

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION  
COMMISSION**

**WUTC v. Avista  
Docket Nos. UE-080416 and UG-080417**

**Public Counsel Response to Bench Request No. 4**

**Bench Request No. 4:**

Exhibit CWK-4, Schedule 4, column "F" purports to show the "PV of Removal Cost at 3%." Mr. King refers to this column in his testimony as "removal costs discounted back to the beginning of the account." *Exh. CWK-1T at 14:10-11*. The formula contained in column "F" appears unusual and is different from the formula used in Exhibit CWK-4, Schedule 3, cell C5, which is also described as "PV Removal Cost." Please confirm that the calculation used in column "F" of Schedule 4 accurately produces the present value that Mr. King describes in his testimony. Explain why the formulas in column "F" of Schedule 4 and cell C5 of Schedule 3 are different.

**RESPONSE:**

The formula for cell C5 of Schedule 3 is the correct formula; the formula for Column F of Schedule 4 is incorrect. Please see the attached Excel file, "Exhibit No.\_\_(CWK-4) Updated in Response to Bench Request No. 4" which corrects for this error.

**Avista Utilities  
Depreciation Expense Adjustment**

Account Number	Description	A 2007 Avg. Balance \$	B Avista Rate %	C Avista Proposed Depreciation \$	D Public Counsel Rate	E Public Counsel Depreciation	F Adjustment
<b>TRANSMISSION PLANT</b>							
350.3	Removing Property of Others	1,487,194	1.26	18,739	1.26%	18,712	(26)
350.4	Land Rights	8,983,607	1.28	114,990	1.28%	115,213	223
352.0	Structures & Improvements	13,958,757	1.61	224,736	1.52%	211,885	(12,851)
353.0	Station Equipment	162,041,924	2.39	3,872,802	2.03%	3,289,895	(582,907)
354.0	Towers & Fixtures	17,073,360	1.87	319,272	1.48%	253,317	(65,955)
355.0	Poles & Fixtures	109,622,871	1.84	2,017,061	1.30%	1,425,977	(591,084)
356.0	OH Conductor & Devices	83,138,549	1.93	1,604,574	1.81%	1,504,670	(99,904)
357.0	UG Conduit	561,148	1.58	8,866	1.58%	8,875	9
358.0	UG Conductor & Devices	1,317,910	1.73	22,800	1.73%	22,853	53
359.0	Roads & Trails	1,826,844	1.65	30,143	1.65%	30,203	60
	<b>Total</b>	<b>400,012,164</b>		<b>8,233,982</b>		<b>6,881,601</b>	<b>(1,352,381)</b>
<b>DISTRIBUTION PLANT - WASHINGTON</b>							
361.0	Structures & Improvements	7,509,556	1.80	135,172	1.59%	119,072	(16,100)
362.0	Station Equipment	51,308,827	2.60	1,334,030	2.34%	1,200,305	(133,725)
364.0	Poles, Towers & Fixtures	109,675,953	2.66	2,917,380	2.08%	2,285,137	(632,243)
365.0	OH Conductor & Devices	70,293,796	2.46	1,729,227	2.09%	1,472,002	(257,226)
366.0	UG Conduit	38,121,129	2.71	1,033,083	2.48%	943,799	(89,283)
367.0	UG Conductor & Devices	64,673,742	6.38	4,126,185	5.68%	3,674,078	(452,107)
368.0	Line Transformers	92,476,649	2.00	1,849,533	1.87%	1,730,920	(118,613)
369.1	OH Services	26,476,468	1.69	447,452	1.46%	387,080	(60,373)
369.2	UG Services - Spokane Network	1,498,836	1.59	23,831	1.38%	20,672	(3,159)
369.3	UG Services - Other	34,915,336	1.59	555,154	1.37%	478,861	(76,293)
370.0	Meters	15,181,830	2.39	362,846	2.39%	363,273	427
373.1	Street Lighting & Signal Sys-Mercury Vapor	3,119,188	1.08	33,687	0.73%	22,795	(10,892)
373.2	Street Lighting & Signal Sys-UG Conductor	1,136,632	1.23	13,981	0.89%	10,146	(3,834)
373.3	Street Lighting & Signal Sys-Decorative	3,233,827	1.02	32,985	0.83%	26,995	(5,990)
373.4	Street Lighting & Signal Sys-Sodium Vapor	6,626,314	2.82	186,862	2.69%	177,948	(8,914)
	<b>Total</b>	<b>526,248,083</b>		<b>14,781,408</b>		<b>12,913,082</b>	<b>(1,868,326)</b>
<b>GAS PLANT</b>							
<b>DISTRIBUTION PLANT</b>							
375.0	Structures & Improvements	533,131	1.96	10,449	1.85%	9,876	(573)
376.0	Mains	171,048,868	1.81	3,095,985	1.38%	2,353,181	(742,803)
378.0	Measuring/Regulating Station Equipment	3,571,756	3.06	109,296	2.95%	105,229	(4,067)
379.0	Measuring/Regulating City Gate Equipment	1,721,455	3.08	53,021	2.95%	50,795	(2,226)
380.0	Services	120,741,193	2.77	3,344,531	2.16%	2,610,532	(733,999)
381.0	Meters	41,013,029	3.22	1,320,620	2.91%	1,193,014	(127,605)
385.0	Measuring/Regulating Industrial Equipment	2,313,940	1.85	42,808	1.76%	40,774	(2,034)
	<b>Total</b>	<b>340,943,372</b>		<b>7,976,709</b>		<b>6,363,402</b>	<b>(1,613,307)</b>

