Exhibit No. (CTM-2) Dockets UE-120436 et al. Witness: Christopher T. Mickelson

## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

DOCKETS UE-120436/UG-120437 (consolidated)

Complainant,

v.

AVISTA CORPORATION, d/b/a AVISTA UTILITIES,

Respondent.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION d/b/a AVISTA UTILITIES,

Respondent.

DOCKETS UE-110876/UG-110877 (consolidated)

**EXHIBIT TO TESTIMONY OF** 

**CHRISTOPHER T. MICKELSON** 

STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Electric Cost of Service

**September 19, 2012** 

## AVISTA UTILITIES WASHINGTON ELECTRIC COST OF SERVICE 12 MONTHS ENDED DECEMBER 31, 2011

			MDED DECEM						
	Α	С	D	Е	F	G	Н	ŀ	
			Residential	General	Large Gen	Extra Large	Pumping	Street &	
1.5		Cuntam			-				
Lir		System	Service	Service	Service	Gen Service	Service	Area Lights	
No	o. Description	Total	Sch 1	Sch 11-12	Sch 21-22	Sch 25	Sch 31-32	Sch 41-49	
1	Plant In Service								
2		775,077,000	351,949,128	65,666,765	200,925,570	137,373,555	16,136,480	3,025,502	
3		333,426,000	151,403,009	28,248,815	86,435,037	59,095,954	6,941,661	1,301,524	
4	Distribution Plant	695,186,000	377,267,679	76,499,108	164,018,215	25,510,159	16,701,655	35,189,183	
- 5	Intangible Plant	86,962,000	40,306,630	7,586,235	22,300,213	14,204,122	1,835,203	729,597	
6		140,219,000	75,745,432	13,821,565	30,433,714	14,500,415	2,875,836	2,842,039	
7	Total Plant In Service	2,030,870,000	996,671,877	191,822,488	504,112,749	250,684,205	44,490,835	43,087,846	
8									
g									
	· · · · · · · · · · · · · · · · · · ·	(0.44.000.000)	(455,000,500)	(00 000 440)	(00 400 077)	(00 F00 00 Å	(= 400 00=)	// 000 /000	
10		(341,353,000)		(28,920,413)	(88,489,977)	(60,500,924)	(7,106,695)	(1,332,467)	
1	Transmission Plant	(111,284,000)	(50,532,149)	(9,428,302)	(28,848,490)	(19,723,819)	(2,316,843)	(434,396)	
1:	2 Distribution Plant	(209,013,000)		(22,229,057)	(47,127,723)	(7,405,287)	(4,788,284)	(14,756,578)	
1:									
	•	(13,861,000)	,	(1,269,877)	(3,484,099)	(1,928,843)	(299,183)	(223,668)	
14		(47,365,000)	(25,771,332)	(4,681,471)	(10,158,532)	(4,839,353)	(965,322)	(948,989)	
1	5 Total Accumulated Depreciation	(722,876,000)	(350,667,405)	(66,529,121)	(178,108,821)	(94,398,227)	(15,476,328).	(17,696,098)	
10			( , , ,	( , , , , ,	( , , ,	(),,	( , , , -	(,,	
		4 007 004 000	040 004 470	405 000 007	000 000 000	450 005 070	00 044 505	05 00 / 5 / 0	
1		1,307,994,000	646,004,472	125,293,367	326,003,929	156,285,978	29,014,507	25,391,748	
18	Accumulated Deferred FIT	(206,296,000)	(101,500,853)	(19,493,115)	(51,019,514)	(25,440,171)	(4,507,674)	(4,334,673)	
19	Miscellaneous Rate Base	23,574,000	9,915,065	2,073,877	6,856,757	3,670,353	557,969	499,978	
20	The state of the s	1,125,272,000	554,418,683	107,874,129	281,841,172	134,516,160	25,064,802	21,557,053	
		1,123,272,000	334,410,003	107,074,125	201,041,172	104,010,100	20,004,002	21,007,000	
2				C TO SOME CONTROL OF THE CONTROL OF					
2:	Revenue From Retail Rates	455,105,000	198,459,000	55,514,000	126,921,000	58,190,000	9,439,000	6,582,000	
