Exh. EMA-14	
BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION	
DOCKET NO. UE-170485	
DOCKET NO. UG-170486	
EXH. EMA-14	
ELIZABETH M. ANDREWS	
REPRESENTING AVISTA CORPORATION	

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>(b)</b>	(c)	(d)							
	Growth	Agreed-to	Revenue	Weighted Avg							
	Rate 2013-	Growth	Portion of	<b>Escalation</b>							
Category	2016	Rate	Category	(a) or (b) x (c)							
Operating Expenses (1)		2.03%	41.40%	0.84%							
Depreciation/Amortization	10.93%		20.13%	2.20%							
Taxes Other than Income	5.21%		7.33%	0.38%							
Net Plant After ADFIT (2)		5.02%	31.15%	1.56%							
Annual Growth In Sales Revenue (2)			100.00%	-0.84%							
Total Escalator % Compan	y			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>(b)</b>	(c)	( <b>d</b> )						
	Growth	Agreed-to	Revenue	Weighted Avg						
	Rate	Growth	Portion of	<b>Escalation</b>						
Category	2007-2016	Rate	Category	(a) or (b) x (c)						
Operating Expenses - UTC Indices		2.03%	41.40%	0.84%						
Depreciation/Amortization	6.17%		20.13%	1.24%						
Taxes Other than Income	5.41%		7.33%	0.40%						
Net Plant After ADFIT (2)		5.02%	31.15%	1.56%						
Annual Growth In Sales Revenue (2)		_	100.00%	-0.84%						
Total Escalator % Staff										
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 C	Growth in Sales 1	Revenue compon	ents.							

Reduction to Growth in Net Plant 2019-2020 Staff Agrees

## AVISTA UTILITIES

WASHI (Shaded rows or %'s represent agreement between Company and Staff)
K-FACTOR RESTATED COMMISSION BASIS STUDY
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

(000'S	OF DOLLARS)		2016 Restated	
		Restated	Commission Basis	
Line	DESCRIPTION	TOTAL	TOTAL	
No.	DESCRIPTION Total Escalator % Company			
	Workpaper Reference	R-Ttl	PF-STtl	
			11 51	
1	REVENUES Total General Business	\$ 150,970	\$ 150,970	
2	Total Transportation	4,477	4,477	
3	Other Revenues	1,020	1,020	
4	Total Gas Revenues	156,467	156,467	
	EXPENSES			
	Production Expenses			
5	City Gate Purchases	63,460	63,460	
6	T Purchased Gas Expense	994	994	REVENUE GROWTH FACTOR (K-FACTOR) CALCULATION
7 8	Net Nat Gas Storage Trans Total Production	64,454	64,454	
0	Total Production	04,454	04,454	
	Underground Storage			Authorized ROR
9	Operating Expenses	974	974	Capital Weighted
10 11	Depreciation/Amortization Taxes	492 210	492 210	Component         Structure         Cost         Cost         Tax on           Total Debt         51.5%         5.20%         2.68%         Tax equity return
12	Total Underground Storage	1,676	1,676	Total Debt 51.5% 5.20% 2.68% Tax equity return Common 48.5% 9.50% 4.61% 53.85% 2.48%
	Total Chaciground Storage	2,070	1,070	Total 100.00% 7.29%
	Distribution			Tax on Equity Return 2.48%
13	Operating Expenses	12,050	12,050	Total % to apply to RB 9.77%
14	Depreciation/Amortization	9,853	9,853	
15	Taxes	8,383	8,383	
16	Total Distribution	30,286	30,286	
17	Customer Accounting	6,812	6,812	
18	Customer Service & Information	963	963	Portion 2013-2016 2018-2020
19	Sales Expenses			Revenue on CB * of Total Growth Rate Growth Rate
				<b>Depreciation</b> 16,605 20.13% 10.93% <b>Agree to</b>
20	Administrative & General Operating Expenses	13,350	13,350	O&M 34,149 41.40% 3.62% 3.26% Staff  Taxes OTI 6,045 7.33% 5.21%
21	Depreciation/Amortization	6,260	6,260	Net Plant After ADFIT
22	Regulatory Amortizations	1,079	1,079	262,931 25,694 31.15% 8.17% 5.02% Reduction to Growt
23	Taxes		-	(RB*9.77%)
24	Total Admin. & General	20,689	20,689	Revenue \$ 82,493 Non-gas cost revenues (1)
25	Total Gas Expense	124,880	124,880	*includes revenue related expenses
	<b>F</b>		, , , , ,	(1) Non-gas cost Revenues, covering investment-related costs and operating expenses.
26	OPERATING INCOME BEFORE FIT	31,587	31,587	
	FEDERAL INCOME TAX			Revenues Growth: (Per Adj. 18.04 w/ps - 2.333 years from 2016 to 04.30.2019)
27	Current Accrual	(1,260)	(1,260)	Annual
28	Debt Interest	12	12	\$ 1,625 <b>\$ 697</b>
29	Deferred FIT	9,923	9,923	
30	Amort ITC	(17)	(17)	D + V - 2.0.2
31	NET OPERATING INCOME	\$ 22,929	\$ 22,929	Rate Yrs 2 & 3 K-Factor
31	NET OFERATING INCOME	\$ 22,727	φ 22,727	2019-2020
	RATE BASE			Depreciation 2.20%
	PLANT IN SERVICE			O&M 0.84%
32	Underground Storage Distribution Plant	\$ 26,868		Taxes OTI 0.38%
33 34	General Plant	390,508 82,624	390,508 82,624	Net Plant After ADFIT 1.56% Revenues -0.84%
35	Total Plant in Service	500,000	500,000	4.14%
	ACCUMULATED DEPRECIATION/AMORT			
36	Underground Storage	(10,317)	(10,317)	
37	Distribution Plant	(129,098)		
38	General Plant	(23,473)	(23,473)	
39	Total Accumulated Depreciation/Amortization	(162,888)		
40	NET PLANT	337,112 (74,181)	337,112	
41	DEFERRED TAXES		` ′ ′	
42	Net Plant After DFIT	262,931	262,931	
43	GAS INVENTORY	9,116	9,116	
44 45	GAIN ON SALE OF BUILDING OTHER	(249)	(249)	
46	WORKING CAPITAL	14,800	14,800	
47	TOTAL RATE BASE	\$ 286,598	\$ 286,598	
4/	TOTAL RATE DAGE	g 400,098	Ψ 200,398	