**Avista Corporation**  
**Comparison of Proposed Removal Cost Allowances with Actual Expenditures**

	A	B	C	D	E	F	G
	Original Cost 12/31/2004	Avista Removal Cost Ratio	Removal Cost Allowance	Average Service Life	Annual Removal Cost Allowance	2000-2004 Avg Annual Removal Cost	Difference
<b>ELECTRIC PLANT</b>							
<b>TRANSMISSION PLANT</b>							
352.00 STRUCTURES AND IMPROVEMENTS	10,923,253	5%	546,163	60	9,103	167	8,936
353.00 STATION EQUIPMENT	135,782,918	15%	20,367,438	47	433,350	22,414	410,936
354.00 TOWERS AND FIXTURES	17,069,239	20%	3,413,848	70	48,769	-	48,769
355.00 POLES AND FIXTURES	89,425,621	30%	26,827,686	60	447,128	13,917	433,211
356.00 OVERHEAD CONDUCTORS AND DEVICES	68,173,980	25%	17,043,495	60	284,058	15,778	268,280
<b>TOTAL TRANSMISSION PLANT INCURRING COR</b>	<b>321,375,011</b>		<b>68,198,629</b>		<b>1,222,408</b>	<b>52,276</b>	<b>1,170,132</b>
<b>DISTRIBUTION PLANT</b>							
361.00 STRUCTURES AND IMPROVEMENTS	10,243,069	10%	1,024,307	55	18,624	-	18,624
362.00 STATION EQUIPMENT	71,839,161	10%	7,183,916	42	171,046	16,664	154,382
364.00 POLES, TOWERS AND FIXTURES	161,910,621	25%	40,477,655	50	809,553	30,649	778,904
365.00 OVERHEAD CONDUCTORS AND DEVICES	108,829,175	15%	16,324,376	50	326,488	29,583	296,905
366.00 UNDERGROUND CONDUIT	54,575,635	10%	5,457,563	45	121,279	2,548	118,731
367.00 UNDERGROUND CONDUCTORS AND DEVICES	86,696,938	15%	13,004,541	28	464,448	2,023	462,425
368.00 LINE TRANSFORMERS	125,446,342	5%	6,272,317	44	142,553	19,394	123,159
369.00 SERVICES	90,262,716	25%	22,565,679	60	376,095	8,578	367,517
370.00 METERS	24,850,469	0%	-	38	-	1,813	(1,813)
373.00 STREET LIGHTING AND SIGNAL SYSTEMS	11,521,217	15%	1,728,182	32	54,006	2,590	51,416
373.40 HIGH PRESSURE SODIUM VAPOR	10,332,352	5%	516,618	32	16,144	498	15,646
<b>TOTAL DISTRIBUTION PLANT INCURRING COR</b>	<b>756,507,695</b>		<b>114,555,155</b>		<b>2,500,234</b>	<b>113,842</b>	<b>2,386,392</b>
<b>TOTAL TRANSMISSION AND DISTRIBUTION W/COR</b>	<b>1,077,882,706</b>		<b>182,753,784</b>		<b>3,722,642</b>	<b>166,118</b>	<b>3,556,524</b>
<b>GAS PLANT</b>							
<b>DISTRIBUTION PLANT</b>							
375.00 STRUCTURES AND IMPROVEMENTS	462,233	5%	23,112	50	462	130	332
376 MAINS	150,417,092	25%	37,604,273	65	578,527	45,050	533,477
378 MEASURING & REGULATING EQUIPMENT	3,305,957	5%	165,298	36	4,592	3,512	3,051
379 COMPRESSOR STATION EQUIPMENT	1,419,053	5%	70,953	36	1,971	-	1,971
380 SERVICES	113,999,912	25%	28,499,978	45	633,333	70,564	562,769
381 METERS	29,929,367	10%	2,992,937	40	74,823	58,331	16,492
385 INDUSTRIAL MEASURING & REGULATING EQUIPMENT	2,183,854	5%	109,193	45	2,427	-	2,427
<b>TOTAL DISTRIBUTION PLANT</b>	<b>301,717,470</b>		<b>69,465,743</b>		<b>1,296,135</b>	<b>177,587</b>	<b>1,118,548</b>