2		67,978,000	31,176,133	5,847,445	17,541,024	11,558,990	1,426,408	428,000	
2		523,083,000							
		323,063,000	229,635,133	61,361,445	144,462,024	69,748,990	10,865,408	7,010,000	
2									
26	3 Operating Expenses								
2		209,676,000	95,210,263	17,764,357	54,354,948	27 162 670	4 26E 20E	040 467	
						37,162,679	4,365,286	818,467	
28		20,534,000	. 9,324,136	1,739,700	5,323,091	3,639,417	427,501	80,154	
29	Distribution Expenses	20,286,000	10,727,108	2,620,720	4,374,831	761,861	530,639	1,270,841	
30		10,825,000	8,374,486	1,301,007	669,662	306,505	131,555	41,786	
3									
	• • • • • • • • • • • • • • • • • • •	1,235,000	870,577	132,077	129,382	82,529	17,542	2,893	
. 32	2 Sales Expenses	4,000	1,724	353	1,067	747	90	19	
33	B Admin & General Expenses	44,480,000	22,264,061	4,212,258	10,426,115	6,028,195	925,132	624,239	
34		307,040,000	146,772,356	27,770,471	75,279,096	47,981,933			
		307,040,000	140,112,000	21,110,411	15,219,090	41,901,933	6,397,744	2,838,399	
3									
36	3 Taxes Other Than Income Taxes	33,268,000	15,118,847	3,599,376	8,894,274	4,447,935	703,559	504,009	
37	Other Income Related Items	(418,000)	(196,895)	(37,440)	(106,496)	(62,842)	(8,959)	(5,369)	
38		(110,000)	(100,,000)	(01,110)	(100,400)	(02,042)	(0,000)	(5,503)	
39	Production Plant Depreciation	17,392,000	7,897,408	1,473,501	4,508,581	3,082,534	362,087	67,889	
40	Transmission Plant Depreciation	6,428,000	2,918,844	544,599	1,666,350	1,139,290	133,826	25,092	
4		19,762,000	10,727,967	2,208,676	4,659,981	743,619	479,722	942,036	
42		11,617,000	6,170,914	1,136,076	2,586,748	1,245,546	241,113	236,602	
43	Amortization Expense	4,678,000	2,126,692	397,042	1,212,030	825,190	97,481	19,565	
44	Total Depreciation Expense	59,877,000	29,841,826	5,759,894	14,633,690	7,036,178	1,314,230	1,291,183	
4		29,418,000							
				6,960,395	12,315,901	2,054,627	559,489	570,016	
46	Total Operating Expenses	429,185,000	198,493,706	44,052,697	111,016,465	61,457,831	8,966,063	5,198,238	
47									
48	B Net Income	93,898,000	31,141,427	17,308,747	33,445,559	8,291,159	1,899,345	1 011 769	
		33,030,000	01,171,721	17,000,741	00,440,000	0,231,103	1,099,343	1,811,762	
49									
5(	Rate of Return	8.34%	5.62%	16.05%	11.87%	6.16%	7.58%	8.40%	
5	•	1.00		1.92	1.42	0.74	0.91	1.01	
					production of the contract of			- Consideration and the property of the proper	
52	•	34,872,000	17,181,347	3,343,002	8,734,213	4,168,634	776,754	668,050	
	53								
54	Functional Cost Components at Current Return by Scheo	dule							
55		241,998,203	102,251,559	24 672 224	60 622 067	40 547 040	4.040.470	047.007	
				24,673,321	68,633,067	40,547,019	4,946,170	947,067	
56		44,174,248	16,460,181	5,707,940	14,231,293	6,724,999	876,278	173,558	
57	<sup>'</sup> Distribution	104,598,014	49,383,474	17,660,111	27,718,693	3,095,988	2,302,236	4,437,513	
58		64,334,535	30,363,786	7,472,628	16,337,947				
						7,821,994	1,314,316	1,023,862	
59		455,105,000	198,459,000	55,514,000	126,921,000	58,190,000	9,439,000	6,582,000	
60									

