

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-17 _____

DOCKET NO. UG-17 _____

EXH. EMA-5

ELIZABETH M. ANDREWS

REPRESENTING AVISTA CORPORATION

AVISTA UTILITIES
CALCULATION OF GENERAL REVENUE REQUIREMENT
WASHINGTON ELECTRIC
TWELVE MONTHS ENDED DECEMBER 31, 2016

The following information provides the Company's "Rate Year Study" results for the period 5/1/2018 through 4/30/2021. This Study is provided as additional support for the rate relief requested by the Company for the Three-Year Rate Plan beginning May 1, 2018 through April 30, 2021. See Exh. EMA-3 for the EOP Rate Base Study representing the Company's requested electric rate relief proposed in this case.

Per Rate Period Study for period 5/1/2018-4/30/2019. See page 11 and 12 for periods 5/1/2019-4/30/2020 and 5/1/2020-4/30/2021.

Line No.	Description	Base Rate Change	Tariff 93	Billed Impact
		5/1/2018	Expiration	5/1/2018
		(000's of Dollars)	(000's of Dollars)	(000's of Dollars)
1	Pro Forma Rate Base	\$ 1,601,033		
2	Proposed Rate of Return	7.69%		
3	Net Operating Income Requirement	\$123,119	(\$9,276)	\$113,843
4	Pro Forma Net Operating Income	84,933		84,933
5	Net Operating Income Deficiency	\$38,186	(\$9,276)	\$28,911
6	Conversion Factor	0.619413	0.619413	0.619413
7	Revenue Requirement	\$61,649	(\$14,976)	\$46,673
8	Total General Business Revenues	\$492,134		
9	Percentage Revenue Increase	12.53%		
10	Total Billed General Business Revenues	\$511,823	\$14,976	\$526,799
11	Percentage Revenue Increase	12.04%	-2.93%	8.86%
12	Total 05/01/2019 Revenue Increase (Rate Year 2, per pg 11)			\$ 10,539
13	Percentage Billed Revenue Increase			1.84%
14	Total 05/01/2020 Revenue Increase (Rate Year 3, per pg 12)			\$ 16,556
15	Percentage Billed Revenue Increase			2.83%

AVISTA UTILITIES RATE YEAR STUDY COST OF CAPITAL WASHINGTON ELECTRIC			
Capital Structure			
Component	Capital Structure	Cost	Weighted Cost
Total Debt	51.5%	5.62%	2.89%
Common	48.5%	9.90%	4.80%
Total	<u>100.00%</u>		<u>7.69%</u>

**AVISTA UTILITIES
REVENUE CONVERSION FACTOR
WASHINGTON ELECTRIC
TWELVE MONTHS ENDED DECEMBER 31, 2016**

<u>Line No.</u>	<u>Description</u>	<u>Factor</u>
1	Revenues	<i>1.000000</i>
	Expense:	
2	Uncollectibles	<i>0.006578</i>
3	Commission Fees	<i>0.002000</i>
4	Washington Excise Tax	<i>0.038479</i>
6	Total Expense	<u><i>0.047057</i></u>
7	Net Operating Income Before FIT	<i>0.952943</i>
8	Federal Income Tax @ 35%	<u><i>0.333530</i></u>
9	REVENUE CONVERSION FACTOR	<u><u><i>0.619413</i></u></u>

Rate Year Study
(Electric)

AVISTA UTILITIES
WASHINGTON ELECTRIC RESULTS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

Line No.	DESCRIPTION	ACTUAL	RESTATEMENT ADJUSTMENTS						
		RESULTS	Deferred FIT Rate Base	Deferred Debits and Credits	Working Capital	Eliminate B & O Taxes	Restate Property Tax	Uncollect. Expense	Regulatory Expense
	Adjustment Number Workpaper Reference	1.00	1.01	1.02	1.03	2.01	2.02	2.03	2.04
		E-ROO	E-DFIT	E-DDC	E-WC	E-EBO	E-RPT	E-UE	E-RE
REVENUES									
1	Total General Business	\$516,333	\$0	\$0	\$0	(\$17,807)	\$0	\$0	\$0
2	Interdepartmental Sales	946	-	-	-	-	-	-	-
3	Sales for Resale	78,098	-	-	-	-	-	-	-
4	Total Sales of Electricity	595,377	-	-	-	(17,807)	-	-	-
5	Other Revenue	81,735	-	-	-	(14)	-	-	-
6	Total Electric Revenue	677,112	-	-	-	(17,821)	-	-	-
EXPENSES									
Production and Transmission									
7	Operating Expenses	184,672	-	4	-	-	-	-	-
8	Purchased Power	96,772	-	-	-	-	-	-	-
9	Depreciation/Amortization	26,677	-	-	-	-	-	-	0
10	Regulatory Amortization	4,310	-	-	-	-	-	-	-
11	Taxes	14,904	-	-	-	-	86	-	-
12	Total Production & Transmission	327,335	-	4	-	-	86	-	-
Distribution									
13	Operating Expenses	21,420	-	-	-	-	-	-	-
14	Depreciation/Amortization	27,913	-	-	-	-	-	-	-
15	Regulatory Amortization	0	-	-	-	-	-	-	-
16	Taxes	45,258	-	-	-	(17,674)	(336)	-	-
17	Total Distribution	94,591	-	-	-	(17,674)	(336)	-	-
18	Customer Accounting	11,733	-	8	-	-	-	1,321	-
19	Customer Service & Information	18,081	-	-	-	-	-	-	-
20	Sales Expenses	0	-	-	-	-	-	-	-
Administrative & General									
21	Operating Expenses	50,568	-	-	-	-	-	-	7
22	Depreciation/Amortization	23,877	-	-	-	-	-	-	-
23	Taxes	0	-	-	-	-	-	-	-
24	Total Admin. & General	74,445	-	-	-	-	-	-	7
25	Total Electric Expenses	526,185	-	12	-	(17,674)	(250)	1,321	7
26	OPERATING INCOME BEFORE FIT	150,927	-	(12)	-	(147)	250	(1,321)	(7)
FEDERAL INCOME TAX									
27	Current Accrual	(25,741)	-	(4)	-	(51)	88	(462)	(2)
28	Debt Interest	0	(8)	-	30	-	-	-	-
29	Deferred Income Taxes	66,436	-	-	-	-	-	-	-
30	Amortized ITC - Noxon	(325)	-	-	-	-	-	-	-
31	NET OPERATING INCOME	\$110,557	\$8	(\$8)	(\$30)	(\$96)	\$163	(\$859)	(\$5)
RATE BASE									
PLANT IN SERVICE									
32	Intangible	\$156,057	\$0	\$0	\$0	\$0	\$0	\$0	\$0
33	Production	832,833	-	-	-	-	-	-	-
34	Transmission	430,613	-	-	-	-	-	-	-
35	Distribution	970,455	-	-	-	-	-	-	-
36	General	233,266	-	-	-	-	-	-	-
37	Total Plant in Service	2,623,224	-	-	-	-	-	-	-
ACCUMULATED DEPRECIATION/AMORT									
38	Intangible	(30,914)	-	-	-	-	-	-	-
39	Production	(351,625)	-	-	-	-	-	-	-
40	Transmission	(135,624)	-	-	-	-	-	-	-
41	Distribution	(295,383)	-	-	-	-	-	-	-
42	General	(80,093)	-	-	-	-	-	-	-
43	Total Accumulated Depreciation	(893,639)	-	-	-	-	-	-	-
44	NET PLANT	1,729,585	-	-	-	-	-	-	-
45	DEFERRED TAXES	(354,707)	806	-	-	-	-	-	-
46	Net Plant After DFIT	1,374,878	806	-	-	-	-	-	-
47	DEFERRED DEBITS AND CREDITS & OTHER	4,568	-	-	-	-	-	-	-
48	WORKING CAPITAL	65,480	-	-	(3,006)	-	-	-	-
49	TOTAL RATE BASE	1,444,926	\$806	\$0	(\$3,006)	\$0	\$0	\$0	\$0
50	RATE OF RETURN	7.65%							
51	REVENUE REQUIREMENT	901	87	13	(324)	154	(262)	1,386	7

Rate Year Study
(Electric)