Assumptions  
 Asset Service Life 20  
 Cost of Removal \$ 2,000  
 Inflation Rate 3.0%  
 PV Removal Cost \$ 1,107.35

Year	TIFCA Accruals			Depreciation of PV Removal Cost	Present Value of \$2000		Inflation	Annual Allowance
	Nominal \$	Price Deflator	Constant Dollars		BOY	EOY		
1	\$ 100.00	1.7798	\$ 177.98	55.37	\$ 1,107.35	\$ 1,140.57	\$ 33.22	\$ 88.59
2	100.00	1.7280	172.80	55.37	1,140.57	1,174.79	34.22	89.58
3	100.00	1.6776	167.76	55.37	1,174.79	1,210.03	35.24	90.61
4	100.00	1.6288	162.88	55.37	1,210.03	1,246.33	36.30	91.67
5	100.00	1.5813	158.13	55.37	1,246.33	1,283.72	37.39	92.76
6	100.00	1.5353	153.53	55.37	1,283.72	1,322.24	38.51	93.88
7	100.00	1.4906	149.06	55.37	1,322.24	1,361.90	39.67	95.03
8	100.00	1.4471	144.71	55.37	1,361.90	1,402.76	40.86	96.22
9	100.00	1.4050	140.50	55.37	1,402.76	1,444.84	42.08	97.45
10	100.00	1.3641	136.41	55.37	1,444.84	1,488.19	43.35	98.71
11	100.00	1.3243	132.43	55.37	1,488.19	1,532.83	44.65	100.01
12	100.00	1.2858	128.58	55.37	1,532.83	1,578.82	45.99	101.35
13	100.00	1.2483	124.83	55.37	1,578.82	1,626.18	47.36	102.73
14	100.00	1.2120	121.20	55.37	1,626.18	1,674.97	48.79	104.15
15	100.00	1.1767	117.67	55.37	1,674.97	1,725.22	50.25	105.62
16	100.00	1.1424	114.24	55.37	1,725.22	1,776.97	51.76	107.12
17	100.00	1.1091	110.91	55.37	1,776.97	1,830.28	53.31	108.68
18	100.00	1.0768	107.68	55.37	1,830.28	1,885.19	54.91	110.28
19	100.00	1.0455	104.55	55.37	1,885.19	1,941.75	56.56	111.92
20	100.00	1.0150	101.50	55.37	1,941.75	2,000.00	58.25	113.62
21	\$ 2,000.00		\$ 2,727.34	\$ 1,107.35			\$ 892.65	\$ 2,000.00