	A B	C	D	·Ε	F	G	Н	1
		0	Residential	General	Large Gen	Extra Large	Pumping	Street &
Line		System	Service Sch 1	Service	Service Sch 21-22	Gen Service Sch 25	Service Sch 31-32	Area Lights
No. 61	Description Expressed as \$/kWh	Total	SCII I	Sch 11-12	SUI 21-22	SCI1 25	SUI 31-32	Sch 41-49
62	Production	\$0.04341	\$0.04278	\$0.05040	\$0.04632	\$0.03813	\$0.03982	\$0.03659
63	Transmission	\$0.00792	\$0.00689	\$0.01166	\$0.00960	\$0.00632	\$0.00706	\$0.00670
64	Distribution	\$0.01876	\$0.02066	\$0.03607	\$0.01871	\$0.00291	\$0.01854	\$0.17142
65	Common	\$0.01154	\$0.01270	\$0.01526	\$0.01103	\$0.00736	\$0.01058	\$0.03955
66	Total Current Melded Rates	\$0.08164	\$0.08303	\$0.11339	\$0.08565	\$0.05473	\$0.07600	\$0.25426
67								
68	Functional Cost Components at Uniform Current Re							
69	Production	243,382,424	110,515,770	20,620,063	63,092,767	43,136,758	5,067,026	950,040
70	Transmission	44,847,695	20,364,567	3,799,626	11,626,005	7,948,742	933,693	175,062
71 72	Distribution Common	104,674,066 64,870,858	59,618,664 33,064,996	12,130,631 6,171,107	22,318,938 14,974,573	3,679,472 8,280,437	2,453,366 1,350,043	4,472,995 1,029,702
73	Total Uniform Current Cost	457,775,043	223,563,997	42,721,427	112,012,283	63,045,408	9,804,128	6,627,800
74	rotal official outch oost	101,1110,010	220,000,007	72,121,721	112,012,200	00,040,400	3,004,120	0,021,000
75	Expressed as \$/kWh							
76	Production	\$0.04366	\$0.04624	\$0.04212	\$0.04258	\$0.04057	\$0.04080	\$0.03670
77	Transmission	\$0.00804	\$0.00852	\$0.00776	\$0.00785	\$0.00748	\$0.00752	\$0.00676
78	Distribution	\$0.01878	\$0.02494	\$0.02478	\$0.01506	\$0.00346	\$0.01975	\$0.17279
79	Common	\$0.01164	\$0.01383	\$0.01261	\$0.01011	\$0.00779	\$0.01087	\$0.03978
80	Total Current Uniform Melded Rates	\$0.08211	\$0.09354	\$0.08726	\$0.07559	\$0.05929	\$0.07894	\$0.25603
81	Revenue to Cost Ratio at Current Rates	0.00	0.00	4.00	4 40	A 00	0.00	0.00
82 83	Revenue to Cost Ratio at Current Rates	0.99	0.89 0.89	1.30 1.31	1.13 1.14	0.92 0.93	0.96	0.99
84		,	0.09	1.31	1,14	. ს. შა	0.97	1.00
85	Functional Cost Components at Proposed Return by	Schodula						
86	Production	234,854,838	100,673,556	23,251,679	65,187,571	39,967,144	4,857,522	917,365
87	Transmission	40,797,090	15,712,631	5,036,531	12,604,111	6,450,008	834,287	159,523
88	Distribution	96,746,608	47,425,707	15,712,257	24,336,718	2,964,971	2,192,178	4,114,777
89	Common	62,326,463	29,850,591	7,011,348	15,476,599	7,719,723	1,288,834	979,368
90 91	Total Proposed Rate Revenue	434,725,000	193,662,486	51,011,815	117,604,999	57,101,847	9,172,820	6,171,034