AVISTA UTILITIES
WASHINGTON ELECTRIC RESULTS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

Line No.	DESCRIPTION	Injuries and Damages 2.05 E-ID	FIT/DFIT/ ITC Expense 2.06 E-FIT	Office Space Charges to Non-Utility 2.07 E-OSC	Restate Excise Taxes 2.08 E-RET	Net Gains / Losses 2.09 E-NGL	Weather Normalization 2.10 E-WN	Eliminate Adder Schedules 2.11 E-EAS	Misc. Restating Non-Util / Non-Recurring Expenses 2.12 E-MR
REVENUES									
1	Total General Business	\$0	\$0	\$0	\$0	\$0	\$7,392	(\$18,203)	\$0
2	Interdepartmental Sales	-	-	-	-	-	-	-	-
3	Sales for Resale	-	-	-	-	-	-	-	-
4	Total Sales of Electricity	-	-	-	-	-	7,392	(18,203)	-
5	Other Revenue	-	-	-	-	-	(5,775)	684	(2,566)
6	Total Electric Revenue	-	-	-	-	-	1,617	(17,519)	(2,566)
EXPENSES									
Production and Transmission									
7	Operating Expenses	-	-	-	-	-	-	(383)	(5)
8	Purchased Power	-	-	-	-	-	-	-	-
9	Depreciation/Amortization	-	-	-	-	-	-	-	-
10	Regulatory Amortization	-	-	-	-	-	-	395	-
11	Taxes	-	-	-	-	-	-	-	-
12	Total Production & Transmission	-	-	-	-	-	-	12	(5)
Distribution									
13	Operating Expenses	-	-	-	-	-	-	-	(2)
14	Depreciation/Amortization	-	-	-	-	(94)	-	-	-
15	Regulatory Amortization	-	-	-	-	-	-	-	-
16	Taxes	-	-	-	(62)	-	284	(700)	-
17	Total Distribution	-	-	-	(62)	(94)	284	(700)	(2)
18	Customer Accounting	-	-	-	-	-	49	(120)	-
19	Customer Service & Information	-	-	-	-	-	-	(16,675)	-
20	Sales Expenses	-	-	-	-	-	-	-	-
Administrative & General									
21	Operating Expenses	151	-	(31)	-	-	15	(36)	(1,068)
22	Depreciation/Amortization	-	-	-	-	-	-	-	-
23	Taxes	-	-	-	-	-	-	-	-
24	Total Admin. & General	151	-	(31)	-	-	15	(36)	(1,068)
25	Total Electric Expenses	151	-	(31)	(62)	(94)	348	(17,519)	(1,075)
26	OPERATING INCOME BEFORE FIT	(151)	-	31	62	94	1,269	-	(1,491)
FEDERAL INCOME TAX									
27	Current Accrual	(53)	110	11	22	33	444	-	(522)
28	Debt Interest	-	-	-	-	-	-	-	-
29	Deferred Income Taxes	-	(40)	-	-	-	-	-	-
30	Amortized ITC - Noxon	-	(1)	-	-	-	-	-	-
31	NET OPERATING INCOME	(\$98)	(\$69)	\$20	\$40	\$61	\$825	\$0	(\$969)
RATE BASE									
PLANT IN SERVICE									
32	Intangible	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
33	Production	-	-	-	-	-	-	-	-
34	Transmission	-	-	-	-	-	-	-	-
35	Distribution	-	-	-	-	-	-	-	-
36	General	-	-	-	-	-	-	-	-
37	Total Plant in Service	-	-	-	-	-	-	-	-
ACCUMULATED DEPRECIATION/AMORT									
38	Intangible	-	-	-	-	-	-	-	-
39	Production	-	-	-	-	-	-	-	-
40	Transmission	-	-	-	-	-	-	-	-
41	Distribution	-	-	-	-	-	-	-	-
42	General	-	-	-	-	-	-	-	-
43	Total Accumulated Depreciation	-	-	-	-	-	-	-	-
44	NET PLANT	-	-	-	-	-	-	-	-
45	DEFERRED TAXES	-	-	-	-	-	-	-	-
46	Net Plant After DFIT	-	-	-	-	-	-	-	-
47	DEFERRED DEBITS AND CREDITS & OTHER	-	-	-	-	-	-	-	-
48	WORKING CAPITAL	-	-	-	-	-	-	-	-
49	TOTAL RATE BASE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
50	RATE OF RETURN								
51	REVENUE REQUIREMENT	158	111	(33)	(65)	(99)	(1,332)	-	1,565

Rate Year Study
(Electric)

AVISTA UTILITIES
WASHINGTON ELECTRIC RESULTS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

(Authorized P.S.
@ Authorized
P/T ratio)

Line No.	DESCRIPTION	Eliminate WA Power Cost Defer 2.13	Nez Perce Settlement Adjustment 2.14	Restating Incentives 2.15	Normalize CS2/Colstrip Major Maint 2.16	Restate Debt Interest 2.17	Authorized Power Supply 2.18	Restated TOTAL
	Adjustment Number Workpaper Reference	E-EWPC	E-NPS	E-RI	E-PMM	E-RDI	E-APS	R-Ttl
REVENUES								
1	Total General Business	\$4,698	\$0	\$0	\$0	\$0	\$0	\$492,413
2	Interdepartmental Sales	-	-	-	-	-	-	946
3	Sales for Resale	-	-	-	-	-	(20,773)	57,325
4	Total Sales of Electricity	4,698	-	-	-	-	(20,773)	550,684
5	Other Revenue	-	-	-	-	-	(56,948)	17,116
6	Total Electric Revenue	4,698	-	-	-	-	(77,721)	567,800
EXPENSES								
Production and Transmission								
7	Operating Expenses	(2,270)	(4)	-	(1,174)	-	(46,240)	134,600
8	Purchased Power	-	-	-	-	-	(19,641)	77,131
9	Depreciation/Amortization	-	-	-	-	-	-	26,677
10	Regulatory Amortization	-	-	-	-	-	-	4,705
11	Taxes	-	-	-	-	-	-	14,990
12	Total Production & Transmission	(2,270)	(4)	-	(1,174)	-	(65,881)	258,103
Distribution								
13	Operating Expenses	-	-	-	-	-	-	21,418
14	Depreciation/Amortization	-	-	-	-	-	-	27,819
15	Regulatory Amortization	-	-	-	-	-	-	-
16	Taxes	181	-	-	-	-	-	26,951
17	Total Distribution	181	-	-	-	-	-	76,188
18	Customer Accounting	30	-	-	-	-	-	13,021
19	Customer Service & Information	-	-	-	-	-	-	1,406
20	Sales Expenses	-	-	-	-	-	-	-
Administrative & General								
21	Operating Expenses	9	-	(626)	-	-	-	48,989
22	Depreciation/Amortization	-	-	-	-	-	-	23,877
23	Taxes	-	-	-	-	-	-	-
24	Total Admin. & General	9	-	(626)	-	-	-	72,866
25	Total Electric Expenses	(2,050)	(4)	(626)	(1,174)	-	(65,881)	421,584
26	OPERATING INCOME BEFORE FIT	6,748	4	626	1,174	-	(11,840)	146,216
FEDERAL INCOME TAX								
27	Current Accrual	1,567	1	219	411	(860)	(4,144)	(28,935)
28	Debt Interest	-	-	-	-	-	-	22
29	Deferred Income Taxes	795	-	-	-	-	-	67,191
30	Amortized ITC - Noxon	-	-	-	-	-	-	(326)
31	NET OPERATING INCOME	\$4,386	\$3	407	763	860	(\$7,696)	108,263
RATE BASE								
PLANT IN SERVICE								
32	Intangible	\$0	\$0	\$0	\$0	\$0	\$0	\$156,057
33	Production	-	-	-	-	-	-	832,833
34	Transmission	-	-	-	-	-	-	430,613
35	Distribution	-	-	-	-	-	-	970,455
36	General	-	-	-	-	-	-	233,266
37	Total Plant in Service	-	-	-	-	-	-	2,623,224
ACCUMULATED DEPRECIATION/AMORT								
38	Intangible	-	-	-	-	-	-	(30,914)
39	Production	-	-	-	-	-	-	(351,625)
40	Transmission	-	-	-	-	-	-	(135,624)
41	Distribution	-	-	-	-	-	-	(295,383)
42	General	-	-	-	-	-	-	(80,093)
43	Total Accumulated Depreciation	-	-	-	-	-	-	(893,639)
44	NET PLANT	-	-	-	-	-	-	1,729,585
45	DEFERRED TAXES	-	-	-	-	-	-	(353,901)
46	Net Plant After DFIT	-	-	-	-	-	-	1,375,684
47	DEFERRED DEBITS AND CREDITS & OTHER	-	-	-	-	-	-	4,568
48	WORKING CAPITAL	-	-	-	-	-	-	62,474
49	TOTAL RATE BASE	\$0	\$0	\$0	\$0	\$0	\$0	\$1,442,726
50	RATE OF RETURN							(1)
51	REVENUE REQUIREMENT	(7,081)	(4)	(657)	(1,232)	(1,388)	12,425	4,330

(1) The Restated TOTAL column does not represent 12/31/2016 Test Period Commission Basis results of operation on a normalized basis (CBR basis). Two differences exist here: 1) inclusion of proposed (Pro Forma) cost debt (pro forma versus CBR cost of debt) impacting Adjustment 2.17 above; and 2) Authorized (ERM) Power Supply (Adj 2.18 above) versus revised Authorized Power Supply (CB) which included the updated Production/ Transmission (P/T) ratio. The P/T ratio update is included in PF Power Supply Adjustment 4.00 in order to separate increased power supply costs from non-energy increased costs requested by the Company.