**Avista Corporation**  
**Mass Property Plant Accounts**  
**Public Counsel Recommended Removal Cost Allowances**

Description	A 12/31/2004 Balance	B Avista Removal Cost Estimate	C Average Service Life	D Remaining Life	E Expired Life	F PV of Removal Cost @ 3%	G Depreciation of Removal Cost	H Current Year Inflation Factor	I Inflation Cost	J Removal Cost Allowance
<b>ELECTRIC PLANT</b>										
<b>TRANSMISSION PLANT</b>										
350.30 REMOVING PROPERTY OF OTHERS	1,486,032									
350.40 LAND RIGHTS	8,444,340									
352.00 STRUCTURES AND IMPROVEMENTS	10,923,253	546,163	60	48.6	11.4	92,702	1,545	0.000250	137	1,682
353.00 STATION EQUIPMENT	135,782,918	20,367,438	47	33.6	13.4	5,076,762	108,016	0.000178	3,632	111,648
354.00 TOWERS AND FIXTURES	17,069,239	3,413,848	70	47.5	22.5	431,160	6,159	0.000061	209	6,368
355.00 POLES AND FIXTURES	89,425,621	26,827,686	60	47.7	12.3	4,563,546	75,892	0.000213	5,720	81,612
356.00 OVERHEAD CONDUCTORS AND DEVICES	68,173,980	17,043,495	60	37.9	22.1	2,892,845	48,214	0.000063	1,082	49,296
357.00 UNDERGROUND CONDUIT	561,148									
358.00 UNDERGROUND CONDUCTORS	1,317,910									
359.00 ROADS AND TRAILS	1,826,844									
<b>TOTAL TRANSMISSION PLANT INCURRING COR</b>	<b>335,011,284</b>	<b>68,196,629</b>								
<b>DISTRIBUTION PLANT</b>										
361.00 STRUCTURES AND IMPROVEMENTS	10,243,069	1,024,307	55	40.8	14.2	201,550	3,665	0.000158	162	3,826
362.00 STATION EQUIPMENT	71,839,161	7,183,916	42	30.1	11.9	2,075,859	49,425	0.000228	1,641	51,067
364.00 POLES, TOWERS AND FIXTURES	161,910,621	40,477,655	50	35.6	14.4	9,233,240	184,665	0.000154	6,214	190,879
365.00 OVERHEAD CONDUCTORS AND DEVICES	108,829,175	16,324,376	50	34.7	15.3	3,723,706	74,474	0.000135	2,210	76,684
366.00 UNDERGROUND CONDUIT	54,575,635	5,457,563	45	34.4	10.6	1,443,191	32,071	0.000291	1,590	33,661
367.00 UNDERGROUND CONDUCTORS AND DEVICES	86,686,938	13,004,541	28	16.2	11.8	5,683,962	202,999	0.000233	3,024	206,024
368.00 LINE TRANSFORMERS	125,446,342	6,272,317	44	32.1	11.9	1,708,402	38,827	0.000228	1,433	40,260
369.10 OVERHEAD SERVICES - SPOKANE	993,815	248,454	60	45.4	14.6	1,715,565	28,593	0.000149	1,508	30,101
369.20 UNDERGROUND SERVICES - OTHER	40,429,724	10,107,431	60	47.7	12.3	42,171	703	0.000213	53	756
370.00 METERS	48,839,178	12,209,794	60	48.7	11.3	2,072,406	34,540	0.000255	3,109	37,649
373.10 STREET LIGHTS & SIGNALS - MERCURY VAPOR	24,850,469		38	25.8	12.2			0.000217		
373.20 STREET LIGHTS & SIGNALS - UG CONDUCTOR	4,850,481	727,572	32	27.0	5.0	282,543	8,829	0.001488	1,082	9,912
373.30 STREET LIGHTS & SIGNALS - UG CONDUCTOR	2,273,422	341,013	32	27.4	4.6	132,428	4,138	0.001798	613	4,752
373.40 HIGH PRESSURE SODIUM VAPOR	4,397,314	659,597	32	29.6	2.4	256,146	8,005	0.008946	5,900	13,905
<b>TOTAL DISTRIBUTION PLANT INCURRING COR</b>	<b>10,332,352</b>	<b>516,618</b>	<b>32</b>	<b>24.7</b>	<b>7.3</b>	<b>200,622</b>	<b>6,269</b>	<b>0.000646</b>	<b>333</b>	<b>6,603</b>
<b>TOTAL TRANSMISSION AND DISTRIBUTION W/COI</b>	<b>1,091,518,979</b>	<b>182,753,784</b>								
<b>GAS PLANT</b>										
<b>DISTRIBUTION PLANT</b>										
375.00 STRUCTURES AND IMPROVEMENTS	462,233	23,112	50	38.0	12.0	5,272	105	0.000225	5	111
376 MAINS	150,417,092	37,604,273	65	50.7	14.3	5,505,764	84,704	0.000156	5,857	90,561
378 MEASURING & REGULATING EQUIPMENT	3,305,957	165,298	36	30.1	5.9	57,033	1,584	0.001028	170	1,754
379 COMPRESSOR STATION EQUIPMENT	1,419,053	70,953	36	28.0	8.0	24,481	660	0.000530	38	718
380 SERVICES	113,999,912	28,499,978	45	32.8	12.2	7,536,495	167,478	0.000217	6,181	173,659
381 METERS	29,929,367	2,992,937	40	25.6	14.4	917,505	22,938	0.000154	459	23,397
385 INDUSTRIAL MEASURING & REGULATING EQUIPM	2,183,854	109,193	45	39.5	5.5	28,875	642	0.001201	131	773
<b>TOTAL DISTRIBUTION PLANT</b>	<b>301,717,470</b>	<b>69,465,743</b>	<b>0</b>							