92	Expressed as \$/kWh							
93	Production	\$0.04213	\$0.04212	\$0.04749	\$0.04399	\$0.03759	\$0.03911	\$0.03544
94	Transmission	\$0.00732	\$0.00657	. \$0.01029	\$0.00851	\$0.00607	\$0.00672	\$0.00616
95	Distribution	\$0.01735	\$0.01984	\$0.03209	\$0.01642	\$0.00279	\$0.01765	\$0.15895
96	Common	\$0.01118	\$0.01249	\$0.01432	\$0.01044	\$0.00726	\$0.01038	\$0.03783
97 98	Total Proposed Melded Rates	\$0.07798	\$0.08103	\$0.10420	\$0.07936	\$0.05370	\$0.07386	\$0.23839
99	Functional Cost Components at Uniform Requested	Roturn						
100	•	235,194,438	106,797,747	19,926,353	60,970,170	41,685,531	4,896,559	918,078
	Transmission	40,957,156	18,597,940	3,470,009	10,617,448	7,259,189	852,695	159,876
102	Distribution	96,075,306	54,978,138	11,171,634	20,213,047	3,349,078	2,240,383	4,123,026
103	Common	62,498,100	31,827,827	5,940,708	14,429,975	8,018,949	1,299,985	980,657
104	Total Uniform Cost	434,725,000	212,201,652	40,508,703	106,230,640	60,312,745	9,289,623	6,181,636
105								
	Expressed as \$/kWh	<b>#</b> 0.04045	<b>#</b>	<b>MO 040-0</b>	00.000	#* ** ·		**
	Production	\$0.04219 \$0.00735	\$0.04468	\$0.04070	\$0.04114	\$0.03921	\$0.03943	\$0.03547
	Transmission Distribution	\$0.00735 \$0.01723	\$0.00778 \$0.02300	\$0.00709 \$0.02282	\$0.00716 \$0.01364	\$0.00683	\$0.00687	\$0.00618 \$0.15027
	Common	\$0.017 <i>2</i> 3 \$0.01121	\$0.02300 \$0.01332	\$0.02282 \$0.01213	\$0.01364 \$0.00974	\$0.00315 \$0.00754	\$0.01804 \$0.01047	\$0.15927 \$0.03788
111	Total Uniform Melded Rates	\$0.07798	\$0.01332	\$0.08274	\$0.00974	\$0.00754	\$0.01047	\$0.03788
112		, , , , , , , , , , , , , , , , , , , ,	+000.0	75.00E1 T	40.01 100	ψ5.0001 Z	ψ5/51 <del>1</del> 00	ΨΟΙΔΟΟΟ
	Revenue to Cost Ratio at Proposed Rates	1.00	0.91	1.26	1.11	0.95	0.99	1.00
114	•							
115 116	Current Revenue to Proposed Cost Ratio	1.05	0.94	1.37	1.19	0.96	1.02	1.06
117	Target - Base Case	(20,379,000)	13,742,000	(15,005,000)	(20,690,000)	2,123,000	(149,000)	(400,000)
118	0 (0) 17 11 (0) 15							
	Cost Classifications at Current Return by Schedule	000 000 005	00 700 000	05 010	07 700			
	Energy Demand	229,662,298	90,722,690	25,013,259	67,799,097	40,034,416	5,020,464	1,072,373
	Customer	221,110,748 40,784,930	96,777,534 28,216,935	27,755,719	67,140,606	21,806,494	4,551,746	3,078,648
123	Total Current Rate Revenue	491,557,976	215,717,159	7,086,224 59,855,201	1,623,698 136,563,401	103,735 61,944,645	642,817 10,215,027	3,111,522 7,262,542
124		101,007,010	210,111,100	00,000,201	100,000,101	V 1,077,040	10,210,021	1,202,042