Rate Year Study
(Electric)

PRO FORMA ADJUSTMENTS

AVISTA UTILITIES
WASHINGTON ELECTRIC RESULTS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

Line No.	DESCRIPTION	NON ERM							
		Pro Forma Trans/Power Sup Non-ERM Rev/Exp 3.01 E-PTR	Pro Forma Labor Non-Exec 3.02 E-PLN	Pro Forma Labor Exec 3.03 E-PLE	Pro Forma Employee Benefits 3.04 E-PEB	Pro Forma Incentive Expenses 3.05 E-PI	Pro Forma Property Tax 3.06 E-PPT	Pro Forma IS/IT Expense 3.07 E-CI	Pro Forma Revenue Normalization 3.08 E-PREV
	Adjustment Number								
	Workpaper Reference								
	REVENUES								
1	Total General Business	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$1,225)
2	Interdepartmental Sales	-	-	-	-	-	-	-	-
3	Sales for Resale	-	-	-	-	-	-	-	-
4	Total Sales of Electricity	-	-	-	-	-	-	-	(1,225)
5	Other Revenue	71	-	-	-	-	-	-	(3,887)
6	Total Electric Revenue	71	-	-	-	-	-	-	(5,112)
	EXPENSES								
	Production and Transmission								
7	Operating Expenses	172	999	-	(125)	-	-	-	-
8	Purchased Power	-	-	-	-	-	-	-	-
9	Depreciation/Amortization	-	-	-	-	-	-	-	-
10	Regulatory Amortization	-	-	-	-	-	-	-	-
11	Taxes	-	-	-	-	-	1,578	-	-
12	Total Production & Transmission	172	999	-	(125)	-	1,578	-	-
	Distribution								
13	Operating Expenses	-	604	-	(77)	-	-	-	-
14	Depreciation/Amortization	-	-	-	-	-	-	-	-
15	Regulatory Amortization	-	-	-	-	-	-	-	-
16	Taxes	-	-	-	-	-	880	-	(47)
17	Total Distribution	-	604	-	(77)	-	880	-	(47)
18	Customer Accounting	-	322	-	(41)	-	-	-	(8)
19	Customer Service & Information	-	27	-	(3)	-	-	-	-
20	Sales Expenses	-	-	-	-	-	-	-	-
	Administrative & General								
21	Operating Expenses	-	912	(33)	(114)	119	-	694	(2)
22	Depreciation/Amortization	-	-	-	-	-	-	-	-
23	Taxes	-	-	-	-	-	-	-	-
24	Total Admin. & General	-	912	(33)	(114)	119	-	694	(2)
25	Total Electric Expenses	172	2,864	(33)	(360)	119	2,458	694	(57)
26	OPERATING INCOME BEFORE FIT	(101)	(2,864)	33	360	(119)	(2,458)	(694)	(5,055)
	FEDERAL INCOME TAX								
27	Current Accrual	(35)	(1,002)	12	126	(42)	(860)	(243)	(1,769)
28	Debt Interest	-	-	-	-	-	-	-	-
29	Deferred Income Taxes	-	-	-	-	-	-	-	-
30	Amortized ITC - Noxon	-	-	-	-	-	-	-	-
31	NET OPERATING INCOME	(\$66)	(\$1,862)	\$21	\$234	(\$77)	(\$1,598)	(\$451)	(3,286)
	RATE BASE								
	PLANT IN SERVICE								
32	Intangible	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
33	Production	-	-	-	-	-	-	-	-
34	Transmission	-	-	-	-	-	-	-	-
35	Distribution	-	-	-	-	-	-	-	-
36	General	-	-	-	-	-	-	-	-
37	Total Plant in Service	-	-	-	-	-	-	-	-
	ACCUMULATED DEPRECIATION/AMORT								
38	Intangible	-	-	-	-	-	-	-	-
39	Production	-	-	-	-	-	-	-	-
40	Transmission	-	-	-	-	-	-	-	-
41	Distribution	-	-	-	-	-	-	-	-
42	General	-	-	-	-	-	-	-	-
43	Total Accumulated Depreciation	-	-	-	-	-	-	-	-
44	NET PLANT	-	-	-	-	-	-	-	-
45	DEFERRED TAXES	-	-	-	-	-	-	-	-
46	Net Plant After DFIT	-	-	-	-	-	-	-	-
47	DEFERRED DEBITS AND CREDITS & OTHER	-	-	-	-	-	-	-	-
48	WORKING CAPITAL	-	-	-	-	-	-	-	-
49	TOTAL RATE BASE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
50	RATE OF RETURN								
51	REVENUE REQUIREMENT	106	3,005	(35)	(378)	125	2,579	728	5,305

Rate Year Study
(Electric)

Exh. EMA-5

AVISTA UTILITIES
WASHINGTON ELECTRIC RESULTS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

Line No.	DESCRIPTION	Pro Forma Def. Debits, Credits & Regulatory Amorts 3.09	Pro Forma 2017 Threshold Capital Adds 3.10	Pro Forma O&M Offsets 3.11	Pro Forma Director Fees Exp 3.12	PF Normalize CS2/Colstrip Major Maint 3.13	Pro Forma Underground Equip Inspection 3.14	Non-Energy Pro Forma Sub-Total
	Adjustment Number							PF-SubTtl
	Workpaper Reference	E-PRA	E-PCAP16	E-POFF	E-PDF	E-PNM	E-PUEI	
REVENUES								
1	Total General Business	\$0	\$0	\$0	\$0	\$0	\$0	\$491,188
2	Interdepartmental Sales	-	-	-	-	-	-	946
3	Sales for Resale	-	-	-	-	-	-	57,325
4	Total Sales of Electricity	-	-	-	-	-	-	549,459
5	Other Revenue	-	-	-	-	-	-	13,300
6	Total Electric Revenue	-	-	-	-	-	-	562,759
EXPENSES								
Production and Transmission								
7	Operating Expenses	(248)	-	-	-	347	-	135,745
8	Purchased Power	-	-	-	-	-	-	77,131
9	Depreciation/Amortization	-	129	-	-	-	-	26,806
10	Regulatory Amortization	(1,393)	-	-	-	-	-	3,312
11	Taxes	-	-	-	-	-	-	16,568
12	Total Production & Transmission	(1,641)	129	-	-	347	-	259,562
Distribution								
13	Operating Expenses	-	-	(875)	-	-	532	21,602
14	Depreciation/Amortization	-	795	-	-	-	-	28,614
15	Regulatory Amortization	-	-	-	-	-	-	-
16	Taxes	-	-	-	-	-	-	27,784
17	Total Distribution	-	795	(875)	-	-	532	78,000
18	Customer Accounting	-	-	-	-	-	-	13,294
19	Customer Service & Information	-	-	-	-	-	-	1,430
20	Sales Expenses	-	-	-	-	-	-	-
Administrative & General								
21	Operating Expenses	-	-	(112)	375	-	-	50,828
22	Depreciation/Amortization	-	2,297	-	-	-	-	26,174
23	Taxes	-	-	-	-	-	-	-
24	Total Admin. & General	-	2,297	(112)	375	-	-	77,002
25	Total Electric Expenses	(1,641)	3,221	(987)	375	347	532	429,288
26	OPERATING INCOME BEFORE FIT	1,641	(3,221)	987	(375)	(347)	(532)	133,471
FEDERAL INCOME TAX								
27	Current Accrual	574	(1,127)	345	(131)	(121)	(186)	(33,395)
28	Debt Interest	54	(353)	-	-	-	-	(277)
29	Deferred Income Taxes	-	-	-	-	-	-	67,191
30	Amortized ITC - Noxon	-	-	-	-	-	-	(326)
31	NET OPERATING INCOME	\$1,013	(\$1,741)	642	(244)	(226)	(346)	100,278
RATE BASE								
PLANT IN SERVICE								
32	Intangible	\$0	\$10,319	\$0	\$0	\$0	\$0	\$166,376
33	Production	-	6,889	-	-	-	-	839,722
34	Transmission	-	-	-	-	-	-	430,613
35	Distribution	-	27,209	-	-	-	-	997,664
36	General	-	-	-	-	-	-	233,266
37	Total Plant in Service	-	44,417	-	-	-	-	2,667,641
ACCUMULATED DEPRECIATION/AMORT								
38	Intangible	-	(1,092)	-	-	-	-	(32,006)
39	Production	-	(95)	-	-	-	-	(\$351,720)
40	Transmission	-	-	-	-	-	-	(135,624)
41	Distribution	-	(327)	-	-	-	-	(295,710)
42	General	-	-	-	-	-	-	(80,093)
43	Total Accumulated Depreciation	-	(1,514)	-	-	-	-	(895,153)
44	NET PLANT	-	42,903	-	-	-	-	1,772,488
45	DEFERRED TAXES	-	(7,992)	-	-	-	-	(361,893)
46	Net Plant After DFIT	-	34,911	-	-	-	-	1,410,595
47	DEFERRED DEBITS AND CREDITS & OTHER	(5,346)	-	-	-	-	-	(778)
48	WORKING CAPITAL	-	-	-	-	-	-	62,474
49	TOTAL RATE BASE	(5,346)	\$34,911	\$0	\$0	\$0	\$0	1,472,291
50	RATE OF RETURN							
51	REVENUE REQUIREMENT	(2,298)	7,144	(1,036)	394	364	558	20,892
								Pro Forma Non-Energy
								4.25%

