

NATURAL GAS

Avista Revised Revenue Growth Factor (K-Factor) for Rate Years 2 and 3 (May 1, 2019 and May 1, 2020)

(Shaded rows or percentages represent agreement between Company and Staff)

Avista Revised Revenue Growth Escalator (K-Factor) Calculation	(a)	(b)	(c)	(d)
Category	Growth Rate 2013-2016	Agreed-to Growth Rate	Revenue Portion of Category	Weighted Avg Escalation (a) or (b) x (c)
Operating Expenses (1)		2.03%	42.75%	0.87%
Depreciation/Amortization	10.93%		20.79%	2.27%
Taxes Other than Income	5.21%		7.57%	0.39%
Net Plant After ADFIT (2)		5.02%	28.90%	1.45%
Annual Growth In Sales Revenue (2)			100.00%	-0.84%
Total Escalator % Company				4.14%
See Exh. EMA- 14, page 4 for growth rates and page 2 for revenue proportion and annual growth in sales revenue.				
(1) On rebuttal Avista agrees with Staff's operating expenses growth component.				
(2) Staff witness Mr. Hancock supports Avista's Net Plant after ADFIT and Annual Growth in Sales Revenue components.				

Staff Composite Revenue Escalator Calculation	(a)	(b)	(c)	(d)
Category	Growth Rate 2007-2016	Agreed-to Growth Rate	Revenue Portion of Category	Weighted Avg Escalation (a) or (b) x (c)
Operating Expenses - UTC Indices		2.03%	42.75%	0.87%
Depreciation/Amortization	6.17%		20.79%	1.28%
Taxes Other than Income	5.41%		7.57%	0.41%
Net Plant After ADFIT (2)		5.02%	28.90%	1.45%
Annual Growth In Sales Revenue (2)			100.00%	-0.84%
Total Escalator % Staff				3.17%
See Exh. CSH-4, page 1.				
(1) On rebuttal Avista agrees with Staff's operating expenses growth component.				
(2) Staff witness Mr. Hancock supports Avista's Net Plant after ADFIT and Annual Growth in Sales Revenue components.				

NATURAL GAS COST AND REVENUE TREND CALCULATIONS 2013-2016

AVI (Shaded rows or %'s represent agreement between Company and Staff)

WASHINGTON NATURAL GAS RESULTS

Commission Basis Results of Operations
(000'S OF DOLLARS)

