

WASHINGTON

Avista 2020 Schedule 51

Allowance

Workpapers

Allowable Investment by Customer Class

RESIDENTIAL (SCHEDULE 1-2)			
	Distribution	Terminal Facilities	Total
Allowable Investment per Customer	\$1,465	\$635	\$2,100
GENERAL SERVICE (SCHEDULE 11-12)*			
	Distribution	Terminal Facilities	Total
Allowable Investment per kWh	\$0.12750	\$0.04493	\$0.17242
LARGE GENERAL SERVICE (SCHEDULE 21-22)*			
	Distribution	Terminal Facilities	Total
Allowable Investment per kWh	\$0.12034	\$0.02626	\$0.14660
PUMPING SERVICE (SCHEDULE 31)			
	Distribution	Terminal Facilities	Total
Allowable Investment per kWh	\$0.14052	\$0.03765	\$0.17817

* Schedules 12 and 22 are for customers who meet the requirements for service under Schedules 11 and 21 and whose electric use qualifies as "residential load" as defined in the Pacific Northwest Electric Power Planning and Conservation Act and the Residential Purchase and Sale Agreement contract in effect between Avista and the Bonneville Power Administration. Tariffed rates are the same under Schedules 11 and 12 and under Schedules 21 and 22.

Calculation of Allowance - Schedule 51 Schedule 001

Summary

Residential (Schedule 1)			
# Customers	215,665		
Rate of Return	8.691%		
2019 Cost of Service Study	Distribution Plant	Terminal Facilities	Total
Net Plant	286,449,613	129,921,474	416,371,087
Return on Net Plant	24,895,555	11,291,575	36,187,130
Depreciation Expense	10,434,588	3,998,188	14,432,776
Total	35,330,143	15,289,763	50,619,906
Per Customer Expenses	Distribution Plant	Terminal Facilities	Total
Net Plant	1328.22	602.42	1930.64
Return on Net Plant	115.44	52.36	167.79
Depreciation Expense	48.38	18.54	66.92
Total	163.82	70.90	234.72
Allowable Investment	\$1,464.45	\$633.77	\$2,098.22
Rounded to nearest \$5 increment	\$0.55	\$1.23	\$1.78
Allowable Investment	\$1,465.00	\$635.00	\$2,100.00

Apartments

Current Schedule 1 Allowance	\$	1,860	Present Schedule 51
Current Duplex Allowance	\$	1,485	Present Schedule 51
Current Multiplex Allowance	\$	1,115	Present Schedule 51
Ratio of Duplex to Residence		0.80	C40/C39
New Duplex Allowance	\$	1,675.00	E32*C42
Ratio of Multiplex to Residence		0.60	C41/C39
New Multiplex Allowance	\$	1,260.00	E32*C44

**Calculation of Allowance - Schedule 51
Schedule 011/012**

Residential (Schedule 11/12)			
Annual MWs	619,306		
Rate of Return	8.691%		
	Distribution Plant	Terminal Facilities	Total
2019 Cost of Service Study			
Net Plant	71,614,395	26,819,780	98,434,175
Return on Net Plant	6,224,062	2,330,928	8,554,989
Depreciation Expense	2,608,720	781,457	3,390,177
Total	8,832,782	3,112,385	11,945,166
	Distribution Plant	Terminal Facilities	Total
Per Customer Expenses			
Net Plant	0.1156	0.0433	0.1589
Return on Net Plant	0.0101	0.0038	0.0138
Depreciation Expense	0.0042	0.0013	0.0055
Total	0.0143	0.0050	0.0193
Allowable Investment	\$0.12750	\$0.04493	\$0.17242

Calculation of Allowance - Schedule 51
Schedule 021/022

Residential (Schedule 21/22)			
Annual MWs	1,365,905		
Rate of Return	8.691%		
2019 Cost of Service Study	Distribution Plant	Terminal Facilities	Total
Net Plant	149,230,122	35,838,805	185,068,927
Return on Net Plant	12,969,704	3,114,778	16,084,482
Depreciation Expense	5,417,685	897,049	6,314,734
Total	18,387,389	4,011,827	22,399,216
Per Customer Expenses	Distribution Plant	Terminal Facilities	Total
Net Plant	0.1093	0.0262	0.1355
Return on Net Plant	0.0095	0.0023	0.0118
Depreciation Expense	0.0040	0.0007	0.0046
Total	0.0135	0.0029	0.0164
Allowable Investment	\$0.12034	\$0.02626	\$0.14660

Calculation of Allowance - Schedule 51
Schedule 031/032

Residential (Schedule 31/32)			
Annual MWhs	145,823		
Rate of Return	8.691%		
2019 Cost of Service Study	Distribution Plant	Terminal Facilities	Total
Net Plant	18,585,129	5,416,828	24,001,957
Return on Net Plant	1,615,248	470,781	2,086,028
Depreciation Expense	677,005	143,341	820,346
Total	2,292,253	614,122	2,906,374
Per Customer Expenses	Distribution Plant	Terminal Facilities	Total
Net Plant	0.1274	0.0371	0.1646
Return on Net Plant	0.0111	0.0032	0.0143
Depreciation Expense	0.0046	0.0010	0.0056
Total	0.0157	0.0042	0.0199
Allowable Investment	\$0.14052	\$0.03765	\$0.17817

*From UE-190334

Cost of Capital			Source
Capital Component	Capital Structure	Component Cost	Weighted Cost
Long Term Debt	51.50%	5.15%	2.65%
Short Term Debt			0.00%
Common Equity	48.50%	9.40%	4.56%
Total	100.00%		7.21%

