Exh. EMA-13	
BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION	
DOCKET NO. UE-170485	
DOCKET NO. UG-170486	
EXH. EMA-13	
ELIZABETH M. ANDREWS	
REPRESENTING AVISTA CORPORATION	

ELECTRIC
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 Factor (K-Factor) Calculation	(a)	<b>(b)</b>	(c)	( <b>d</b> )
	Growth	Agreed-to	Revenue	Weighted Avg
	Rate	Growth	Portion of	<b>Escalation</b>
Category	2013-2016	Rate	Category	(a) or (b) x (c)
Operating Expenses (1)		2.36%	35.74%	0.84%
Depreciation/Amortization	9.13%		20.05%	1.83%
Taxes Other than Income	4.53%		9.82%	0.44%
Net Plant After ADFIT (2)		3.04%	34.40%	1.05%
Annual Growth In Sales Revenue (2)		•	100.00%	-1.02%
Total Escalator % Company	У			3.14%
See Exh. EMA- 13, page 4 for growth rates and page 2 for revenue proportion and ar	nual 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 C	Frowth in Sales	Revenue compo	nents.	

Staff Composite Revenue Escalator Calculation	(a) Growth	(b) Agreed-to	(c) <b>Kevenue</b>	(d) Weighted Avg
	Rate	Growth	Portion of	<b>Escalation</b>
Category	2007-2016	Rate	Category	(a) or (b) x (c)
Operating Expenses - UTC Indices (1)		2.36%	35.74%	0.84%
Depreciation/Amortization	4.70%		20.05%	0.94%
Taxes Other than Income	5.13%		9.82%	0.50%
Net Plant After ADFIT (2)		3.04%	34.40%	1.05%
Annual Growth In Sales Revenue (2)		•	100.00%	-1.02%
Total Esc	alator % Staff			2.32%
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 ADF	IT and Annual Growth in Sales	Revenue compo	nents.	

AVISTA UTILITIES

WASHINGTON ELECTRIC RESULTS

YEAR 2 and 3 GROWTH FACTOR CALCULATION DATA TWELVE MONTHS ENDED DECEMBER 31, 2016 (000'S OF DOLLARS) Remove Authorized Power Supply

(000'S	OF DOLLARS)	1		
T		Restated	Remove	Non-Energy
Line No.	DESCRIPTION	TOTAL	Authorized Power Supply	Restated Total
140.	Adjustment Number	R-Ttl	Remove	NE-Total
	Workpaper Reference			
	REVENUES			
1	Total General Business	\$492,413	(\$92,915)	\$399,498
2	Interdepartmental Sales	4.52,1.15	(4)2,713)	
3	Sales for Resale	57,325	(57,325)	-
4	Total Sales of Electricity	549,738	(150,240)	399,498
5	Other Revenue	17,116	(10,225)	6,891
6	Total Electric Revenue	566,854	(160,465)	406,389
	EXPENSES			
	Production and Transmission			_
7	Operating Expenses	134,600	(78,962)	55,638
8	Purchased Power	77,131	(77,131)	-
9	Depreciation/Amortization	26,677	-	26,677
10	Regulatory Amortization	4,705	-	4,705
11	Taxes	14,990	-	14,990
12	Total Production & Transmission	258,103	(156,093)	102,010
	Distribution			
13	Operating Expenses	21,418	-	21,418
14	Depreciation/Amortization	27,819	-	27,819
15	Regulatory Amortization	-	-	-
16	Taxes	26,951	(\$3,575)	23,376
17	Total Distribution	76,188	(3,575)	72,613
18	Customer Accounting	13,021	(\$611)	12,410
19	Customer Service & Information	1,406	(0011)	1,406
20	Sales Expenses	´ -	-	
	•			
	Administrative & General			
21	Operating Expenses	48,989	(\$186)	48,803
22	Depreciation/Amortization	23,877	-	23,877
23	Taxes		-	-
24	Total Admin. & General	72,866	(186)	72,680
25	Total Electric Expenses	421,584	(160,465)	261,119
26	OPERATING INCOME BEFORE FIT	145,270	0	145,270
20	OPERATING INCOME BEFORE FIT	145,270	0	145,270
	FEDERAL INCOME TAX			
27	Current Accrual	(28,530)	0	(28,530)
28	Debt Interest	22	-	22
29	Deferred Income Taxes	67,191	-	67,191
30	Amortized ITC - Noxon	(326)	-	(326)
31	NET OPERATING INCOME	106,913	0	106,913
	PLANT IN SERVICE			
32	Intangible	\$156,057	\$0	\$156,057
33	Production	832,833	-	832,833
34	Transmission	430,613	-	430,613
35	Distribution	970,455	-	970,455
36	General	233,266	-	233,266
37	Total Plant in Service	2,623,224	-	2,623,224
	ACCUMULATED DEPRECIATION/AMORT			
38	Intangible	(30,914)	-	(30,914)
39	Production	(351,625)	-	(\$351,625)
40	Transmission	(135,624)	-	(135,624)
41	Distribution	(295,383)	-	(295,383)
42 43	General Total Assumulated Depressions	(80,093) (893,639)	-	(80,093)
43 44	Total Accumulated Depreciation NET PLANT	1,729,585	-	(893,639) 1,729,585
			-	
45	DEFERRED TAXES	(353,901)	-	(353,901)
46	Net Plant After DFIT	1,375,684	-	1,375,684
47 48	DEFERRED DEBITS AND CREDITS & OTHER WORKING CAPITAL	4,568 62,474	-	4,568 62,474
			-	
49	TOTAL RATE BASE	\$1,442,726	\$0	1,442,726