Rate Year Study
(Electric)

AVISTA UTILITIES

WASHINGTON ELECTRIC RESULTS

RATE YEAR STUDY - 5/1/2018 - 4/30/2021

TWELVE MONTHS ENDED DECEMBER 31, 2016

(000'S OF DOLLARS)

Line No.	DESCRIPTION	ERM Related Only		9/1/2017 Power Supply Update Tariff Schedule 93	Incremental impact of Pro Forma Power Supply and Expiration of Schedule 93
		Pro Forma Power Supply & Transm Revs	Pro Forma Including PS Total		
	Adjustment Number	4.00	PF-Ttl		
	Workpaper Reference	E-PPS			
	REVENUES				
1	Total General Business	\$0	\$491,188	\$0	\$0
2	Interdepartmental Sales	-	946	-	-
3	Sales for Resale	(21,762)	35,563	(26,116)	4,354
4	Total Sales of Electricity	(21,762)	527,697	(26,116)	4,354
5	Other Revenue	(268)	13,032	-	(268)
6	Total Electric Revenue	(22,030)	540,729	(26,116)	4,086
	EXPENSES				
	Production and Transmission				
7	Operating Expenses	(2,292)	133,453	(5,139)	2,847
8	Purchased Power	(3,911)	73,220	(6,706)	2,795
9	Depreciation/Amortization	-	26,806	-	-
10	Regulatory Amortization	-	3,312	-	-
11	Taxes	-	16,568	-	-
12	Total Production & Transmission	(6,203)	253,359	(11,845)	5,642
	Distribution				
13	Operating Expenses	-	21,602	-	-
14	Depreciation/Amortization	-	28,614	-	-
15	Regulatory Amortization	-	-	-	-
16	Taxes	-	27,784	-	-
17	Total Distribution	-	78,000	-	-
18	Customer Accounting	-	13,294	-	-
19	Customer Service & Information	-	1,430	-	-
20	Sales Expenses	-	-	-	-
	Administrative & General				
21	Operating Expenses	-	50,828	-	-
22	Depreciation/Amortization	-	26,174	-	-
23	Taxes	-	-	-	-
24	Total Admin. & General	-	77,002	-	-
25	Total Electric Expenses	(6,203)	423,085	(11,845)	5,642
26	OPERATING INCOME BEFORE FIT	(15,827)	117,644	(14,271)	(1,556)
	FEDERAL INCOME TAX				
27	Current Accrual	(5,539)	(38,935)	(4,995)	(545)
28	Debt Interest	-	(277)	-	-
29	Deferred Income Taxes	-	67,191	-	-
30	Amortized ITC - Noxon	-	(326)	-	-
31	NET OPERATING INCOME	(\$10,288)	89,991	(\$9,276)	(\$1,011)
	RATE BASE				
	PLANT IN SERVICE				
32	Intangible	\$0	\$166,376	\$0	\$0
33	Production	-	839,722	-	-
34	Transmission	-	430,613	-	-
35	Distribution	-	997,664	-	-
36	General	-	233,266	-	-
37	Total Plant in Service	-	2,667,641	-	-
	ACCUMULATED DEPRECIATION/AMORT				
38	Intangible	-	(32,006)	-	-
39	Production	-	(\$351,720)	-	-
40	Transmission	-	(135,624)	-	-
41	Distribution	-	(295,710)	-	-
42	General	-	(80,093)	-	-
43	Total Accumulated Depreciation	-	(895,153)	-	-
44	NET PLANT	-	1,772,488	-	-
45	DEFERRED TAXES	-	(361,893)	-	-
46	Net Plant After DFIT	-	1,410,595	-	-
47	DEFERRED DEBITS AND CREDITS & OTHER	-	(778)	-	-
48	WORKING CAPITAL	-	62,474	-	-
49	TOTAL RATE BASE	\$0	1,472,291	\$0	\$0
50	RATE OF RETURN				
51	REVENUE REQUIREMENT	16,609	37,501	14,976	1,633
		ERM Power Supply Adj	Ttl Pro Forma w/ PS	Sch. 93 PS Update	Incremental Increase / (Decrease) in PS Costs
		3.37%	7.62%	2.93%	0.32%

Rate Year Study
(Electric)

Exh. EMA-5

AVISTA UTILITIES
WASHINGTON ELECTRIC RESULTS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

Step 1 Increase (5/1/2018)
05.2018 Rate Year Analysis
(5/1/2018-4/30/2018)

(Increase excluding
CS2/Colstrip)

