## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-17\_\_\_\_\_

EXH. TLK-3

TARA L. KNOX

REPRESENTING AVISTA CORPORATION

05/26/17

Washington Jurisdiction

Electric Utility

Sumcost Scenario: Company Base Case UE-17\_\_\_\_ Cost of Service Basic Summary Load Factor Peak Credit Method AS FILED METHOD

AVISTA UTILITIES For the Twelve Months Ended December 31, 2016

	(b)	(c)	(d)	(e)	(f)	(g) Residential	(h) General	(i) Large Gen	(j) Extra Large	(k) Pumping	(I) Street &
					System	Service	Service	Service	Gen Service	Service	Area Lights
	Description				Total	Sch 1-2	Sch 11-12	Sch 21-22	Sch 25	Sch 31-32	Sch 41-49
	Plant In Service										
1	Production Plant				981,834,000	439,585,713	105,678,243	235,099,479	176,797,279	21,505,142	3,168,143
2	Transmission Plant				483,236,000	216,353,927	52,012,389	115,710,529	87,015,534	10,584,334	1,559,287
3	Distribution Plant				1,074,987,000	565,647,205	137,141,090	250,125,388	32,779,214	30,620,614	58,673,490
4	Intangible Plant				189,139,000	89,333,380	21,396,098	44,545,061	26,213,072	4,453,778	3,197,610
5	General Plant				259,007,000	138,570,543	30,271,104	52,082,517	27,383,076	5,725,011	4,974,749
6	Total Plant In Service				2,988,203,000	1,449,490,769	346,498,923	697,562,975	350,188,175	72,888,878	71,573,279
	Assume Denne sistian										
7	Accum Depreciation				(400 255 000)	(102 105 (00)	(44 202 224)	(100 704 014)	(77 205 242)	(0,401,004)	(1 205 102)
7 8	Production Plant Transmission Plant				(429,255,000)	(192,185,609)	(46,202,224)	(102,784,816)	(77,295,262)	(9,401,986)	(1,385,103)
o 9					(141,609,000)	(63,401,036)	(15,241,874)	(33,908,178)	(25,499,306)	(3,101,667)	(456,938)
9 10	Distribution Plant Intangible Plant				(332,685,000) (48,315,000)	(178,022,575) (23,216,498)	(42,148,806) (5,536,645)	(74,310,869) (11,270,923)	(9,843,470)	(9,192,978) (1,154,033)	(19,166,303) (975,414)
10	General Plant				,	,			(6,161,486) (0,542,579)		,
12	Total Accumulated Depreciation				(90,139,000) (1,042,003,000)	(48,189,459) (505,015,178)	(10,533,574) (119,663,123)	(18,147,105) (240,421,891)	(9,542,578) (128,342,102)	(1,993,675) (24,844,339)	(1,732,609)
12	Total Accumulated Depreciation				(1,042,003,000)	(505,015,176)	(119,003,123)	(240,421,091)	(120,342,102)	(24,044,339)	(23,716,367)
13	Net Plant				1,946,200,000	944,475,591	226,835,800	457,141,084	221,846,073	48,044,539	47,856,912
14	Accumulated Deferred FIT				(414,196,000)	(202,159,154)	(48,124,366)	(96,057,279)	(47,733,827)	(10,086,350)	(10,035,025)
15	Miscellaneous Rate Base				60,161,000	28,380,495	6,961,336	14,557,536	7,230,996	1,504,519	1,526,118
16	Total Rate Base				1,592,165,000	770,696,933	185,672,771	375,641,341	181,343,242	39,462,708	39,348,005