**Avista Utilities**  
**Calculation of Depreciation Rates**

Description	A 12/31/2004 Balance	B Book Reserve	C Remaining to Be Recovered	D Remaining Life	E Depreciation Accrual	F Removal Cost Allowance	G Total Accrual	H Depreciation Rate
<b>ELECTRIC PLANT</b>								
<b>TRANSMISSION PLANT</b>								
350.00 REMOVING PROPERTY OF OTHERS	1,486,032	486,915	989,117	52.9	18,698		18,698	1.26%
350.40 LAND RIGHTS	8,444,340	2,823,710	5,620,630	51.9	108,297		108,297	1.28%
352.00 STRUCTURES AND IMPROVEMENTS	10,923,253	2,946,712	7,976,541	48.6	164,126	1,682	165,808	1.52%
353.00 STATION EQUIPMENT	135,782,918	46,906,964	88,875,954	33.6	2,645,118	111,648	2,756,765	2.03%
354.00 TOWERS AND FIXTURES	17,069,239	5,342,072	11,727,167	47.5	246,888	6,368	253,256	1.48%
355.00 POLES AND FIXTURES	89,425,621	37,831,458	51,594,163	47.7	1,081,639	81,612	1,163,251	1.30%
356.00 OVERHEAD CONDUCTORS AND DEVICES	68,173,980	23,279,896	44,894,084	37.9	1,184,540	49,296	1,233,836	1.81%
357.00 UNDERGROUND CONDUIT	561,148	251,405	309,743	34.9	8,875		8,875	1.58%
358.00 UNDERGROUND CONDUCTORS	1,317,910	577,485	740,425	32.4	22,853		22,853	1.73%
359.00 ROADS AND TRAILS	1,826,844	470,739	1,356,105	44.9	30,203		30,203	1.65%
<b>TOTAL TRANSMISSION PLANT</b>	<b>335,011,284</b>	<b>120,927,356</b>	<b>214,083,928</b>		<b>5,511,237</b>	<b>250,606</b>	<b>5,761,842</b>	<b>1.72%</b>
<b>DISTRIBUTION PLANT</b>								
361.00 STRUCTURES AND IMPROVEMENTS	10,243,069	3,772,676	6,470,393	40.8	158,588	3,826	162,414	1.59%
362.00 STATION EQUIPMENT	71,839,161	22,790,642	49,048,519	30.1	1,629,519	51,067	1,680,585	2.34%
364.00 POLES, TOWERS AND FIXTURES	161,910,621	48,610,560	113,300,061	35.6	3,182,586	190,879	3,373,465	2.08%
365.00 OVERHEAD CONDUCTORS AND DEVICES	108,828,175	32,410,201	76,418,974	34.7	2,202,276	76,684	2,278,960	2.09%
366.00 UNDERGROUND CONDUIT	54,575,635	9,253,026	45,322,609	34.4	1,317,518	33,661	1,351,179	2.48%
367.00 UNDERGROUND CONDUCTORS AND DEVICES	86,696,938	10,246,236	76,450,702	16.2	4,719,179	206,024	4,925,203	5.68%