Line No.	DESCRIPTION	Pro Forma Including ERM Total	EOP 2017 Capital Net Rate Base	Rate Period Capital Add (AMA) 05.2018-04.2019	Rate Period Major Maint Hydro Thermal, Other	Rate Period CS2/Colstrip Major Maint	Rate Period IS/IT Expense	Rate Period Revenues 05.2018-04.2019	May 1, 2018 Rate Period Total
		PF-Ttl	18.01 E-EOPCAP17	18.02 E-RPCAP	18.03 E-RPMM	18.04 E-PNM	18.05 E-CI	18.06 E-RPRev	2018 Ttl
	Adjustment Number Workpaper Reference								
	REVENUES								
1	Total General Business	\$491,188	\$0	\$0	\$0	\$0	\$0	\$13,357	\$504,545
2	Interdepartmental Sales	946	-	-	-	-	-	-	946
3	Sales for Resale	35,563	-	-	-	-	-	-	35,563
4	Total Sales of Electricity	527,697	-	-	-	-	-	13,357	541,054
5	Other Revenue	13,032	-	-	-	-	-	(687)	12,345
6	Total Electric Revenue	540,729	-	-	-	-	-	12,670	553,399
	EXPENSES								
	Production and Transmission								
7	Operating Expenses	133,453	-	-	1,486	767	-	-	135,706
8	Purchased Power	73,220	-	-	-	-	-	2,685	75,905
9	Depreciation/Amortization	26,806	1,311	1,609	-	-	-	-	29,726
10	Regulatory Amortization	3,312	-	-	-	-	-	-	3,312
11	Taxes	16,568	-	-	-	-	-	-	16,568
12	Total Production & Transmission	253,359	1,311	1,609	1,486	767	-	2,685	261,217
	Distribution								
13	Operating Expenses	21,602	-	-	-	-	-	-	21,602
14	Depreciation/Amortization	28,614	1,224	2,215	-	-	-	-	32,053
15	Regulatory Amortization	-	-	-	-	-	-	-	-
16	Taxes	27,784	-	-	-	-	-	514	28,298
17	Total Distribution	78,000	1,224	2,215	-	-	-	514	81,953
18	Customer Accounting	13,294	-	-	-	-	-	88	13,382
19	Customer Service & Information	1,430	-	-	-	-	-	-	1,430
20	Sales Expenses	-	-	-	-	-	-	-	-
	Administrative & General								
21	Operating Expenses	50,828	-	-	-	-	217	27	51,072
22	Depreciation/Amortization	26,174	5,480	4,831	-	-	-	-	36,485
23	Taxes	-	-	-	-	-	-	-	-
24	Total Admin. & General	77,002	5,480	4,831	-	-	217	27	87,557
25	Total Electric Expenses	423,085	8,015	8,655	1,486	767	217	3,314	445,539
26	OPERATING INCOME BEFORE FIT	117,644	(8,015)	(8,655)	(1,486)	(767)	(217)	9,356	107,860
	FEDERAL INCOME TAX								
27	Current Accrual	(38,935)	(2,805)	(3,029)	(520)	(268)	(76)	3,275	(42,359)
28	Debt Interest	(277)	(1,213)	(90)	-	-	-	-	(1,579)
29	Deferred Income Taxes	67,191	-	-	-	-	-	-	67,191
30	Amortized ITC - Noxon	(326)	-	-	-	-	-	-	(326)
31	NET OPERATING INCOME	89,991	(\$3,997)	(5,536)	(966)	(499)	(\$141)	\$6,081	84,933
	RATE BASE								
	PLANT IN SERVICE								
32	Intangible	\$166,376	\$19,881	\$15,712	-	\$0	\$0	\$0	\$201,969
33	Production	839,722	73,821	19,907	-	-	-	-	933,450
34	Transmission	430,613	52,623	16,622	-	-	-	-	499,858
35	Distribution	997,664	77,322	39,859	-	-	-	-	1,114,845
36	General	233,266	25,741	13,470	-	-	-	-	272,477
37	Total Plant in Service	2,667,641	249,388	105,570	-	-	-	-	3,022,599
	ACCUMULATED DEPRECIATION/AMORT								
38	Intangible	(32,006)	(14,017)	(18,217)	-	-	-	-	(64,240)
39	Production	(\$351,720)	(10,617)	(18,137)	-	-	-	-	(\$380,474)
40	Transmission	(135,624)	(5,984)	(5,907)	-	-	-	-	(147,515)
41	Distribution	(295,710)	(36,976)	(29,735)	-	-	-	-	(362,421)
42	General	(80,093)	(10,045)	(7,994)	-	-	-	-	(98,132)
43	Total Accumulated Depreciation	(895,153)	(77,639)	(79,990)	-	-	-	-	(1,052,782)
44	NET PLANT	1,772,488	171,749	25,580	-	-	-	-	1,969,817
45	DEFERRED TAXES	(361,893)	(51,875)	(16,712)	-	-	-	-	(430,480)
46	Net Plant After DFIT	1,410,595	119,874	8,868	-	-	-	-	1,539,337
47	DEFERRED DEBITS AND CREDITS & OTHER	(778)	-	-	-	-	-	-	(778)
48	WORKING CAPITAL	62,474	-	-	-	-	-	-	62,474
49	TOTAL RATE BASE	1,472,291	119,874	\$8,868	\$0	\$0	\$0	\$0	1,601,033
50	RATE OF RETURN								
51	REVENUE REQUIREMENT	37,501	21,336	10,039	1,559	805	228	(9,818)	61,649
	Ttl Pro Forma w/ PS							12.53%	(16,609)
								9.15%	45,040

Rate Year Study
(Electric)

AVISTA UTILITIES
WASHINGTON ELECTRIC RESULTS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

Step 2 Increase (5/1/2019)
05.2019 Rate Year Analysis
(5/1/2019-4/30/2020)

Line No.	DESCRIPTION	May 1, 2018 Total	2.71%				May 1, 2019 Rate Period Total	Incremental May 1, 2019 (1) Rate Period Total
			Rate Period Capital Add (AMA) 05.2019-04.2020	Rate Period O&M/A&G 2.71%	Rate Period Property Tax Expense	Rate Period Revenues 05.2019-04.2020		
	Adjustment Number	2018 Totl	19.01	19.02	19.03	19.04	2019Totl	2019-Inc
	Workpaper Reference		E-CAP19	E-LN19	E-PT19	E-Rev19		
	REVENUES							
1	Total General Business	\$504,545	\$0	\$0	\$0	\$2,615	\$507,160	\$2,615
2	Interdepartmental Sales	946	-	-	-	-	946	-
3	Sales for Resale	35,563	-	-	-	-	35,563	-
4	Total Sales of Electricity	541,054	-	-	-	2,615	543,669	2,615
5	Other Revenue	12,345	-	-	-	2,156	14,501	2,156
6	Total Electric Revenue	553,399	-	-	-	4,771	558,170	4,771
	EXPENSES							
	Production and Transmission	-						
7	Operating Expenses	135,706	-	1,598	-	-	137,304	1,598
8	Purchased Power	75,905	-	-	-	502	76,407	502
9	Depreciation/Amortization	29,726	1,287	-	-	-	31,013	1,287
10	Regulatory Amortization	3,312	-	-	-	-	3,312	-
11	Taxes	16,568	-	-	787	-	17,355	787
12	Total Production & Transmission	261,217	1,287	1,598	787	502	265,391	4,174
	Distribution							
13	Operating Expenses	21,602	-	585	-	-	22,187	585
14	Depreciation/Amortization	32,053	1,505	-	-	-	33,558	1,505
15	Regulatory Amortization	-	-	-	-	-	-	-
16	Taxes	28,298	-	-	434	101	28,833	535
17	Total Distribution	81,953	1,505	585	434	101	84,578	2,625
18	Customer Accounting	13,382	-	363	-	17	13,762	380
19	Customer Service & Information	1,430	-	39	-	-	1,469	39
20	Sales Expenses	-	-	-	-	-	-	-
	Administrative & General							
21	Operating Expenses	51,072	-	1,384	-	5	52,461	1,389
22	Depreciation/Amortization	36,485	2,610	-	-	-	39,095	2,610
23	Taxes	-	-	-	-	-	-	-
24	Total Admin. & General	87,557	2,610	1,384	-	5	91,556	3,999
25	Total Electric Expenses	445,539	5,402	3,969	1,221	625	456,756	11,217
26	OPERATING INCOME BEFORE FIT	107,860	(5,402)	(3,969)	(1,221)	4,146	101,414	(6,446)
	FEDERAL INCOME TAX							
27	Current Accrual	(42,359)	(1,891)	(1,389)	(427)	1,451	(44,615)	(2,256)
28	Debt Interest	(1,579)	(354)	-	-	-	(1,933)	(354)
29	Deferred Income Taxes	67,191	-	-	-	-	67,191	-
30	Amortized ITC - Noxon	(326)	-	-	-	-	(326)	-
31	NET OPERATING INCOME	84,933	(\$3,157)	(2,580)	(\$794)	\$2,695	81,098	(3,836)
	RATE BASE							
	PLANT IN SERVICE							
32	Intangible	\$201,969	\$11,848	\$0	\$0	\$0	\$213,817	\$11,848
33	Production	933,450	38,238	-	-	-	971,688	38,238
34	Transmission	499,858	32,482	-	-	-	532,340	32,482
35	Distribution	1,114,845	52,604	-	-	-	1,167,449	52,604
36	General	272,477	11,125	-	-	-	283,602	11,125
37	Total Plant in Service	3,022,599	\$146,297	-	-	-	3,168,896	146,297
	ACCUMULATED DEPRECIATION/AMORT							
38	Intangible	(64,240)	(19,023)	-	-	-	(83,263)	(19,023)
39	Production	(\$380,474)	(18,272)	-	-	-	(\$398,746)	(\$18,272)
40	Transmission	(147,515)	(5,786)	-	-	-	(153,301)	(5,786)
41	Distribution	(362,421)	(30,924)	-	-	-	(393,345)	(30,924)
42	General	(98,132)	(8,527)	-	-	-	(106,659)	(8,527)
43	Total Accumulated Depreciation	(1,052,782)	(82,532)	-	-	-	(1,135,314)	(82,532)
44	NET PLANT	1,969,817	63,765	-	-	-	2,033,582	63,765
45	DEFERRED TAXES	(430,480)	(28,754)	-	-	-	(459,234)	(28,754)
46	Net Plant After DFIT	1,539,337	35,011	-	-	-	1,574,348	35,011
47	DEFERRED DEBITS AND CREDITS & OTHER	(778)	-	-	-	-	(778)	-
48	WORKING CAPITAL	62,474	-	-	-	-	62,474	-
49	TOTAL RATE BASE	1,601,033	\$35,011	\$0	\$0	\$0	1,636,044	35,011
50	RATE OF RETURN	5.30%					4.96%	
51	REVENUE REQUIREMENT	61,649	9,444	4,165	1,281	(4,351)	72,188	10,539

PS Auth
Expense
\$ 79,036
PS PF
\$ (2,292)

Rate Year Study
(Electric)

Exh. EMA-5

AVISTA UTILITIES
WASHINGTON ELECTRIC RESULTS
RATE YEAR STUDY - 5/1/2018 - 4/30/2021
TWELVE MONTHS ENDED DECEMBER 31, 2016
(000'S OF DOLLARS)