Line No.	DESCRIPTION	2007 Restated Total	2008 Restated Total	2009 Restated Total	2010 Restated Total	2011 Restated Total	2012 Restated Total	2013 Restated Total	2014 Restated Total	2015 Restated Total	2016 Restated Total
Total Escalator % Company											
1	Total General Business	\$ 209,186	\$ 203,727	\$ 182,706	\$ 142,370	\$ 152,457	\$ 142,048	\$ 144,257	\$ 154,546	\$ 149,865	\$ 150,970
2	Total Transportation	3,263	3,369	3,275	3,155	3,448	3,627	3,915	3,960	4,054	4,477
3	Other Revenues	68,416	153,093	84,085	115,257	98,841	68,107	403	332	7,129	1,020
4	Total Gas Revenues	280,865	360,189	270,066	260,782	254,746	213,782	148,575	158,838	161,048	156,467
EXPENSES											
Production Expenses											
5	City Gate Purchases	222,364	310,276	194,267	197,494	188,167	139,073	76,801	84,187	79,634	63,460
6	Purchased Gas Expense	792	(9,103)	803	800	14	130	891	779	840	994
7	Net Nat Gas Storage Trans	283	2	10,720	(3,322)	(4,366)	4,352	-	-	-	1
8	Total Production	223,439	301,175	205,790	194,972	183,815	143,555	77,692	84,966	80,474	64,455
Underground Storage											
9	Operating Expenses	451	436	403	380	585	712	820	893	857	974
10	Depreciation/Amortization	310	276	393	348	395	438	380	402	439	492
11	Taxes	95	113	121	116	19	17	158	184	196	210
12	Total Underground Storage	856	825	917	844	999	1,167	1,358	1,479	1,492	1,676
Distribution											
13	Operating Expenses	6,467	6,123	7,700	7,696	8,854	9,511	10,820	10,704	12,315	12,050
14	Depreciation/Amortization	5,605	5,673	6,064	6,367	6,649	6,978	7,925	8,513	9,088	9,866
15	Taxes	9,844	8,941	8,746	7,223	8,051	7,825	8,116	8,719	8,554	8,383
16	Total Distribution	21,916	20,737	22,510	21,286	23,554	24,314	26,861	27,936	29,957	30,299
17	Customer Accounting	4,487	4,692	5,586	5,234	5,740	5,796	6,270	6,108	6,632	6,811
18	Customer Service & Information	4,658	5,169	7,609	9,505	9,777	6,955	983	865	837	964
19	Sales Expenses	516	442	497	105	3	3	3	-	-	-
Administrative & General											
20	Operating Expenses	8,901	9,706	9,770	11,383	11,585	13,419	11,862	12,777	14,007	13,267
21	Depreciation/Amortization	1,498	1,803	1,999	2,412	2,734	3,276	3,868	4,389	5,649	6,260
22	Regulatory Amortizations	(815)	(242)	440	216	(186)	171	91	(91)	(2,087)	1,079
23	Taxes	20	17	19	24	-	(1)	-	-	-	-
24	Total Admin. & General	9,604	11,284	12,228	14,035	14,133	16,865	15,821	17,075	17,569	20,606
25	Total Gas Expense	265,476	344,324	255,137	245,981	238,021	198,655	128,988	138,429	136,961	124,811
26	OPERATING INCOME BEFORE FIT	15,389	15,865	14,929	14,801	16,725	15,127	19,587	20,409	24,087	31,656
FEDERAL INCOME TAX											
27	Current Accrual	5,010	506	2,468	(5,811)	(907)	(1,185)	4,253	(6,945)	(729)	(1,133)
28	Debt Interest	-	-	-	-	63	3	(56)	(137)	(37)	11
29	Deferred FIT	(1,442)	3,320	1,238	9,594	5,691	5,033	1,403	13,105	7,842	9,923
30	Amort ITC	(31)	(31)	(30)	(29)	(27)	(25)	(24)	(20)	(20)	(17)
31	NET OPERATING INCOME	\$ 11,852	\$ 12,070	\$ 11,253	\$ 11,047	\$ 11,906	\$ 11,301	\$ 14,011	\$ 14,406	\$ 17,031	\$ 22,872
RATE BASE											
PLANT IN SERVICE											
32	Underground Storage	\$ 13,758	\$ 15,260	\$ 21,798	\$ 20,047	\$ 22,008	\$ 24,365	\$ 24,711	\$ 25,235	\$ 25,720	\$ 26,868
33	Distribution Plant	229,417	240,778	255,976	269,469	281,279	296,152	313,469	337,894	360,612	390,508
34	General Plant	21,708	24,256	27,747	33,401	38,971	44,809	52,223	59,169	75,514	82,624
35	Total Plant in Service	264,883	280,294	305,521	322,917	342,258	365,326	390,403	422,298	461,846	500,000
ACCUMULATED DEPRECIATION/AMORT											
36	Underground Storage	7,427	7,581	7,807	7,912	8,286	8,677	9,088	9,521	9,906	10,318
37	Distribution Plant	77,997	81,405	84,021	89,620	97,489	102,678	108,662	114,795	121,623	129,098
38	General Plant	7,136	8,309	8,882	10,722	10,926	12,186	14,724	17,429	20,741	23,473
39	Total Accumulated Depreciation/Amortization	92,560	97,295	100,710	108,254	116,701	123,541	132,474	141,745	152,270	162,889
40	NET PLANT	172,323	182,999	204,811	214,663	225,557	241,785	257,929	280,553	309,576	337,111
41	DEFERRED TAXES	(26,823)	(28,945)	(31,005)	(36,762)	(42,004)	(46,498)	(50,170)	(54,652)	(64,929)	(74,181)
42	Net Plant After DFIT	145,500	154,054	173,806	177,901	183,553	195,287	207,759	225,901	244,647	262,930
43	GAS INVENTORY	5,607	15,327	8,440	10,226	13,753	13,107	11,702	14,762	12,740	9,116
44	GAIN ON SALE OF BUILDING	(197)	(152)	(109)	(44)	(14)	-	-	-	-	-
45	OTHER	789	452	(1,359)	(1,163)	(1,012)	(816)	(332)	(479)	(485)	(249)
46	WORKING CAPITAL	-	-	-	-	-	-	5,695	10,073	16,069	14,800
47	TOTAL RATE BASE	\$ 151,699	\$ 169,681	\$ 180,778	\$ 186,920	\$ 196,280	\$ 207,578	\$ 224,824	\$ 250,257	\$ 272,971	\$ 286,597