Authorized I			XX : 1 1		
_	Capital	~	Weighted		
Component	Structure	Cost	Cost		Tax on equity
Total Debt	51.5%	5.20%	2.68%	Tax	return
Common	48.5%	9.50%		53.85%	2.48%
Total	100.00%		7.29%		
	Tax on I	<b>Equity Return</b>	2.48%		
	Total % to	o apply to RB	9.77%		
			Rate Year 1	Rate Years	
			Kate Tear 1	2 & 3	
	Revenue on CB	Portion	2013-2016	2018-2020	
	Less PS*	of Total	Growth Rate	Growth Rate	•
Depreciation	78,373	20.05%	9.13%		Agree to Staff
O&M	139,675	35.74%	2.84%	2.36%	rigite to Stuir
Taxes OTI	38,366	9.82%	4.53%		
Net Plant After ADFIT					Reduction t
	134,436	34.40%	4.81%	3.04%	Growth in Net 2019-2020 St
1,375,684					
1,375,684 (RB*9.77%)	_	100.00%			Agrees
	\$ 390,850 N	100.00% Non-ERM rev	enues (1)		Agrees
(RB*9.77%) Non PS Revenue	\$ 390,850 N	Non-ERM rev	enues (1)		Agrees
(RB*9.77%) Non PS Revenue *includes rev	venue related exper	Non-ERM rev		onerating expe	
(RB*9.77%) Non PS Revenue *includes rev		Non-ERM rev		operating expe	
(RB*9.77%) Non PS Revenue *includes rev (1) Non-ERM	venue related exper I Revenues, covering	Non-ERM rev nses g investment-rela	ated costs and		enses.
(RB*9.77%) Non PS Revenue *includes rev (1) Non-ERM	venue related exper	Non-ERM rev nses g investment-rela	ated costs and	2016 to 04.30.	enses.
(RB*9.77%) Non PS Revenue *includes rev (1) Non-ERM	venue related exper I Revenues, covering	Non-ERM rev nses g investment-rela	ated costs and	2016 to 04.30. Annual	enses.

	Rate Yrs 2 & 3 K-Factor 2019-2020	
Depreciation	1.83%	Avista Proposed
O&M	0.84%	Agree to Staff
Taxes OTI	0.44%	Avista Proposed
Net Plant After ADFIT	1.05%	Staff agrees
Revenues	-1.02%	Staff agrees
	3.14%	_