## NATURAL GAS COST AND REVENUE TREND CALCULATIONS 2013-2016

 $\boldsymbol{AVI'}$  (Shaded rows or %'s represent agreement between Company and Staff)

## WASHINGTON NATURAL GAS RESULTS

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

(000	5 OF DOLLARS)		•	•	•		•	•	,		
l		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Line		Restated	Restated	Restated	Restated	Restated	Restated	Restated	Restated	Restated	Restated
No.	DESCRIPTION	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
	Total Escalator % Company										
1	Total General Business	\$ 209,186	\$ 203,727	\$ 182,706	\$ 142,370	\$ 152,457					\$ 150,970
2	Total Transportation Other Revenues	3,263 68,416	3,369 153,093	3,275 84,085	3,155 115,257	3,448 98,841	3,627 68,107	3,915 403	3,960 332	4,054 7,129	4,477 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
4		200,005	300,109	270,000	200,782	254,740	213,762	140,575	150,050	101,040	150,407
	EXPENSES										
_	Production Expenses	222.244	210.25	10125	107.404	100.14	120.052	<b>#</b> < 001	04.10	<b>50</b> (24	(2.4(0
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 7	Purchased Gas Expense Net Nat Gas Storage Trans	792 283	(9,103) 2	803 10,720	(3,322)	14 (4,366)	130 4,352	891	779	840	994 1
8	5	223,439	301,175	205,790	194,972	183,815	143,555	77,692	84,966	80,474	64,455
8	Total Production	223,439	301,175	205,790	194,972	183,815	143,555	77,692	84,966	80,474	04,455
	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)		15.055	- 15.500	-
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
20	FEDERAL INCOME TAX	15,567	15,665	14,727	14,001	10,723	13,127	17,507	20,407	24,007	31,030
27	Current Accrual	5,010	506	2,468	(5,811)	(907)	(1,185)	4,253	(6,945)	(729)	(1,133)
28	Debt Interest	3,010	300	2,400	(3,611)	63	(1,163)	(56)			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)			(17)
30	Allorette	(31)	(31)	(30)	(23)	(21)	(23)	(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
31		ψ 11,652	ψ 12,070	ψ 11,233	ψ 11,047	ÿ 11,700	ψ 11,501	ψ 14,011	ψ 14,400	ψ 17,031	φ 22,672
	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
	DEFERRED TAXES	(26,823)	(28,945)	(31,005)	(36,762)	(42,004)	(46,498)	(50,170)		(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		\$ 272,971	\$ 286,597
4/	TOTAL RATE BASE	a 151,099	p 109,081	a 100,//8	p 180,920	» 190,280	p 207,578	p 224,824	\$ 250,257	\$ 414,9/I	p 280,597