NATURAL GAS COST AND REVENUE TREND CALCULATIONS 2013-2016

**AVISTA UTILITIES
WASHINGTON NATURAL GAS RESULTS
(000'S OF DOLLARS)**

Natural Gas Data for Escalators

Line No.		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Exclude Gas Cost and Adder Schedule Expenses (DSM Tariff Rider, Decoupling Surcharge/Rebate) from O&M												
1	Underground Storage	451	436	403	380	585	712	820	893	857	974	
2	Distribution	6,467	6,123	7,700	7,696	8,854	9,511	10,820	10,704	12,315	12,050	
3	Customer Accounting	4,487	4,692	5,586	5,234	5,740	5,796	6,270	6,108	6,632	6,811	
4	Customer Service and Information	4,658	5,169	7,609	9,505	9,777	6,955	983	865	837	964	
5	Sales	516	442	497	105	3	3	3	0	0	0	
6	Administrative and General	8,901	9,706	9,770	11,383	11,585	13,419	11,862	12,777	14,007	13,267	
7	Operating expenses excluding production	25,480	26,568	31,565	34,303	36,544	36,396	30,758	31,347	34,648	34,066	
8	Add Non PGA production O&M expenses	792	783	802	800	981	928	891	779	840	994	
9	Deduct Gas Cost Rev Related Expenses	-1,115	-1,054	-865	-564	-601	-535	-549	-602	-570	-454	
10	Deduct DSM Tariff Rider Expenses	-3,862	-4,412	-6,825	-8,477	-9,017	-5,984	0	0	0	0	
11	Deduct Decoupling Surcharge/Rebate Expenses	0	-3	-5	-3	-3	-1	0	0	0	0	
12	Adjusted Operating Expenses	21,295	21,882	24,672	26,059	27,904	30,804	31,100	31,524	34,918	34,606	
	Annual Percentage Change	3.33%	2.76%	12.75%	5.62%	7.08%	10.39%	0.96%	1.36%	10.77%	-0.89%	
Depreciation/Amortization												
13	Underground Storage	310	276	393	348	395	438	380	402	439	492	
14	Distribution	5,605	5,673	6,064	6,367	6,649	6,978	7,925	8,513	9,088	9,866	
15	Administrative & General	1,498	1,803	1,999	2,412	2,734	3,276	3,868	4,389	5,649	6,260	
16	Total Depreciation/Amortization	7,413	7,752	8,456	9,127	9,778	10,692	12,173	13,304	15,176	16,618	
	Annual Percentage Change	6.46%	4.57%	9.08%	7.94%	7.13%	9.35%	13.85%	9.29%	14.07%	9.50%	
Exclude Adder Schedule amortizations (Decoupling Surcharge/Rebate) from Regulatory Amortizations												
17	Regulatory Amortizations	-815	-242	440	216	-186	171	91	-91	-2,087	1,079	
18	Deduct Decoupling Surcharge/Rebate Expenses	-85	-432	-710	-494	-494	-184	0	0	0	0	
19	Adjusted Regulatory Amortizations	-900	-674	-270	-278	-680	-13	91	-91	-2,087	1,079	
Exclude Gas Cost and Adder Schedule excise taxes (DSM Tariff Rider, Decoupling Surcharge/Rebate) from Taxes Other Than Income Tax												
20	Underground Storage	95	113	121	116	19	17	158	184	196	210	
21	Distribution	9,844	8,941	8,746	7,223	8,051	7,825	8,116	8,719	8,554	8,383	
22	Administrative & General	20	17	19	24	0	-1	0	0	0	0	
23	Total Taxes Other Than Income	9,959	9,071	8,886	7,363	8,070	7,841	8,274	8,903	8,750	8,593	
24	Deduct Gas Cost Excise Tax	-6,261	-5,917	-4,858	-3,171	-3,374	-3,003	-3,083	-3,380	-3,197	-2,548	
25	Deduct DSM Tariff Rider Excise Tax	-154	-176	-272	-338	-359	-239	0	0	0	0	
26	Deduct Decoupling Surcharge/Rebate Excise Tax	-3	-17	-28	-20	-20	-7	0	0	0	0	
27	Adjusted Taxes Other Than Income	3,541	2,961	3,728	3,834	4,317	4,592	5,191	5,523	5,553	6,045	
	Annual Percentage Change	-1.34%	-16.38%	25.90%	2.84%	12.59%	6.38%	13.04%	6.40%	0.54%	8.86%	
Planned (Per Rate Period Study)												
28	Net Plant After Deferred Income Tax	145,500	154,054	173,806	177,901	183,553	195,287	207,759	225,901	244,647	262,930	
	Annual Percentage Change	3.35%	5.88%	12.82%	2.36%	3.18%	6.39%	6.39%	8.73%	8.30%	7.47%	
										14.15%	5.00%	5.04%