	A	В	С	D	Ε	F	Ģ	Н	1
Line			System	Residential Service	General Service	Large Gen Service	Extra Large Gen Service	Pumping Service	Street & Area Lights
No.			Total	Sch 1	Sch 11-12	Sch 21-22	Sch 25	Sch 31-32	Sch 41-49
125	•								
	Energy	\$/kWh	\$0.04120	\$0.03796	\$0.05109	\$0.04575	\$0.03765	\$0.04042	\$0.04143
127		\$/kW/mo	\$17.26	\$16.05	\$22.27	\$20.15	\$11.99	\$14.95	\$39.67
128	Customer	\$/Cust/mo	\$14.45	\$11.67	\$20.86	\$50.45	\$392.93	\$22.32	\$787.93
129									
130								•	
131		ırn	000 505 000	00.075.440	00 055 400		40.040.000	E 400 007	4 070 040
	Energy		230,525,933	99,375,140	20,355,460	61,511,806	43,043,286	5,163,927	1,076,313
133			221,660,794	112,046,743	20,148,979	57,738,091	23,852,924	4,773,202	3,100,854
	Customer	_	41,931,810	30,792,231	5,774,787	1,466,167	107,458	661,512	3,129,656
135	Total Uniform Current Cost		494,118,537	242,214,115	46,279,226	120,716,064	67,003,668	10,598,641	7,306,823
136	Everyograph on Unit Cont								
137		@/LAA/Ib	<b>#</b> 0.0449E	¢0.04450	<b>CO 044E0</b>	<b>60 04454</b>	<b>@0.04040</b>	<b>#0.044E0</b>	<b>#0.044E0</b>
138	••	\$/kWh	\$0.04135	\$0.04158	\$0.04158	\$0.04151	\$0.04048	\$0.04158	\$0.04158
	Demand	\$/kW/mo	\$17.31	\$18.59	\$16.16	\$17.33	\$13.12	\$15.68	\$39.95
140	Customer	\$/Cust/mo	\$14.86	\$12.74	\$17.00	\$45.56	\$407.04	\$22.97	\$792.52
141 142							,		
	Revenue to Cost Ratio at Current Rates		0.99	0.00	A DO	4.40	0.00	0.00	ስ ስለ
143	Nevenue to Cost Ratio at Current Rates		0.55	0.89	1.29 1.30	1.13 1.14	0.92 0.93	0.96 0.97	0.99 1.00
145				0.50	1,30	1.14	0.80	18.0	1.00
145	Cost Classifications at Proposed Return by	Schadula							
140		ooneduid	221,643,908	89,069,168	23,379,023	63,887,276	39,360,061	4,915,199	1,033,181
	Demand		208,820,366	93,853,612	25,085,596	61,287,361	21,347,337	4,388,955	2,857,505
149			39,539,664	27,724,898	6,626,097	1,525,679	102,905	629,099	2,930,987
150	Total Proposed Rate Revenue	_	470,003,938	210,647,678	55,090,716	126,700,315	60,810,304	9,933,252	6,821,673
151	Total Troposcu Nate Nevenue		470,000,000	210,047,070	33,030,710	120,700,313	. 00,010,304	5,500,202	0,021,073
152	Expressed as Unit Cost								
	Energy	\$/kWh	\$0.03976	\$0.03727	\$0.04775	\$0.04311	\$0.03702	\$0.03958	\$0.03991
154	· ·	\$/kW/mo	\$16.31	\$15.57	\$20.12	\$18.40	\$11.74	\$14.42	\$36.82
	Customer	\$/Cust/mo	\$14.01	\$11.47	\$19.50	\$47.41	\$389.79	\$21.84	\$742.21
156	Oustomer	Ψ/Ουσυπιο	Ψ1-1.01	Ψ11.47	ψ19.50	ψ <del>τ</del> /, <del>1</del> τψ	φυσσ./ σ	φ21.04	Φ142.Z1
157			•				4		
	Cost Classifications at Uniform Requested F	Return							
159	•	toturi,	221,489,919	95,479,894	19,557,579	59,100,704	41,356,102	4,961,515	1,034,124
160	,		208,168,835	105,166,791	18,844,722	54,129,140	22,704,909	4,460,451	2,862,822
	Customer		40,264,701	29,632,972	5,550,142	1,405,749	105,375	635,134	2,935,329
162	Total Uniform Cost	_	469,923,455	230,279,657	43,952,443	114,635,593	64,166,386	10,057,100	6,832,275
163			,.			,,	0 1, 100,000		0,002,210
164	Expressed as Unit Cost			•					•
165	Energy	\$/kWh	\$0.03973	\$0.03995	\$0.03995	\$0.03988	\$0.03890	\$0.03995	\$0.03995
	Demand	\$/kW/mo	\$16.25	\$17.44	\$15.12	\$16.25	\$12.49	\$14.65	\$36.88
	Customer	\$/Cust/mo	\$14.27	\$12.26	\$16.34	\$43.68	\$399.15	\$22.05	\$743.31
168			•		•		,		,
	Revenue to Cost Ratio at Proposed Rates	•	1.00	0.91	1.25	1.11	0.95	0.99	1.00
170									
	Current Revenue to Proposed Cost Ratio		1.05	0.94	1.36	1.19	0.97	1.02	1.06
172									
173		ices, Meter F	Reading & Billi	ng Costs by So	hedule at Re	quested Rate	of Return		
174									
	Rate Base								
176	Services		76,191,000	65,366,953	9,186,636	858,563	0	778,848	0
177	Services Accum. Depr.	· _	(28,270,000)	(24,253,833)	(3,408,620)	(318,562)	0	(288,985)	0
178			47,921,000	41,113,120	5,778,015	540,001	0	489,863	. 0
179									
180			26,286,000	16,055,740	6,137,585	3,050,265	61,020	981,391	0
181	Meters Accum. Depr.	_	(4,947,000)	(3,021,675)	(1,155,088)	(574,057)	(11,484)	(184,697)	0
182			21,339,000	13,034,065	4,982,497	2,476,208	49,536	796,694	0
183									
184			69,260,000	54,147,185	10,760,513	3,016,209	49,536	1,286,557	. 0
185			r 200	0.000 :==			_		
186			5,000,572	3,909,427	776,909	217,770	3,576	92,889	0
187			0.62082	0.62082	0.62082	0.62082	0.62082	0.62082	0.62082
188	Rate Base Revenue Requirement		8,054,786	6,297,199	1,251,424	350,778	5,761	149,624	0
	•								