## ELECTRIC COST AND REVENUE TREND CALCULATIONS 2013-2016

## Commission Basis Results of Operations

## AVISTA UTILITIES

(000	(000'S OF DOLLARS)										
Line		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
No.	REVENUES										
1	Total General Business	\$326,335	\$365,425	\$402,618	\$415,740	3.00%	\$459,266	\$468,006	\$488,372	\$497,229	\$492,413
2	Interdepartmental Sales	739	820	872	790	820	816	884	922	928	946
3	Sales for Resale	34,954	46,848	31,491	133,479	52,604	54,549	75,349	60,998	49,505	57,854
4	Total Sales of Electricity	362,028	413,093	434,981	550,009	53,424	514,631	544,239	550,292	547,662	551,213
5 6	Other Revenue	10,170	10,927 424,020	9,395 444,376	11,786	13,666	13,089 527,720	13,408	17,163 567,455	16,920	17,310
6	Total Electric Revenue	372,198	424,020	444,376	561,795	67,090	527,720	557,647	367,433	564,582	568,523
	EXPENSES										
7	Production and Transmission	102,890	117,123	87,599	147,107	145,634	131,795	143,904	120,307	140,485	136,385
8	Operating Expenses Purchased Power	65,640	72,508	100,437	147,107	91.142	101,283	109,034	116,643	85,107	78,794
9	Depreciation/Amortization	24,877	23,076	23,969	25,008	25,158	25,680	23,284	23,715	24,947	26,676
10	Regulatory Amortization	(3,082)	(1,076)	(1,703)	(2,879)	403	(7,744)	8,629	8,101	5,974	4,706
11	Taxes	8,319	8,146	9,014	9,955	10,846	11,456	12,913	12,828	14,133	14,654
12	Total Production & Transmission	198,644	219,777	219,316	321,388	273,183	262,470	297,764	281,594	270,646	261,215
	Distribution										
13	Operating Expenses	14,563	17,329	17,267	18,354	19,081	21,152	20,878	21,299	24,056	21,415
14	Depreciation/Amortization	11,333	15,611	16,809	17,985	19,240	20,749	22,303	23,794	25,379	27,819
15	Taxes	16,156	17,416	18,216	20,029	22,459	22,699	23,809	25,821	27,448	27,287
16	Total Distribution	42,052	50,356	52,292	56,368	60,780	64,600	66,990	70,914	76,883	76,521
17	Customer Accounting	7,514	7,919	9,646	9,261	10,275	10,336	11,334	11,166	12,363	13,021
18	Customer Service & Information	7,472	12,847	19,736	20,832	21,292	18,487	1,516	1,383	1,454	1,406
19	Sales Expenses	682	571	660	176	4	5	5	0	0	0
	Administrative & General										
20	Operating Expenses	35,844	35,982	38,461	44,662	44,779	49,333	43,310	46,210	49,942	48,989
21	Depreciation/Amortization	6,739	7,187	7,688	9,277	10,906	12,517	14,721	16,947	21,503	23,877
22	Taxes	(9)	(3)	(3)	2	0	(4)	0	0	0	0
23	Total Admin. & General	42,574	43,166	46,146	53,941	55,685	61,846	58,031	63,157	71,445	72,866
24	Total Electric Expenses	298,938	334,636	347,796	461,966	421,219	417,744	435,640	428,214	432,791	425,029