ANNUAL AND COMPOUND GROWTH RATES

Line No.	Natural Gas K-Factor Growth Rate Analysis	Rate Year 1							Rate Years 2 & 3			
	Compound Growth Rates to 2016	2007-2016	2008-2016	2009-2016	2010-2016	2011-2016	2012-2016	2013-2016	2018-2020	2018	2019	2020
5	Adjusted Operating Expenses	5.54%	5.90%	4.95%	4.84%	4.40%	2.95%	3.62%	3.26%	used Staff's proposed = 2.03%		
6	Adjusted Depreciation/Amortization	9.38%	10.00%	10.13%	10.50%	11.19%	11.66%	10.93%	See page 1			
7	Adjusted Taxes Other than Income	6.12%	9.33%	7.15%	7.88%	6.97%	7.11%	5.21%				
8	Net Plant After Deferred Income Taxes	6.80%	6.91%	6.09%	6.73%	7.45%	7.72%	8.17%	5.02%	(1)		
		Portion							2013-2016			
9	Depreciation	20.79%	1.95%	2.08%	2.11%	2.18%	2.33%	2.42%	2.27%	2019-2020		
10	O&M	42.75%	2.37%	2.52%	2.12%	2.07%	1.88%	1.26%	1.55%	0.87%	Agreed to Staff, See page 1	
11	Taxes OTI	7.57%	0.46%	0.71%	0.54%	0.60%	0.53%	0.54%	0.39%	0.39%		
12	Net Plant After Revenues	28.90%	1.96%	2.00%	1.76%	1.94%	2.23%	2.23%	2.36%	1.45%	Rate Base Reduction (1) Staff Agreed	
13			-0.84%	-0.84%	-0.84%	-0.84%	-0.84%	-0.84%	-0.84%	-0.84%	Staff Agreed	
14	Total K Factor %	5.91%	6.46%	5.68%	5.95%	6.05%	5.61%	5.73%	4.14%			

(1) Reduction in net plant compared to previous years trend warrants a growth rate reduction for the 2-Year period 2019-2020. This is based on planned transfers to plant and impacts of A/D & ADFIT for those years. Reductions in net plant in 2019 and 2020 results from: 1) timing of transfers to plant (less in 2019-2020); 2) the continuing impact of repairs and bonus depreciation on ADFIT through 2020; and 3) carrying forward A/D on all plant from December 31, 2016 on an AMA basis to each rate year, increases A/D, reducing the net plant adjustment amount in each year.