Step 3 Increase (5/1/2020)
05.2020 Rate Year Analysis
(5/1/2020-4/30/2021)

Line No.	DESCRIPTION	May 1, 2019 Rate Period Total	Rate Period	Rate Period	Rate Period	Rate Period	May 1, 2020 Rate Period Total	Incremental
			Capital Add (AMA) 05.2020-04.2021	O&M/A&G 2.71% 20.02 E-LN20	Property Tax Expense 20.03 E-PT20	Revenues 05.2020-04.2021 20.04 E-Rev20		May 1, 2020 Rate Period Total
	Adjustment Number Workpaper Reference	2019Ttl	20.01 E-CAP20	20.02 E-LN20	20.03 E-PT20	20.04 E-Rev20	2020Ttl	2020-Inc
	REVENUES							
1	Total General Business	\$507,160	\$0	\$0	\$0	\$3,566	\$510,726	\$3,566
2	Interdepartmental Sales	946	-	-	-	-	946	-
3	Sales for Resale	35,563	-	-	-	-	35,563	-
4	Total Sales of Electricity	543,669	-	-	-	3,566	547,235	3,566
5	Other Revenue	14,501	-	-	-	1,575	16,076	1,575
6	Total Electric Revenue	558,170	-	-	-	5,141	563,311	5,141
	EXPENSES							
	Production and Transmission							
7	Operating Expenses	137,304	-	1,641	-	-	138,945	1,641
8	Purchased Power	76,407	-	-	-	676	77,083	676
9	Depreciation/Amortization	31,013	1,561	-	-	-	32,574	1,561
10	Regulatory Amortization	3,312	-	-	-	-	3,312	-
11	Taxes	17,355	-	-	875	-	18,230	875
12	Total Production & Transmission	265,391	1,561	1,641	875	676	270,144	4,753
	Distribution							
13	Operating Expenses	22,187	-	601	-	-	22,789	601
14	Depreciation/Amortization	33,558	1,696	-	-	-	35,254	1,696
15	Regulatory Amortization	-	-	-	-	-	-	-
16	Taxes	28,833	-	-	509	137	29,479	646
17	Total Distribution	84,578	1,696	601	509	137	87,522	2,943
18	Customer Accounting	13,762	-	373	-	23	14,158	396
19	Customer Service & Information	1,469	-	40	-	-	1,509	40
20	Sales Expenses	-	-	-	-	-	-	-
	Administrative & General							
21	Operating Expenses	52,461	-	1,422	-	7	53,890	1,429
22	Depreciation/Amortization	39,095	5,189	-	-	-	44,284	5,189
23	Taxes	-	-	-	-	-	-	-
24	Total Admin. & General	91,556	5,189	1,422	-	7	98,174	6,618
25	Total Electric Expenses	456,756	8,446	4,077	1,384	843	471,506	14,750
26	OPERATING INCOME BEFORE FIT	101,414	(8,446)	(4,077)	(1,384)	4,298	91,805	(9,609)
	FEDERAL INCOME TAX							
27	Current Accrual	(44,615)	(2,956)	(1,427)	(484)	1,504	(47,978)	(3,363)
28	Debt Interest	(1,933)	(607)	-	-	-	(2,540)	(607)
29	Deferred Income Taxes	67,191	-	-	-	-	67,191	-
30	Amortized ITC - Noxon	(326)	-	-	-	-	(326)	-
31	NET OPERATING INCOME	81,098	(\$4,883)	(2,650)	(\$900)	\$2,794	75,459	(5,639)
	RATE BASE							
	PLANT IN SERVICE							
32	Intangible	\$213,817	\$18,026	\$0	\$0	\$0	\$231,843	\$18,026
33	Production	971,688	44,599	-	-	-	1,016,287	44,599
34	Transmission	532,340	38,276	-	-	-	570,616	38,276
35	Distribution	1,167,449	58,079	-	-	-	1,225,528	58,079
36	General	283,602	19,973	-	-	-	303,575	19,973
37	Total Plant in Service	3,168,896	178,953	-	-	-	3,347,849	178,953
	ACCUMULATED DEPRECIATION/AMORT							
38	Intangible	(83,263)	(22,927)	-	-	-	(106,190)	(22,927)
39	Production	(\$398,746)	(19,058)	-	-	-	(\$417,804)	(\$19,058)
40	Transmission	(153,301)	(6,449)	-	-	-	(159,750)	(6,449)
41	Distribution	(393,345)	(32,596)	-	-	-	(425,941)	(32,596)
42	General	(106,659)	(9,099)	-	-	-	(115,758)	(9,099)
43	Total Accumulated Depreciation	(1,135,314)	(90,129)	-	-	-	(1,225,443)	(90,129)
44	NET PLANT	2,033,582	88,824	-	-	-	2,122,406	88,824
45	DEFERRED TAXES	(459,234)	(28,793)	-	-	-	(488,027)	(28,793)
46	Net Plant After DFIT	1,574,348	60,031	-	-	-	1,634,379	60,031
47	DEFERRED DEBITS AND CREDITS & OTHER	(778)	-	-	-	-	(778)	-
48	WORKING CAPITAL	62,474	-	-	-	-	62,474	-
49	TOTAL RATE BASE	1,636,044	\$60,031	\$0	\$0	\$0	1,696,075	60,031
50	RATE OF RETURN	4.96%					4.45%	
51	REVENUE REQUIREMENT	72,188	15,336	4,278	1,452	(4,510)	88,744	16,556

1

Exh. EMA-5 – Electric Rate Year Study

2

Q. Please explain the purpose of the electric Rate Year Study.

3

A. The Rate Year Study was developed to show the planned investment, and

4

operating expenses, offset by revenues from increased sales to customers through each rate

5

year of the Three-Year Rate Plan, May 1, 2018 through April 30, 2021. This Study is

6

provided as additional evidence demonstrating the need for revenue increases for the three-

7

year rate period. This information is the same information presented to Avista's Board of

8

Directors and Rating Agencies, and reflects the planned operations for Avista for the

9

specific rate year. Therefore, the results of the Rate Year Study reflect the revenue

10

increases actually needed by Avista during the three-year period in order for revenue to be

11

sufficient during the rate year to cover Avista's costs, and have a reasonable opportunity to

12

earn the allowed return on investment.

13

The results of the electric Rate Year Study are \$61.6 million¹ for Rate Year 1,

14

effective May 1, 2018; \$10.5 million for Rate Year 2, effective May 1, 2019; and \$16.6

15

million for Rate Year 3, effective May 1, 2020.

16

Q. Please explain what is shown on pages 1 – 3 of Exh. EMA-5.

17

A. Page 1 of Exh. EMA-5 shows, at line 7, the calculation of the electric Rate

18

Year 1 revenue requirement of \$61,649,000, or 12.53% revenue increase, as shown on line

19

9. This page also shows the effect on billed rates, with the expiration of Schedule 93

¹ The electric Rate Year 1 revenue requirement includes \$16.6 million of increased power supply costs. If the proposed \$15.0 million Power Supply Rate Adjustment is approved effective September 1, 2017, the total revenue requirement amount would be offset by the \$15.0 million on a billed basis.

1 (Power Cost Rate Adjustment (PCRA)) totaling \$14.976 million², resulting in a bill impact
2 of \$46,673,000, or 8.86% on an overall billed basis (net of the expiration of Schedule 93).

3 Also shown on page 1, at lines 12-15, are the incremental rate adjustments, per the
4 Rate Year Study, for Rate Year 2 (effective May 1, 2019) and Rate Year 3 (May 1, 2020).
5 As shown on lines 12 and 13, the incremental revenue requirement for Rate Year 2 is
6 \$10,539,000, or 1.84% on a billed basis. Lines 14 and 15 show the incremental revenue
7 requirement for Rate Year 3 is \$16,556,000, or 2.83% on a billed basis.

8 Page 2 of Exh. EMA-5, shows the Cost of Capital and Capital Structure included
9 in the Rate Year Study, including: 1) 48.5% Common Equity / 51.5% Debt capital
10 structure; 2) Return on Equity of 9.9%; and 3) cost of debt of 5.62%, resulting in an overall
11 Rate of Return (weighted average cost of capital) of 7.69%. Company witness Mr. Thies
12 discusses the Company's rate of return and the capital structure, while Company witness
13 Mr. McKenzie provides additional testimony related to the appropriate return on equity for
14 Avista.