368.00 LINE TRANSFORMERS	125,446,342	51,367,068	74,079,274	32.1	2,307,766	40,260	2,348,026	1.87%
369.10 OVERHEAD SERVICES	40,429,724	14,961,584	25,468,140	45.4	560,972	30,101	591,073	1.46%
369.20 UNDERGROUND SERVICES - SPOKANE	993,815	376,052	617,763	47.7	12,951	756	13,707	1.38%
369.00 UNDERGROUND SERVICES - OTHER	48,839,178	18,052,231	30,786,947	48.7	632,175	37,649	669,825	1.37%
370.00 METERS	24,850,469	9,509,142	15,341,327	25.8	594,625		594,625	2.39%
373.10 STREET LIGHTS & SIGNALS - MERCURY VAPOR	4,850,481	4,161,014	689,467	27.0	25,536	9,912	35,448	0.73%
373.20 STREET LIGHTS & SIGNALS - UG CONDUCTOR	2,273,422	1,847,562	425,860	27.4	15,542	4,752	20,294	0.89%
373.30 STREET LIGHTS & SIGNALS - DECORATIVE	4,397,314	3,722,363	674,951	29.6	22,802	13,905	36,707	0.83%
373.40 HIGH PRESSURE SODIUM VAPOR	10,332,352	3,641,888	6,690,464	24.7	270,870	6,603	277,473	2.69%
<b>TOTAL DISTRIBUTION PLANT</b>	<b>756,507,695</b>	<b>234,722,215</b>	<b>521,785,480</b>		<b>17,652,906</b>	<b>706,078</b>	<b>18,358,984</b>	<b>2.43%</b>
<b>TOTAL TRANSMISSION AND DISTRIBUTION</b>	<b>1,091,518,979</b>		<b>735,869,408</b>		<b>23,164,142</b>	<b>956,684</b>	<b>24,120,826</b>	<b>2.21%</b>
<b>GAS PLANT</b>								
<b>DISTRIBUTION PLANT</b>								
375.00 STRUCTURES AND IMPROVEMENTS	462,233	141,059	321,174	38.0	8,452	111	8,563	1.85%
376 MAINS	150,417,092	50,092,864	100,324,228	50.7	1,978,782	90,561	2,069,343	1.38%
378 MEASURING & REGULATING EQUIPMENT	3,305,957	427,085	2,878,872	30.1	95,644	1,754	97,398	2.95%
379 COMPRESSOR STATION EQUIPMENT	1,419,053	266,733	1,152,320	28.0	41,154	718	41,872	2.95%
380 SERVICES	113,999,912	38,851,133	75,148,779	32.8	2,291,121	173,659	2,464,780	2.16%
381 METERS	29,929,367	8,240,840	21,688,527	25.6	847,208	23,397	870,605	2.91%
385 INDUSTRIAL MEASURING & REGULATING EQPT.	2,183,854	694,339	1,489,515	39.5	37,709	773	38,482	1.76%
<b>TOTAL DISTRIBUTION PLANT</b>	<b>301,717,470</b>	<b>98,714,053</b>	<b>203,003,417</b>		<b>5,300,070</b>	<b>290,972</b>	<b>5,591,042</b>	<b>1.85%</b>