17	Davanua From Datail Dataa				402 124 000	200,400,000		10/ 7// 000	( 1 2 4 0 0 0 0	10 004 000	( 071 000
17	Revenue From Retail Rates				492,134,000	209,489,000	73,766,000	126,766,000	64,348,000	10,894,000	6,871,000
18	Other Operating Revenues				48,595,000	22,053,916	5,305,928	11,610,409	8,184,280	1,089,289	351,179
19	Total Revenues				540,729,000	231,542,916	79,071,928	138,376,409	72,532,280	11,983,289	7,222,179
	Operating Expenses										
20	Production Expenses				185,799,000	83,185,738	19,998,199	44,489,443	33,456,529	4,069,562	599,529
21	Transmission Expenses				20,874,000	9,345,686	2,246,742	4,998,265	3,758,748	457,204	67,355
22	Distribution Expenses				21,602,000	11,730,048	3,092,620	4,674,953	780,542	635,055	688,783
23	Customer Accounting Expenses				13,294,000	9,841,590	1,756,976	939,979	525,518	171,762	58,176
24	Customer Information Expenses				1,430,000	1,220,358	181,930	11,066	122	14,146	2,378
25	Sales Expenses				0	0	0	0	0	0	0
26	Admin & General Expenses				50,828,000	26,633,363	6,039,161	10,407,621	5,937,041	1,129,825	680,988
27	Total O&M Expenses				293,827,000	141,956,783	33,315,628	65,521,327	44,458,499	6,477,553	2,097,210
					,	, ,			,,	-,,	_,,
28	Taxes Other Than Income Taxes				44,352,000	20,052,896	5,768,402	10,923,669	5,810,122	1,028,964	767,948
29	Other Income Related Items				(100,000)	(52,148)	(12,638)	(23,308)	(3,947)	(2,809)	(5,150)
	Depreciation Expense										
30	Production Plant Depreciation				21,376,000	9,570,441	2,300,774	5,118,469	3,849,142	468,199	68,975
31	Transmission Plant Depreciation				8,430,000	3,774,271	907,351	2,018,558	1,517,977	184,643	27,202
32	Distribution Plant Depreciation				29,905,000	15,613,420	3,799,182	6,891,322	930,995	845,375	1,824,706
33	General Plant Depreciation				31,357,000	15,961,204	3,653,860	6,843,094	3,473,618	732,677	692,547
34	Amortization Expense				1,953,000	887,904	213,287	465,634	328,445	43,715	14,015
35	Total Depreciation Expense				93,021,000	45,807,239	10,874,453	21,337,077	10,100,177	2,274,608	2,627,445
36	Income Tax				24,082,000	787,338	8,873,127	11,156,823	2,624,479	406,779	233,454
37	Total Operating Expenses				455,182,000	208,552,107	58,818,972	108,915,588	62,989,330	10,185,095	5,720,907
38	Net Income				85,547,000	22,990,809	20,252,956	29,460,820	9,542,949	1,798,194	1,501,272
39	Rate of Return				5.37%	2.98%	10.91%	7.84%	5.26%	4.56%	3.82%
40	Return Ratio				1.00	0.56	2.03	1.46	0.98	0.85	0.71
41	Interest Expense				44,740,000	21,656,663	5,217,424	10,555,560	5,095,764	1,108,906	1,105,683
42	Revenue Related Expenses				24,122,000	10,268,125	3,615,648	6,213,449	3,154,024	533,971	336,783
12	Expenses				21,122,000	10,200,120	0,010,040	012101777	0,104,024	000,771	000,100

