,488,000	74,032,992	16,928,088	1,121,176	208,168	3,197,576			
Revenue per Therm at Proposed Rates									
28 Commodity	\$0.09991	\$0.09565	\$0.14779	\$0.13426	\$0.08750	\$0.03751			
29 Demand	\$0.09934	\$0.09826	\$0.12849	\$0.11707	\$0.10444	\$0.05554			
30 Customer	\$0.27082	\$0.42589	\$0.07675	\$0.02111	\$0.03904	\$0.01104			
31 Total Revenue per Therm at Proposed Rates	\$0.47007	\$0.61980	\$0.35302	\$0.27244	\$0.23097	\$0.10409			
Cost per Unit at Proposed Rates									
32 Commodity Cost per Therm	\$0.09991	\$0.09565	\$0.14779	\$0.13426	\$0.08750	\$0.03751			
33 Demand Cost per Peak Day Therms	\$14.01	\$12.29	\$19.43	\$17.59	\$16.08	\$12.58			
34 Customer Cost per Customer per Month	\$29.24	\$27.54	\$111.58	\$318.17	\$1,465.88	\$706.71			
Cost by Classification at Uniform Proposed Return									
35 Commodity	19,136,444	12,428,737	4,984,975	427,520	66,780	1,228,432			
36 Demand	19,366,121	12,832,425	4,263,157	368,193	78,667	1,823,679			
37 Customer	56,985,434	53,724,526	2,802,681	70,824	30,747	356,658			
38 Total Uniform Proposed Cost	95,488,000	78,985,688	12,050,813	866,537	176,194	3,408,769			
Cost per Therm at Proposed Return									
39 Commodity	\$0.09421	\$0.10405	\$0.10396	\$0.10388	\$0.07410	\$0.03999			
40 Demand	\$0.09534	\$0.10743	\$0.08891	\$0.08947	\$0.08728	\$0.05937			
41 Customer	\$0.28053	\$0.44978	\$0.05845	\$0.01721	\$0.03411	\$0.01161			
42 Total Cost per Therm at Proposed Return	\$0.47007	\$0.66126	\$0.25131	\$0.21056	\$0.19550	\$0.11096			
Cost per Unit at Uniform Proposed Return									
43 Commodity Cost per Therm	\$0.09421	\$0.10405	\$0.10396	\$0.10388	\$0.07410	\$0.03999			
44 Demand Cost per Peak Day Therms	\$13.44	\$13.44	\$13.44	\$13.44	\$13.44	\$13.44			
45 Customer Cost per Customer per Month	\$30.29	\$29.08	\$84.97	\$259.43	\$1,281.11	\$743.04			
46 Margin to Cost Ratio at Proposed Rates	1.00	0.94	1.40	1.29	1.18	0.94			
47 Current Revenue to Proposed Cost Ratio	0.91	0.86	1.28	1.18	1.08	0.86			

Sumcost
Company Base Case UG-17 _____

AVISTA UTILITIES
Customer Cost Analysis
For the Twelve Months Ended December 31, 2016

Natural Gas Utility
Washington Jurisdiction

(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Description				System	General	Large General	High Load Factor	Interruptible	Transportation
				Total	Service	Service	Lg. Gen. Service	Service	Service
Meter, Services, Meter Reading & Billing Costs by Schedule at Requested Rate of Return									
Rate Base									
1	Services			152,554,000	\$ 149,319,668	\$ 2,665,825	\$ 66,177	\$ 5,818	\$ 496,512
2	Services Accum. Depr.			(57,597,000)	\$ (56,375,873)	\$ (1,006,486)	\$ (24,985)	\$ (2,197)	\$ (187,459)
3	Total Services			94,957,000	92,943,795	1,659,339	41,192	3,621	309,053
4	Meters			57,482,000	\$ 49,283,881	\$ 7,070,798	\$ 178,660	\$ 90,937	\$ 857,724
5	Meters Accum. Depr.			(13,440,000)	\$ (11,523,179)	\$ (1,653,240)	\$ (41,773)	\$ (21,262)	\$ (200,546)
6	Total Meters			44,042,000	37,760,702	5,417,559	136,887	69,675	657,177
7	Total Rate Base			138,999,000	130,704,497	7,076,897	178,079	73,296	966,230
8	Return on Rate Base @ 7.76%			10,786,322	10,142,669	549,167	13,819	5,688	74,979
9	Tax Benefit of Interest Expense			(1,367,055)	(1,285,479)	(69,601)	(1,751)	(721)	(9,503)
10	Revenue Conversion Factor			0.62065	0.62065	0.62065	0.62065	0.62065	0.62065
11	Rate Base Revenue Requirement			15,176,456	14,270,829	772,683	19,443	8,003	105,497
Expenses									
12	Services Depr Exp			3,678,000	\$ 3,600,022	\$ 64,272	\$ 1,595	\$ 140	\$ 11,971
13	Meters Depr Exp			1,857,000	\$ 1,592,153	\$ 228,428	\$ 5,772	\$ 2,938	\$ 27,709
14	Services Maintenance Exp			1,555,000	\$ 1,522,032	\$ 27,173	\$ 675	\$ 59	\$ 5,061
15	Meters Maintenance Exp			1,377,000	\$ 1,180,611	\$ 169,383	\$ 4,280	\$ 2,178	\$ 20,547
16	Meter Reading			1,918,000	\$ 1,883,580	\$ 33,628	\$ 278	\$ 24	\$ 489
17	Billing			4,037,000	\$ 3,964,553	\$ 70,780	\$ 586	\$ 52	\$ 1,030
18	Total Expenses			14,422,000	13,742,952	593,663	13,186	5,392	66,808
19	Revenue Conversion Factor			0.954839	0.954839	0.954839	0.954839	0.954839	0.954839
20	Expense Revenue Requirement			15,104,117	14,392,952	621,742	13,809	5,647	69,967
21	Total Meter, Service, Meter Reading, and Billing Cost			30,280,573	28,663,781	1,394,425	33,253	13,650	175,464
22	Total Customer Bills			1,881,222	1,847,462	32,983	273	24	480
23	Average Unit Cost per Month			\$16.10	\$15.52	\$42.28	\$121.81	\$568.73	\$365.55
Fixed Costs per Customer									
24	Total Customer Related Cost			56,985,434	53,724,526	2,802,681	70,824	30,747	356,658
25	Customer Related Unit Cost per Month			\$30.29	\$29.08	\$84.97	\$259.43	\$1,281.11	\$743.04
26	Other Non-Gas Costs			38,502,566	25,261,163	9,248,132	795,713	145,447	3,052,111
27	Other Non-Gas Unit Cost per Month			\$20.47	\$13.67	\$280.39	\$2,914.70	\$6,060.29	\$6,358.56
28	Total Fixed Unit Cost per Month			\$50.76	\$42.75	\$365.36	\$3,174.13	\$7,341.40	\$7,101.60