Line	А		В	C System	D Residential Service	E General Service	F Large Gen Service	G Extra Large Gen Service	H Pumping Service	l Street & Area Lights
No.	Description			Total	Sch 1	Sch 11-12	Sch 21-22	Sch 25	Sch 31-32	Sch 41-49
189									- •	
190	Expenses									
191	Services Depr Exp			2,073,000	1,778,500	249,949	23,360	0	21,191	0
192	Meters Depr Exp			1,009,000	616,307	235,594	117,086	2,342	37,671	0
193	Services Operations Exp			479,000	410,951	57,755	5,398	0	4,896	0
194	Meters Operating Exp			1,717,000	1,048,760	400,907	199,243	3,986	64,104	0
195	Meters Maintenance Exp	•		89,000	54,362	20,781	10,328	207	3,323	0
196	Meter Reading			2,611,000	2,205,520	309,963	29,363	36,273	26,279	3,603
197	Billing .			5,644,000	4,828,900	678,651	64,288	6,736	57,536	7,888
198										
199	Total Expenses			13,622,000	10,943,301	1,953,599	449,065	49,543	215,001	11,491
200	Revenue Conversion Factor			0.9551	0.9551	0.9551	0.9551	0.9551	0.9551	0.9551
201	Expense Revenue Requireme	nt		14,262,381	11,457,754	2,045,440	470,176	51,872	225,108	12,032
202		•								
203	Total Meter, Service, Meter Read	ling, and Billing	Cost	22,317,167	17,754,952	3,296,864	820,954	57,633	374,732	12,032
204										
205	Total Customer Bills			2,822,306	2,417,371	339,736	32,183	264	28,803	3,949
206										
207	Average Unit Cost per Month			\$7.91	\$7.34	\$9.70	\$25.51	\$218.31	\$13.01	\$3.05
208										
209				Distribution I	Fixed Costs pe	r Customer				
210										
211	Total Customer Related Cost			40,264,701	29,632,972	5,550,142	1,405,749	105,375	635,134	2,935,329
212	Customer Related Unit Cost per M	onth		\$14.27	\$12.26	\$16.34	\$43.68	\$399.15	\$22.05	\$743.31
213										
214	Total Distribution Demand Related	Cost		88,695,709	45,565,398	9,387,427	24,716,278	4,331,821	2,291,228	2,403,557
215	Dist Demand Related Unit Cost pe	r Month		\$31.43	\$18.85	\$27.63	\$767.99	\$16,408.41	\$79.55	\$608.65
216										
217	Total Distribution Unit Cost per l	Month		\$45.69	\$31.11	\$43.97	\$811.67	\$16,807.56	\$101.60	\$1,351.96
218	•									