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	Sumcost	AVISTA UTILITIES	:		\//a	shington Jurisdict	ion	
	Scenario: Company Base Case UE-17	Revenue to Cost b		nonont Summany		05/26/17		
						Electric Utility		03/20/17
	Load Factor Peak Credit Method	For the Twelve Mo	nths Ended Dece	mber 31, 2016				
	AS FILED METHOD							
	(b) (c) (d) (e)	(f)	(g)	(h)	(i)	(j)	(k)	(I)
	(b) (c) (d) (c)	(1)	Residential	General				Street &
		Custom			Large Gen	Extra Large	Pumping	
		System	Service	Service	Service	Gen Service	Service	Area Lights
	Description	Total	Sch 1-2	Sch 11-12	Sch 21-22	Sch 25	Sch 31-32	Sch 41-49
	Functional Cost Components at Current Ret							
1	Production	231,432,419	95,025,826	29,486,476	59,882,821	41,414,351	4,917,174	705,773
2	Transmission	47,469,954	16,088,319	7,860,834	14,051,928	8,391,937	948,414	128,522
3	Distribution	115,909,500	53,141,716	22,168,949	29,839,351	3,393,718	2,882,593	4,483,173
4	Common	97,322,126	45,233,139	14,249,742	22,991,901	11,147,994	2,145,819	1,553,532
5	Total Current Rate Revenue	492,134,000	209,489,000	73,766,000	126,766,000	64,348,000	10,894,000	6,871,000
5		472,134,000	207,407,000	13,100,000	120,700,000	04,540,000	10,074,000	0,071,000
	Expressed as \$/kWh							
6	Production	\$0.04090	\$0.04023	\$0.04731	\$0.04249	\$0.03740	\$0.03683	\$0.03052
7	Transmission	\$0.00839	\$0.00681	\$0.01261	\$0.00997	\$0.00758	\$0.00710	\$0.00556
8	Distribution		\$0.02250	\$0.03557	\$0.02117	\$0.00306	\$0.02159	\$0.19390
		\$0.02048						
9	Common	\$0.01720	\$0.01915	\$0.02286	\$0.01631	\$0.01007	\$0.01607	\$0.06719
10	Total Current Melded Rates	\$0.08697	\$0.08870	\$0.11836	\$0.08994	\$0.05811	\$0.08161	\$0.29717
	Functional Cost Components at Uniform Cu	rrant Daturn						
	Functional Cost Components at Uniform Cu		400.057.444	04.047.400	FF 077 770	14 5 ( 0 174	F 0F ( 000	744.040
11	Production	230,853,777	103,357,616	24,847,603	55,277,779	41,569,471	5,056,398	744,910
12	Transmission	47,122,071	21,097,445	5,071,914	11,283,348	8,485,196	1,032,116	152,052
13	Distribution	116,435,427	65,360,060	15,197,463	24,038,292	3,427,582	3,115,725	5,296,306
14	Common	97,722,725	50,471,868	11,465,227	20,653,458	11,201,209	2,228,407	1,702,556
15	Total Uniform Current Cost	492,134,000	240,286,989	56,582,207	111,252,877	64,683,457	11,432,646	7,895,824
	E							
	Expressed as \$/kWh							
16	Production	\$0.04080	\$0.04376	\$0.03987	\$0.03922	\$0.03754	\$0.03788	\$0.03222
17	Transmission	\$0.00833	\$0.00893	\$0.00814	\$0.00801	\$0.00766	\$0.00773	\$0.00658
18	Distribution	\$0.02058	\$0.02767	\$0.02438	\$0.01705	\$0.00310	\$0.02334	\$0.22907
19	Common	\$0.01727	\$0.02137	\$0.01840	\$0.01465	\$0.01011	\$0.01669	\$0.07364