15 Page 3 shows the derivation of the electric net-operating-income-to-gross-revenue
16 conversion factor. The conversion factor takes into account uncollectible accounts
17 receivable, Commission fees and Washington State excise taxes. Federal income taxes are
18 reflected at 35%.

² Company witness Mr. Ehrbar discusses the PCRA as it relates to this general rate case. Schedule 93 includes the proposed update to current authorized power supply costs in retail rates, increasing power supply net expense \$14.976 million effective September 1, 2017 (or 2.9%), as well as updating the base for the Energy Recovery Mechanism (ERM). With this general rate case the Company is proposing to update power supply base costs per the pro forma for Rate Year 1 (May 1, 2018-April 30, 2019). With new base rates effective May 1, 2018, Schedule 93 expires (\$15.0 million), offsetting the majority of the increase in pro forma net power supply costs (\$16.6 million), for a bill impact of \$1.6 million.

1 **Q. Now turning to pages pages 4 through 9 of Exh. EMA-5, please explain**
2 **what is included on those pages?**

3 A. Page 4 begins with actual operating results and rate base for the twelve-
4 months-ending December 31, 2016 test period on an AMA basis in column (1.00).
5 Individual normalizing and restating adjustments that are standard components of our
6 annual reporting to the Commission begin in column (1.01) on page 4 and continue through
7 column (2.18) on page 6. Individual Pro Forma adjustments are shown on pages 7 and 8
8 in columns (3.01) though (3.14). The last column on page 8, labeled “Non-Energy Pro
9 Forma Sub-Total” is the subtotal of the previous columns (1.00) through (3.14), and
10 produces the Traditional Pro Forma Study Non-Energy net operating income (NOI), total
11 rate base, and revenue requirement totaling \$20,892,000, as seen in Exh. EMA-2.

12 Turning to page 9, adjustment 4.00 “Pro Forma Power Supply and Transmission
13 Revenues” is the last pro forma adjustment included (\$16.609 million), prior to the “Pro
14 Forma Including PS Total,” column, totaling \$37.501 million overall Pro Forma revenue
15 requirement, as shown on page 1. The final two columns on page 9 show the impact of the
16 expiration of tariff Schedule 93 (\$14.976 million), and the incremental difference of
17 column 4.00 “Pro Forma Power Supply & Transmission Revenues,” net of the expiration
18 of “Schedule 93,” showing the incremental bill increase of \$1.633 million (or .32%).

19 Provided with Exh. EMA-2 are explanations of each of the electric Commission
20 Basis, restating and Pro Forma adjustments included on pages 4 through 9. The Company
21 has also provided workpapers, both in hard copy and electronic format, which include
22 additional details related to each of these adjustments.

1 **Q. Now turning to pages pages 10 through 12 of Exh. EMA-5, please**
2 **explain what is included on those pages?**

3 A. Page 10 of Exh. EMA-5 includes additional Rate Year 1 (May 1, 2018 –
4 April 30, 2019) adjustments necessary beyond that included in the Traditional Pro Forma
5 Study. These adjustments represent Rate Year 1 adjustments that do not meet the
6 Commissions traditional pro forma methodology for inclusion in the Traditional Pro Forma
7 Study; but none-the-less, are planned costs during the Rate Year 1 period. These individual
8 Rate Year adjustments include columns (18.01) through (18.06). A summary column on
9 page 10, labeled “May 1, 2018 Rate Period Total” sums the Traditional Pro Forma Total
10 column and these six adjustments reflecting the overall revenue requirement needed per
11 Rate Year 1 of \$61,649,000, including pro forma power supply.

12 Turning to page 11, this page starts with the “May 1, 2018 Rate Period Total.” Four
13 Rate Year 2 adjustments, (19.01) through (19.04) for the period May 1, 2019 – April 30,
14 2020, are included here to reflect planned capital additions and expenses, offset by revenues
15 from increased sales to customers for Rate Year 2, effective May 1, 2019. The impact of
16 including these Rate Year 2 adjustments, result in a total revenue requirement as of May 1,
17 2019 of \$72,188,000 as shown in column “May 1, 2019 Rate Period Total.” This reflects
18 an incremental revenue requirement amount of \$10,539,000 above the May 1, 2018 level.

19 Turning to Page 12, this page starts with the “May 1, 2019 Rate Period Total.” Four
20 Rate Year 3 adjustments, (20.01) through (20.04) for the period May 1, 2020 – April 30,
21 2021, are included here to reflect planned capital additions and expenses, offset by revenues
22 from increased sales to customers for Rate Year 3, effective May 1, 2020. The impact of
23 including these Rate Year 3 adjustments, result in a total revenue requirement as of May 1,

1 2020 of \$88,744,000. This reflects an incremental revenue requirement amount of
2 \$16,556,000 above the May 1, 2019 level.

3 Below is an explanation of each of the Rate Year Study adjustments mentioned
4 above. The Company has also provided workpapers, both in hard copy and electronic
5 formats, which include additional details related to each of these adjustments.

6

7 **Rate Year 1 (May 1, 2018 – April 30, 2019) Adjustments**

8 **Q. Please explain each of the Rate Year 1 adjustments included on page 10**
9 **of Exh. EMA-5.**

10 A. Page 10 of Exh. EMA-5 includes the following adjustments:

11 **EOP 2017 Capital Net Rate Base Additions**, column (18.01), adjustment starts
12 with the Traditional Pro Forma Study net plant after ADFIT results and adjusts total net
13 plant after ADFIT, including all 2017 remaining capital additions, to a 2017 EOP basis.
14 Specifically, Avista reviewed the planned capital projects that were below the 0.5 percent
15 threshold for 2017 (i.e., those not included in the Traditional Pro Forma Study adjustment
16 3.10 Pro Forma 2017 “Threshold Capital Additions” discussed in Exh. EMA-2). These
17 additions were included for 2017, together with the associated A/D and ADFIT on a 2017
18 EOP basis, as well as annual depreciation expense.³ The associated ADFIT includes the

³ The Company reviewed large capital additions in 2017 to determine any offsets (e.g., reduced O&M costs, reduced load losses, etc.). Maintenance records were reviewed to determine whether any specific maintenance costs were incurred in the test year that would be reduced or eliminated by the investment. Those costs were quantified and included as a reduction to O&M expenses in adjustment (3.11) Pro Forma O&M Savings included in Exh. EMA-2 and Exh. EMA-5. In addition, the output from generation assets is included in the AURORA_{XMP} power cost model. Therefore, to the extent that the additional investments serve to either preserve or increase generation from the generation projects, the benefits are already reflected in the AURORA_{XMP} model.

1 repairs deduction and bonus tax depreciation expected through 2017 on an EOP basis⁴. In
2 addition, the plant-in-service for 2016 AMA was adjusted to a 2017 EOP basis. The effect
3 of this adjustment increases rate base by \$119,874,000 and decreases net operating income
4 by \$3,997,000. Company witness Ms. Schuh sponsors this adjustment.

5 **Rate Period Capital Additions (AMA) 05.2018-04.2019**, column (18.02), this
6 adjustment includes planned capital additions for the period January 1, 2018 through April
7 30, 2019, together with the associated A/D and ADFIT for the period 12-months ended
8 April 30, 2019 on an average-of-monthly-average (AMA) basis. Annual depreciation for
9 these capital additions are also included in this adjustment. The associated ADFIT includes
10 the repairs deduction and bonus tax depreciation expected through April 2019 on an AMA
11 basis. In addition, total plant-in-service as of EOP 2017 was adjusted to a 04.2019 AMA
12 basis. The effect of this adjustment increases rate base by \$8,868,000 and decreases net
13 operating income by \$5,536,000. Ms. Schuh sponsors this adjustment.

14 **Rate Period Major Maintenance Hydro, Thermal, Other**, column (18.03),
15 includes the incremental increase in hydro, thermal and other generating plant major
16 maintenance expense expected during the rate year beginning May 1, 2018, above that
17 included in the 2016 test period.⁵ Examples of major planned maintenance include Cabinet
18 Gorge and Long Lake spillgate repairs or refurbishment, Cabinet Gorge penstock repairs
19 on Unit #3, Kettle Falls Combustion Turbine north grate rebuild and turbine maintenance,

⁴ The IRS extended bonus depreciation through 2019. The Company has included bonus depreciation through 2019 within its capital adjustments.

⁵ This adjustment does not include planned maintenance at the Company's Colstrip or CS2 generating plants, as the associated maintenance at those facilities are separately included in the CS2/Colstrip Major Maintenance Adjustments discussed in Exh. EMA-2 (restating adjustment 2.16 and Pro Forma adjustment 3.13) and Rate Year 1 adjustment 18.04 discussed below.