25	OPERATING INCOME BEFORE FIT	73,260	89,384	96,580	99,829	(354,129)	109,976	122,007	139,241	131,791	143,494
	FEDERAL INCOME TAX										
26	Current Accrual	5,070	(6,217)	(1,846)	9,263	6,569	11,499	19,267	(7,683)	4,968	(29,081)
27	Debt Interest	0	0	0	0	207	70	1	(136)	1	21
28	Deferred Income Taxes	6,497	26,634	23,983	13,823	16,402	15,684	10,613	46,085	29,492	67,191
29	Amortized ITC - Noxon	0	0	(58)	(83)	(99)	(128)	(130)	(128)	(129)	(326)
30	Levelized Settlement Exchange Power	0	0	0	0	0	0	0	0	0	0
31		\$61,693	\$68,967	\$74,501	\$76,826	(\$377,208)	\$82,850	\$92,256	\$101,103	\$97,459	\$105,689
	(1) Corrected excise tax error in 2013-2015. RATE BASE										
	PLANT IN SERVICE										
32	Intangible	\$20,632	\$23,321	\$57,116	\$81,955	\$84,081	\$85,247	\$91,466	\$102,620	\$144,970	\$156,057
33	Production	645,576	657,099	677,646	692,689	706,894	717,448	738,315	746,101	779,441	832,833
34	Transmission	259,532	289,302	301,090	312,505	328,012	342,382	359,941	371,971	401,700	430,613
35	Distribution General	529,067	561,248	602,201	642,143	696,082	743,732	796,640 179,134	842,795	895,055	970,455
36 37		81,368 1,536,175	91,205 1,622,175	98,727 1,736,780	120,996	140,218 1,955,287	155,104 2,043,913	2,165,496	196,867 2,260,354	212,726	2,623,224
	ACCUMULATED DEPRECIATION/AMORT									2,433,892	
38	Intangible	6,349	7,252	9,302	12,606	13,074	14,736	17,667	20,242	24,943	30,914
39	Production	230,738	243,189	255,390	272,340	286,300	300,170	314,599	325,531	342,899	351,625
40	Transmission	90,140	95,026	100,649	106,041	111,144	116,316	122,308	123,869	129,936	135,624
41	Distribution	162,343	172,026	181,327	194,593	209,101	221,408	236,201	252,722	273,578	295,383
42	General	36,737	39,933	39,153	43,819	47,365	51,504	58,357	65,720	73,050	80,093
43	Total Accumulated Depreciation	526,307	557,426	585,821	629,399	666,984	704,134	749,132	788,084	844,406	893,639
44	NET PLANT	1,009,868	1,064,749	1,150,959	1,220,889	1,288,303	1,339,779	1,416,364	1,472,270	1,589,486	1,729,585
45	DEFERRED TAXES	(139,033)	(147,502)	(163,716)	(184,825)	(201,163)	(208,209)	(221,354)	(257,766)	(317,860)	(353,900)
46	Net Plant After Deferred Income Taxes	870,835	917,247	987,243	1,036,064	1,087,140	1,131,570	1,195,010	1,214,504	1,271,626	1,375,685
47	DEFERRED DEBITS AND CREDITS	21,020	19,593	17,776	17,776	18,845	16,438	14,761	10,846	7,458	4,566
48	WORKING CAPITAL	0	0	0	18,188	31,877	10,967	16,281	47,807	59,722	62,474
49	TOTAL RATE BASE	\$891,855	\$936,840	\$1,005,019	\$1,072,028	\$1,137,863	\$1,158,975	\$1,226,052	\$1,273,157	\$1,338,806	\$1,442,726