20	Total Current Uniform Melded Rates	\$0.08697	\$0.10174	\$0.09079	\$0.07893	\$0.05841	\$0.08564	\$0.34150
21	Revenue to Cost Ratio at Current Rates	1.00	0.87	1.30	1.14	0.99	0.95	0.87
	Functional Cost Components at Proposed R							
22	Production	249,747,851	102,579,806	31,470,374	64,569,460	45,122,111	5,267,700	738,400
23	Transmission	58,502,093	20,639,126	9,055,803	16,874,543	10,624,809	1,159,608	148,205
24	Distribution	137,986,508	64,238,969	25,155,451	35,753,537	4,204,418	3,470,765	5,163,368
25	Common	107,253,547	49,986,100	15,441,372	25,373,460	12,420,662	2,353,927	1,678,027
26	Total Proposed Rate Revenue	553,490,000	237,444,000	81,123,000	142,571,000	72,372,000	12,252,000	7,728,000
	·							
	Expressed as \$/kWh							
27	Production	\$0.04414	\$0.04343	\$0.05049	\$0.04581	\$0.04075	\$0.03946	\$0.03194
28	Transmission	\$0.01034	\$0.00874	\$0.01453	\$0.01197	\$0.00959	\$0.00869	\$0.00641
29	Distribution	\$0.02439	\$0.02720	\$0.04036	\$0.02537	\$0.00380	\$0.02600	\$0.22332
30	Common	\$0.01895	\$0.02116	\$0.02478	\$0.01800	\$0.01122	\$0.01763	\$0.07258
31	Total Proposed Melded Rates	\$0.09781	\$0.10053	\$0.13016	\$0.10115	\$0.06535	\$0.09178	\$0.33424
51			φ0.10000	\$0.15010	\$0.10115	ψ0.00000	\$0.07170	ψ0.33424
	Functional Cost Components at Uniform Re							
32	Production	248,779,881	111,383,474	26,777,053	59,570,172	44,797,396	5,449,034	802,753
33	Transmission	57,920,144	25,931,948	6,234,149	13,868,939	10,429,588	1,268,627	186,894
34	Distribution	139,115,626	77,149,308	18,102,139	29,455,840	4,133,532	3,774,408	6,500,399
35	Common	107,674,349	55,521,528	12,624,174	22,834,819	12,309,266	2,461,493	1,923,067
36	Total Uniform Cost	553,490,000	269,986,257	63,737,515	125,729,770	71,669,781	12,953,562	9,413,114
50		333,470,000	207,700,237	03,131,313	123,127,110	71,007,701	12,755,502	7,413,114
	Expressed as \$/kWh							
37	Production	\$0.04396	\$0.04716	\$0.04296	\$0.04226	\$0.04045	\$0.04082	\$0.03472
38	Transmission	\$0.01024	\$0.01098	\$0.01000	\$0.00984	\$0.00942	\$0.00950	\$0.00808
30 39	Distribution	\$0.02458	\$0.01098	\$0.01000	\$0.00984		\$0.00930	\$0.00000
						\$0.00373 \$0.01112		
40	Common	\$0.01903	\$0.02351	\$0.02026	\$0.01620	\$0.01112	\$0.01844	\$0.08317
41	Total Uniform Melded Rates	\$0.09781	\$0.11431	\$0.10227	\$0.08920	\$0.06472	\$0.09703	\$0.40712
42	Revenue to Cost Ratio at Proposed Rates	1.00	0.88	1.27	1.13	1.01	0.95	0.82
43	Current Revenue to Proposed Cost Ratio	0.89	0.78	1.16	1.01	0.90	0.84	0.73
44	Target Revenue Increase	61,356,000	60,496,000	(10,028,000)	(1,036,000)	7,322,000	2,060,000	2,542,000
	J			( ,,,0000)	(,,)	,,	,,	,,000