1 and Upper Falls generator and turbine bearing overhaul, to name a few. The effect of this
2 adjustment decreases Washington net operating income by \$966,000.

3 **Rate Period CS2/Colstrip Major Maintenance**, column (18.04), reflects an
4 increase to the normalized major maintenance expense included in Pro Forma adjustment
5 (3.13). Pro Forma adjustment (3.13) reflect the normalized level of major maintenance in
6 2016 and 2017 normalized over the three-year period for regulatory purposes. This
7 adjustment includes the incremental CS2 major maintenance planned for 2018 of \$3.5
8 million (system) on a normalized basis for regulatory purposes. This adjustment reflects
9 1/3⁶ of Washington's share of the 2018 \$3.5 million (system) major maintenance. The
10 results of this adjustment on a Washington share bases, increases normalized major
11 maintenance expense by \$767,000, decreasing net operating income by \$499,000.

12 **Rate Period IS/IT Expense**, column (18.05), adjusts the level of information
13 services and information technology (IS/IT) expense included in the Traditional Pro Forma
14 Study in Pro Forma IS/IT adjustment (3.07), which includes the level of IS/IT expenses
15 that would be known as of May 1, 2018. This adjustment includes the incremental IS/IT
16 expenses planned during the period May 1, 2018 through April 30, 2019. This adjustment
17 includes the incremental costs associated with software development, application licenses,
18 maintenance fees, and technical support for a range of information services programs.
19 These incremental expenditures are necessary to support Company cyber and general
20 security, emergency operations readiness, electric and natural gas facilities and operations

⁶ CS2 major maintenance is to be amortized over a 4-year normalization period. This error came to light recently after completion of the Rate Year Study. Correcting this adjustment to reflect a 4-year amortization would reduce this expense by \$292,000 system annually, or \$192,000 Washington expense. This correction, as well as updating for actual 2017 Colstrip overhaul major maintenance expense currently in progress, will be updated during the process of this case.

1 support, and customer services. Company witness Mr. Kensok sponsors this adjustment
2 and provides more information within his testimony. The effect of this adjustment
3 decreases net operating income by \$141,000.

4 **Rate Period Revenues 05.2018-04.2019**, column (18.06), reflects the incremental
5 revenue at present rates from loads and customers included in the Company's forecast for
6 the period 12-months ended April 30, 2019 compared to the test year Pro Forma
7 Normalized Revenue. The adjustment includes estimated deferred revenues associated
8 with the Decoupling Mechanism, assuming the decoupling base is updated by Pro Forma
9 Normalized Revenue at present rates, and the Retail Revenue Adjustment rate embedded
10 in present rates. The power cost of the incremental load is calculated using the same Retail
11 Revenue Adjustment rate included in the updated decoupling base. Company witness Ms.
12 Knox sponsors this adjustment. The effect of this adjustment increases Washington net
13 operating income by \$6,081,000.

14

15 **Rate Year 2 (May 1, 2019 – April 30, 2020) Adjustments**

16 **Q. Please explain each of the Rate Year 2 adjustments included on page 11**
17 **of Exh. EMA-5.**

18 A. Page 11 of Exh. EMA-5 includes the following adjustments:

19 **Rate Period Capital Additions (AMA) 05.2019-04.2020**, column (19.01), this
20 adjustment includes planned capital additions for the period May 1, 2019 through April 30,
21 2020, together with the associated A/D and ADFIT for the period 12-months ended April
22 30, 2020 on an AMA basis. Annual depreciation for these capital additions are also
23 included in this adjustment. The associated ADFIT includes the repairs deduction and

1 bonus tax depreciation expected through April 2020 on an AMA basis. In addition, total
2 plant-in-service as of AMA 04.2019 was adjusted to a 04.2020 AMA basis. The effect of
3 this adjustment increases rate base by \$35,011,000 and decreases net operating income by
4 \$3,157,000. Ms. Schuh sponsors this adjustment.

5 **Rate Period O&M/A&G (2.71%) Expense**, column (19.02), reflects the annual
6 planned increase in operating expenses of 2.71% on a system basis, including O&M,
7 customer service, and administrative and general expenses. Per the Company's current
8 financial forecast, the annual percentage increase in O&M has been reduced to reflect
9 "efficiency reductions" in O&M, resulting in an O&M average increase of 2.71% over the
10 four-year period 2017 to 2020 for the combined electric and natural gas systems. This
11 2.71% growth in operating expenses is a significant reduction from the prior year's average
12 growth in O&M expenses, and reflects an effort by the Company to reduce its O&M
13 expenses from previous years. The effect of this adjustment decreases Washington net
14 operating income by \$2,580,000.

15 **Rate Period Property Tax Expense**, column (19.03), restates the Rate Year 1 level
16 of property tax expense (beginning May 1, 2018) included in adjustment (3.06) Pro Forma
17 Property tax, to the level of property tax expense the Company will experience during Rate
18 Year 2 beginning May 1, 2019. The property on which the tax is calculated is the property
19 value as of December 31, 2018. The effect of this adjustment decreases net operating
20 income by \$794,000.

21 **Rate Period Revenues 05.2019-04.2020**, column (19.04), reflects the incremental
22 revenue at present rates from loads and customers included in the Company's forecast for
23 the period 12-months ended April 30, 2020 compared to the Rate Year Revenues 05.2018-

1 04.2019. The adjustment includes estimated deferred revenues associated with the
2 Decoupling Mechanism, assuming the decoupling base is updated by Pro Forma
3 Normalized Revenue at present rates, and the Retail Revenue Adjustment rate embedded
4 in present rates. The power cost of the incremental load is calculated using the same Retail
5 Revenue Adjustment rate included in the updated decoupling base. Ms. Knox sponsors
6 this adjustment. The effect of this adjustment increases Washington net operating income
7 by \$2,695,000.

8

9 **Rate Year 3 (May 1, 2020 – April 30, 2021) Adjustments**

10 **Q. Please explain each of the Rate Year 3 adjustments included on page 12**
11 **of Exh. EMA-5.**

12 A. Page 12 of Exh. EMA-5 includes the following adjustments:

13 **Rate Period Capital Additions (AMA) 05.2020-04.2021**, column (20.01), this
14 adjustment includes planned capital additions for the period May 1, 2020 through April 30,
15 2021, together with the associated A/D and ADFIT for the period 12-months ended April
16 30, 2021 on an AMA basis. Annual depreciation for these capital additions are also
17 included in this adjustment. The associated ADFIT includes the repairs deduction and
18 bonus tax depreciation expected through April 2021 on an AMA basis. In addition, total
19 plant-in-service as of AMA 04.2020 was adjusted to a 04.2021 AMA basis. The effect of
20 this adjustment increases rate base by \$60,031,000 and decreases net operating income by
21 \$4,883,000. Ms. Schuh sponsors this adjustment.

22 **Rate Period O&M/A&G (2.71%) Expense**, column (20.02), reflects the annual
23 planned increase in operating expenses of 2.71%, including O&M, customer service, and

1 administrative and general expenses. Per the Company's current financial forecast, the
2 annual percentage increase in O&M has been reduced to reflect "efficiency reductions" in
3 O&M, resulting in an O&M average increase of 2.71% over the four-year period 2017 to
4 2020 for the combined electric and natural gas systems. This 2.71% growth in operating
5 expenses is a significant reduction from the prior year average growth in O&M expenses,
6 and reflects an effort by the Company to reduce its O&M expenses from previous years.
7 The effect of this adjustment decreases Washington net operating income by \$2,650,000.

8 **Rate Period Property Tax Expense**, column (20.03), restates the Rate Year 2 level
9 of property tax expense (beginning May 1, 2019) included in adjustment (19.03) Rate
10 Period Property tax, to the level of property tax expense the Company will experience
11 during Rate Year 3 beginning May 1, 2020. The property on which the tax is calculated is
12 the property value as of December 31, 2019. The effect of this adjustment decreases net
13 operating income by \$900,000.

14 **Rate Period Revenues 05.2020-04.2021**, column (20.04), reflects the incremental
15 revenue at present rates from loads and customers included in the Company's forecast for
16 the period 12-months ended April 30, 2021 compared to the Rate Period Revenues
17 05.2019-04.2020. The adjustment includes estimated deferred revenues associated with
18 the Decoupling Mechanism, assuming the decoupling base is updated by Pro Forma
19 Normalized Revenue at present rates, and the Retail Revenue Adjustment rate embedded
20 in present rates. The power cost of the incremental load is calculated using the same Retail
21 Revenue Adjustment rate included in the updated decoupling base. Ms. Knox sponsors this
22 adjustment. The effect of this adjustment increases net operating income by \$2,794,000.