## ELECTRIC COST AND REVENUE TREND CALCULATIONS 2013-2016

AVISTA UTILITIES

WASHINGTON ELECTRIC RESULTS

(000'S OF DOLLARS)

(000	S OF DOLLARS)											
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Line												
No.	Exclude Power Supply and Adder Schedule Expens						101 505		400.00	4.40.40#	404.00#	
1	Production/Transmission	102,890	117,123	87,599	147,107	145,634	131,795	143,904	120,307	140,485	136,385	
2	Purchased Power	65,640	72,508	100,437	142,197	91,142	101,283	109,034	116,643	85,107	78,794	
3	Distribution	14,563	17,329	17,267	18,354	19,081	21,152	20,878	21,299	24,056	21,415	
4 5	Customer Accounting Customer Service and Information	7,514 7,472	7,919 12,847	9,646 19,736	9,261 20,832	10,275 21,292	10,336 18,487	11,334 1,516	11,166 1,383	12,363 1,454	13,021 1,406	
6	Sales	682	571	19,736	20,832 176	4	18,487	1,516	1,383	1,454	1,406	
7	Administrative and General	35,844	35,982	38,461	44,662	44,779	49,333	43,310	46,210	49,942	48,989	
8	Total Operating & Maintenance Expenses	234,605	264,279	273,806	382,589	332,207	332,391	329,981	317,008	313,407	300,010	
9	Deduct Power Supply Expenses	(135,719)	(152,984)	(146,538)	(249,369)	(188,583)	(180,834)	(201,471)	(186,117)	(175,095)	(160,262)	
10	Deduct DSM Tariff Rider Expenses	(6,711)	(12,172)	(19,005)	(19,612)	(20,235)	(17,018)	0	0	0	0	
11	Deduct Res X Credit Expenses	37	24	27	41	31	55	0	0	0	0	
	CS2/Colstrip 2012 Deferral/Amort	3,		2,		5.	(4,400)	1,000	1,000	1,000	1,100	
	Remove Wind Storm						(1,100)	-,	-,	(2,303)	0	
12	Adjusted Operating Expenses	92,212	99,146	108,289	113,650	123,419	130,194	129,510	131,891	137,009	140,848	
		3.81%	7.52%	9.22%	4.95%	8.60%	5.49%	-0.53%	1.84%	3.88%	2.80%	
	Depreciation/Amortization	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
	Production/Transmission	24,877	23,076	23,969	25,008	25,158	25,680	23,284	23,715	24,947	26,676	
14		11,333	15,611	16,809	17,985	19,240	20,749	22,303	23,794	25,379	27,819	
	Administrative and General	6,739	7,187	7,688	9,277	10,906	12,517	14,721	16,947	21,503	23,877	
16	Total Depreciation/Amortization	42,949	45,874	48,466	52,270	55,304	58,946	60,308	64,456	71,829	78,372	
		2.72%	6.81%	5.65%	7.85%	5.80%	6.59%	2.31%	6.88%	11.44%	9.11%	
	Exclude Adder Schedule excise taxes (DSM Tariff	Rider and Resi	idential Exch	ange Credit) fr	om Taxes Oth	er Than Incom	e Tax					
		8,319	8,146	9,014	9,955	10,846	11,456	12,913	12,828	14,133	14,654	
	Distribution	16,156	17,416	18,216	20,029	22,459	22,699	23,809	25,821	27,448	27,287	
	Administrative and General	(9)	(3)	(3)	2	0	(4)	0	0	0	0	
23		24,466	25,559	27,227	29,986	33,305	34,151	36,722	38,649	41,581	41,941	
24	Deduct DSM Tariff Rider Excise Tax	(269)	(488)	(762)	(787)	(812)	(683)	0	0	0	0	
25	Deduct Res X Credit Excise Tax	225	144	162	252	186	336	0	0	0	0	
26	Adjusted Taxes Other Than Income Tax	24,422	25,215	26,626	29,451	32,680	33,805	36,722	38,649	41,581	41,941	
		-3.93%	3.25%	5.60%	10.61%	10.96%	3.44%	8.63%	5.25%	7.59%	0.87%	(1) Planned (Per Rate Period Study)
27	NAME AND DESIGNATIONS	050 025	015.045	007.242	1.026.064	1.007.140	1 121 550	1 105 010	1 214 504	1 271 (2)	1 255 (05	2018 2019 2020
27	Net Plant After Deferred Income Tax	870,835	917,247	987,243	1,036,064	1,087,140	1,131,570	1,195,010	1,214,504	1,271,626	1,375,685	1,539,337 1,574,348 1,634,379
ANN	NUAL GROWTH RATES											
	Electric K-Factor Growth Rate Analysis							-	Rate Year 1		Rate Years 2	
No.	Compound Growth Rates to 2016		2007-2016	2008-2016	2009-2016	2010-2016	2011-2016	2012-2016	2013-2016		& 3	
1	Adjusted Operating Expenses		4.82%	4.49%	3.83%	3.64%	2.68%	1.99%	2.84%		2.55%	used Staff's proposed = 2.36%
2	Total Depreciation/Amortization		6.91%	6.92%	7.11%	6.98%	7.22%	7.38%	9.13%			See page 1
3	Adjusted Taxes Other than Income		6.19%	6.57%	6.71%	6.07%	5.12%	5.54%	4.53%			
4	Net Plant After Deferred Income Taxes		5.21%	5.20%	4.85%	4.84%	4.82%	5.00%	4.81%		3.04%	(1)
		Portion							2013-2016		2019-2020	1
5	Depreciation	20.05%	1.39%	1.39%	1.43%	1.40%	1.45%	1.48%	1.83%		1.83%	
6	O&M	35.74%	1.72%	1.60%	1.37%	1.30%	0.96%	0.71%	1.01%		0.84%	Agreed to Staff, See page 1
7	Taxes OTI	9.82%	0.61%	0.64%	0.66%	0.60%	0.50%	0.54%	0.44%		0.44%	rigited to built, bee page 1
8	Net plant After ADFIT	34.40%	1.79%	1.79%	1.67%	1.66%	1.66%	1.72%	1.65%		1.05%	Rate Base Reduction (1) Staff Agreed
9	Revenues	2	-1.02%	-1.02%	-1.02%	-1.02%	-1.02%	-1.02%	-1.02%		-1.02%	Staff Agreed
		-										<u> </u>
10	Total K Factor %		4.49%	4.40%	4.10%	3.94%	3.55%	3.43%	3.92%		3.14%	See page 1

(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.