## NATURAL GAS COST AND REVENUE TREND CALCULATIONS 2013-2016

Portion

20.13%

41.40%

7.33%

31.15%

1.89%

2.29%

0.45%

2.12%

-0.84%

5.91%

2.01%

2.44%

0.68%

2.15%

-0.84%

6.45%

2.04%

2.05%

0.52%

1.90%

-0.84%

5.67%

2.11%

2.00%

0.58%

2.10%

-0.84%

5.95%

Depreciation

Taxes OTI

Revenues

Net Plant After

Total K Factor %

O&M

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

**Natural Gas Data for Escalators** 

10

11

12

13

14

			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016			
Line															
No.	Exclude Gas Cost and Adder Sche														
1	Underground Storage	CBR Line 9	451	436	403	380	585	712	820	893	857	974			
2	Distribution	CBR Line 13	6,467	6,123	7,700	7,696	8,854	9,511	10,820	10,704	12,315	12,050			
3	Customer Accounting	CBR Line 17	4,487	4,692	5,586	5,234	5,740	5,796	6,270	6,108	6,632	6,811			
5	Customer Service and Information	CBR Line 18	4,658	5,169	7,609	9,505	9,777	6,955	983 3	865	837	964 0			
-	Sales Administrative and General	CBR Line 19	516 8,901	442 9,706	497 9,770	105 11.383	3 11.585	-	-	0 12,777	0	-			
6 7		CBR Line 20	25,480	26,568	31,565	34,303	36,544	13,419 36,396	11,862 30,758	31,347	14,007 34.648	13,267 34,066			
8	Operating expenses excluding production Add Non PGA production O&M expenses		25,480 792	20,308	31,363 802	34,303 800	30,344 981	36,396 928	30,738 891	31,347 779	34,648 840	34,000 994			
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	-549	0	-570	-454			
11	Deduct Decoupling Surcharge/Rebate Expenses		-5,802	-4,412	-0,825	-3,477	-9,017	-5,564	0	0	0	0			
12		_	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	CBR Line 10	310	276	393	348	395	438	380	402	439	492			
13	Distribution	CBR Line 14	5,605	5,673	6,064	6,367	6,649	6,978	7,925	8,513	9,088	9,866			
15	Administrative & General	CBR Line 14	1,498	1,803	1.999	2,412	2,734	3,276	3,868	4,389	5,649	6.260			
16		CDR Line 21	7,413	7,752	8,456	9,127	9,778	10,692	12,173	13,304	15,176	16,618			
10	Annual Percentage Change	_	6.46%	4,57%	9,08%	7.94%	7.13%	9,35%	13.85%	9.29%	14.07%	9,50%			
						7.5470	7.1370	7.3370	13.03 /0	7.2770	14.0770	7.50%			
17	Exclude Adder Schedule amortizat		rcnarge/Rebati -815	e) from Regulator -242	y Amortizations 440	216	-186	171	0.1	0.1	2.007	1.070			
17 18	Regulatory Amortizations  Deduct Decoupling Surcharge/Rebate Expenses	CBR Line 22	-815 -85	-242 -432	-710	-494	-180 -494	-184	91 0	-91 0	-2,087 0	1,079			
18	Adjusted Regulatory Amortizations	_	-85	-432 -674	-710	-494	-494	-184	91	-91	-2,087	1,079			
19	• • •	<del>=</del>							- 71	-91	-2,007	1,079			
	Exclude Gas Cost and Adder Sche											***			
20	Underground Storage	CBR Line 11	95	113	121	116	19	17	158	184	196	210			
21	Distribution	CBR Line 15	9,844 20	8,941 17	8,746 19	7,223 24	8,051	7,825	8,116 0	8,719 0	8,554 0	8,383			
22 23	Administrative & General Total Taxes Other Than Income	CBR Line 23	9,959	9,071	8,886	7,363	8.070	7,841	8,274	8,903	8,750	8,593			
23	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		-0,201	-3,917	-4,636 -272	-3,171	-3,374	-3,003	-5,065	-5,560	-5,197	-2,548			
26	Deduct Deswi Tallii Ridel Excise Tax  Deduct Decoupling Surcharge/Rebate Excise Tax	v	-134	-170	-28	-20	-20	-239	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			
2,	Annual Percentage Change	_	-1.34%	-16.38%	25.90%	2.84%	12.59%	6.38%	13.04%	6.40%	0.54%	8.86%	Dlannad (D.	er Rate Period S	tudu)
	Annual 1 elcentage Change		=1.5470	-10.3670	23.90%	2.8470	12.3970	0.3870	13.0470	0.40%	0.5470	8.80%	2018	2019	2020
28	Net Plant After Deferred Income Tax	CBR Line 42	145,500	154,054	173,806	177,901	183,553	195,287	207,759	225,901	244,647	262,930	300,122	315,126	331,023
	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%
ANN	UAL AND COMPOUND GROWTH RATE	S													
Line	Line Natural Gas K-Factor Growth Rate Analysis Rate Year 1 Rate Year 2 & 3														
No.		ate Analysis		2007-2016	2008-2016	2009-2016	2010-2016	2011-2016	2012-2016	Rate Year 1 2013-2016		2018-2020			
	Compound Growth Rates to 2016		-								_		All Athonorous		020/
5	Adjusted Operating Expenses			5.54%	5.90%	4.95%	4.84%	4.40%	2.95%	3.62%			ed Staff's propose	a = 2.	03%
6	Adjusted Depreciation/Amortization			9.38%	10.00%	10.13%	10.50%	11.19%	11.66%	10.93%		Se	e 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)		

6.07% (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.

2.25%

1.82%

0.51%

2.32%

-0.84%

2013-2016

2.20%

1.50%

0.38%

2.54%

-0.84%

5.78%

2.35%

1.22%

0.52%

2.40%

-0.84%

5.65%

2019-2020

2.20%

0.84%

0.38%

4.14%

-0.84% Staff Agreed

Agreed to Staff, See page 1

1.56% Rate Base Reduction (1) Staff Agreed