File: WA 2017 Elec Case / Elec COS Base Case / Sumcost Exhibits

Sumcost	AVISTA
Scenario: Company Base Case UE-17	Revenue
Load Factor Peak Credit Method	For the T
AS FILED METHOD	

ISTA UTILITIES venue to Cost By Classification Summary r the Twelve Months Ended December 31, 2016

Washington Jurisdiction	
Electric Utility	05/26/17

	(b)	(c) (d)	(e)	(f)	(g) Residential	(h) General	(i) Large Gen	(j) Extra Large	(k) Pumping	(I) Street &			
	Description			System Total	Service Sch 1-2	Service Sch 11-12	Service Sch 21-22	Gen Service Sch 25	Service Sch 31-32	Area Lights Sch 41-49			
	Cost Classifications at Curren	t Return by	Sched	ule									
1	Energy			210,032,013	78,141,432	28,745,391	57,797,743	39,788,636	4,762,204	796,607			
2	Demand			237,962,878	100,000,974	37,640,313	68,177,118	24,374,195	5,561,638	2,208,640			
3	Customer			44,139,109	31,346,594	7,380,296	791,139	185,169	570,158	3,865,753			
4	Total Current Rate Revenue			492,134,000	209,489,000	73,766,000	126,766,000	64,348,000	10,894,000	6,871,000			
	Expressed as Unit Cost												
5	Energy	\$/kWh		\$0.03712	\$0.03308	\$0.04612	\$0.04101	\$0.03593	\$0.03567	\$0.03445			
6	Demand	\$/kW/mo		\$19.72	\$18.47	\$27.12	\$22.74	\$13.12	\$16.43	\$32.07			
7	Customer	\$/Cust/mo	)	\$14.96	\$12.45	\$19.66	\$34.64	\$734.80	\$19.53	\$787.64			
•		¢/ o dourno		<b></b>	<i><b></b></i>	*17100	<i><b>40</b></i> 110 1	<i><i><i></i></i></i>	<i><i><i></i></i></i>	<i><i><i></i></i></i>			
	Cost Classifications at Uniform Current Return												
8	Energy	in our one is	(otunn	208,361,444	87,428,016	23,070,113	52,080,726	39,985,244	4,941,487	855,858			
9	Demand			237,354,206	118,584,942	27,355,716	58,446,004	24,512,697	5,903,697	2,551,150			
10	Customer			46,418,350	34,274,032	6,156,378	726,146	185,517	587,461	4,488,817			
11	Total Uniform Current Cost			492,134,000	240,286,989	56,582,207	111,252,877	64,683,457	11,432,646	7,895,824			
10	Expressed as Unit Cost	<b>6</b> // ) / //		*****	******	<b>*</b> 0.00700	<b>#0.00/0</b> 5	<b>#0.00/44</b>	<b>*</b> 0.00700	<b>*</b> 0.00700			
12	Energy	\$/kWh		\$0.03682	\$0.03702	\$0.03702	\$0.03695	\$0.03611	\$0.03702	\$0.03702			
13 14	Demand Customer	\$/kW/mo \$/Cust/mo		\$19.67 \$15.73	\$21.90 \$13.61	\$19.71 \$16.40	\$19.49 \$31.80	\$13.19 \$736.18	\$17.44 \$20.12	\$37.04 \$914.59			
14	Cusiomer	\$/CUSI/III0	)	\$10.75	\$13.01	\$10.40	\$31.0U	\$730.10	\$20.1Z	\$914.09			
15	Revenue to Cost Ratio at Curr	ont Datas		1.00	0.87	1.30	1.14	0.99	0.95	0.87			
10	Revenue to Cost Ratio at Curr	eni Kales		1.00	0.07	1.50	1.14	0.99	0.95	0.07			
	Cost Classifications at Propos	sed Return	by Sch	edule									
16	Energy		,	231,912,337	86,567,368	31,174,188	63,619,813	44,490,959	5,213,945	846,064			
17	Demand			273,621,304	116,875,427	42,044,995	78,093,893	27,687,584	6,424,325	2,495,081			
18	Customer			47,956,359	34,001,205	7,903,817	857,294	193,457	613,730	4,386,855			
19	Total Proposed Rate Revenu	e		553,490,000	237,444,000	81,123,000	142,571,000	72,372,000	12,252,000	7,728,000			
	Expressed as Unit Cost												
20	Energy	\$/kWh		\$0.04098	\$0.03665	\$0.05002	\$0.04514	\$0.04018	\$0.03906	\$0.03659			
21	Demand	\$/kW/mo		\$22.68	\$21.59	\$30.29	\$26.05	\$14.90	\$18.98	\$36.22			
22	Customer	\$/Cust/mo	)	\$16.25	\$13.50	\$21.05	\$37.54	\$767.69	\$21.02	\$893.82			
	Cost Classifications at Uniform	n Requeste	ed Retu	rn									
23	Energy			229,695,892	96,379,905	25,432,297	57,413,351	44,079,395	5,447,454	943,490			
24	Demand			273,007,044	136,511,913	31,639,684	67,529,681	27,397,657	6,869,842	3,058,267			
25	Customer			50,787,064	37,094,440	6,665,533	786,738	192,730	636,266	5,411,357			
26	Total Uniform Cost			553,490,000	269,986,257	63,737,515	125,729,770	71,669,781	12,953,562	9,413,114			
	Expressed as Unit Cost												
27	Energy	\$/kWh		\$0.04059	\$0.04081	\$0.04081	\$0.04073	\$0.03980	\$0.04081	\$0.04081			
28	Demand	\$/kW/mo		\$22.63	\$25.21	\$22.80	\$22.52	\$14.74	\$20.30	\$44.40			
29	Customer	\$/Cust/mo	)	\$17.21	\$14.73	\$17.75	\$34.45	\$764.80	\$21.80	\$1,102.56			
30	Revenue to Cost Ratio at Prop	osed Rates	6	1.00	0.88	1.27	1.13	1.01	0.95	0.82			
0.4		0			. 70					. 70			
31	Current Revenue to Proposed	Cost Ratio		0.89	0.78	1.16	1.01	0.90	0.84	0.73			

	Sumcost Scenario: Company Base Case UE-17 Load Factor Peak Credit Method AS FILED METHOD	AVISTA UTILITIES Customer Cost Ana For the Twelve Mor	lysis	nber 31, 2016	Washington Jurisdiction Electric Utility			05/26/17		
	(b) (c) (d) (e) Description	(f) System Total	(g) Residential Service Sch 1-2	(h) General Service Sch 11-12	(i) Large Gen Service Sch 21-22	(j) Extra Large Gen Service Sch 25	(k) Pumping Service Sch 31-32	(I) Street & Area Lights Sch 41-49		
	Meter, Services, Meter Reading & Billing Costs by Schedule at Requested Rate of Return									
1 2 3	Rate Base Services Services Accum. Depr. Total Services	101,101,000 (42,303,000) 58,798,000	86,444,148 (36,170,234) 50,273,914	12,886,999 (5,392,219) 7,494,780	767,791 (321,262) 446,529	0 0 0	1,002,062 (419,286) 582,776	0 0 0		
4 5 6	Meters Meters Accum. Depr. Total Meters	27,615,000 (7,686,000) 19,929,000	18,925,506 (5,267,479) 13,658,027	6,263,494 (1,743,300) 4,520,195	1,542,792 (429,401) 1,113,392	38,576 (10,737) 27,839	844,631 (235,084) 609,548	0 0 0		
7	Total Rate Base	78,727,000	63,931,941	12,014,975	1,559,921	27,839	1,192,324	0		
8 9 10 11	Return on Rate Base @ 7.64% Tax Benefit of Interest Revenue Conversion Factor Rate Base Revenue Requirement	6,109,215 (774,283) 0.619413 <b>8,612,884</b>	4,961,119 (628,773) 0.619413 <b>6,994,276</b>	932,362 (118,168) 0.619413 <b>1,314,461</b>	121,050 (15,342) 0.619413 <b>170,658</b>	2,160 (274) 0.619413 <b>3,046</b>	92,524 (11,727) 0.619413 <b>130,442</b>	0 0 0.619413 <b>0</b>		
12 13 14 15 16 17 18	Expenses Services Depr Exp Meters Depr Exp Services Operations Exp Meters Operating Exp Meters Maintenance Exp Meter Reading Billing	2,735,000 936,000 457,000 1,458,000 16,000 3,034,000 6,504,000	2,338,501 641,473 390,748 999,217 10,965 2,524,300 5,547,687	348,621 212,299 58,252 330,696 3,629 376,320 827,043	20,770 52,292 3,471 81,455 894 22,890 50,305	0 1,308 0 2,037 22 81,229 3,844	27,108 28,628 4,530 44,594 489 29,262 64,309	0 0 0 0 0 10,812		
19 20 21	Total Expenses Revenue Conversion Factor Expense Revenue Requirement	15,140,000 0.952943 <b>15,887,624</b>	12,452,891 0.952943 <b>13,067,823</b>	2,156,860 0.952943 <b>2,263,368</b>	232,078 0.952943 <b>243,538</b>	88,439 0.952943 <b>92,806</b>	198,920 0.952943 <b>208,743</b>	10,812 0.952943 <b>11,346</b>		
22	Total Meter, Service, Meter Reading, and Billing Cost	24,500,508	20,062,100	3,577,829	414,196	95,852	339,186	11,346		
23	Total Customer Bills	2,950,996	2,518,371	375,436	22,836	252	29,193	4,908		
24	Average Unit Cost per Month	\$8.30	\$7.97	\$9.53	\$18.14	\$380.37	\$11.62	\$2.31		
		Distrib	oution Fixed Co	sts per Custor	ner					
25 26	Total Customer Related Cost Customer Related Unit Cost per Month	50,787,064 \$17.21	37,094,440 \$14.73	6,665,533 \$17.75	786,738 \$34.45	192,730 \$764.80	636,266 \$21.80	5,411,357 \$1,102.56		
27 28	Total Distribution Demand Related Cost Dist Demand Related Unit Cost per Month	134,305,355 \$45.51	67,953,230 \$26.98	17,420,055 \$46.40	36,730,483 \$1,608.45	5,140,288 \$20,397.97	4,248,272 \$145.52	2,813,027 \$573.15		
29	Total Distribution Unit Cost per Month	\$62.72	\$41.71	\$64.15	\$1,642.90	\$21,162.77	\$167.32	\$1,675.71		