UE-190334, Settlement Stipulation, Pg 4

UE-190334, Settlement Stipulation, Pg 4

UE-190334, Settlement Stipulation, Pg 4

Grossed-up Rate of Return	
Tax Gross-up Factor	1.325
Weighted ROE * Tax Gross-up	1.325 * 4.56%
Long Term and Short Term Debt	6.039%
Preferred Equity * Tax Gross-up	2.652%
Grossed-up Rate of Return	0.000%
	8.691%

*From UE-190334 Cost of Service (Knox)

	Total	Schedule 001	Schedule 011/012	Schedule 021/022	Schedule 031/032	Source
Number of Customers	252,251	215,665	32,233	1,899	2,454	Knox COS Study - "Assign" (columns BB - BL)
Annual Consumption (MWhs)	4,505,738	2,374,704	619,306	1,365,905	145,823	Knox COS Study - "Assign" (columns BB - BL)
NCP Demand (kW)	858,967	467,271	116,821	244,558	30,317	Knox COS Study - "Assign" (columns BB - BL)

Plant in Service

Account	Schedule 001	Schedule 011/012	Schedule 021/022	Schedule 031/032	Final ProForma Cost of Service Balances From UE-170485
Structures & Improvements	14,207,063	3,551,865	7,435,623	921,768	28,173,000
Station Equipment	48,633,788	12,158,785	25,453,713	3,155,408	95,242,000
Storage Battery Equipment	1,310,724	327,690	686,000	85,041	2,670,000
Poles, Towers & Fixtures	138,522,512	34,631,592	72,438,147	8,987,476	268,958,000
OH Conductors & Devices	90,080,831	22,520,834	47,126,076	5,844,532	174,173,000

366	UG Conduit	40,983,945	10,246,271	21,025,394	2,659,078	78,792,000
367	UG Conductors & Devices	73,077,032	18,269,766	37,588,373	4,741,309	141,215,000
	Subtotals	406,815,895	101,706,803	211,753,326	26,394,612	789,223,000
368	Line Transformers	102,854,647	25,714,377	49,393,325	6,673,310	185,646,000
369	Services	95,375,349	14,254,846	825,624	1,085,181	111,541,000
370	Meters	0	0	0	0	0
	Subtotals	198,229,996	39,969,223	50,218,949	7,758,491	297,187,000
	Totals	605,045,891	141,676,026	261,972,275	34,153,103	

Accumulated Depreciation

Account	Schedule 001	Schedule 011/012	Schedule 021/022	Schedule 031/032		
361	Structures & Improvements	2,416,003	604,017	1,264,476	156,753	4,791,000
362	Station Equipment	12,165,852	3,041,547	6,367,303	789,332	23,825,000
363	Storage Battery Equipment	233,181	58,297	122,041	15,129	475,000
364	Poles, Towers & Fixtures	31,081,786	7,770,663	16,253,726	2,016,617	60,349,000
365	OH Conductors & Devices	25,874,066	6,468,697	13,536,101	1,678,735	50,028,000
366	UG Conduit	12,052,480	3,013,204	6,183,108	781,977	23,171,000
367	UG Conductors & Devices	36,542,914	9,135,983	18,796,449	2,370,940	70,616,000
	Subtotals	120,366,282	30,092,408	62,523,204	7,809,483	233,255,000
368	Line Transformers	29,240,380	7,310,299	14,041,948	1,897,145	52,777,000
369	Services	39,068,142	5,839,144	338,196	444,518	45,690,000
370	Meters	0	0	0	0	0
	Subtotals	68,308,522	13,149,443	14,380,144	2,341,663	98,467,000
	Totals	188,674,804	43,241,851	76,903,348	10,151,146	

Net Plant

Account	Schedule 001	Schedule 011/012	Schedule 021/022	Schedule 031/032		
361	Structures & Improvements	11,791,060	2,947,848	6,171,147	765,015	
362	Station Equipment	36,467,936	9,117,238	19,086,410	2,366,076	
363	Storage Battery Equipment	1,077,543	269,393	563,959	69,912	
364	Poles, Towers & Fixtures	107,440,726	26,860,929	56,184,421	6,970,859	
365	OH Conductors & Devices	64,206,765	16,052,137	33,589,975	4,165,797	
366	UG Conduit	28,931,465	7,233,067	14,842,286	1,877,101	
367	UG Conductors & Devices	36,534,118	9,133,783	18,791,924	2,370,369	
	Subtotals	286,449,613	71,614,395	149,230,122	18,585,129	
368	Line Transformers	73,614,267	18,404,078	35,351,377	4,776,165	
369	Services	56,307,207	8,415,702	487,428	640,663	
370	Meters	0	0	0	0	
	Subtotals	129,921,474	26,819,780	35,838,805	5,416,828	

Totals	416,371,087	98,434,175	185,068,927	24,001,957
Depreciation Expense				
Account	Schedule 001	Schedule 011/012	Schedule 021/022	Schedule 031/032
361	198,686	49,673	103,987	12,891
362	819,056	204,770	428,674	53,141
363	54,492	13,623	28,519	3,535
364	2,713,199	678,319	1,418,824	176,035
365	2,144,795	536,213	1,122,056	139,156
366	937,317	234,336	480,858	60,814
367	3,567,043	891,786	1,834,767	231,433
Subtotals	10,434,588	2,608,720	5,417,685	677,005
368	1,828,875	457,231	878,270	118,659
369	2,169,313	324,226	18,779	24,682
370	0	0	0	0
Subtotals	3,998,188	781,457	897,049	143,341
Totals	14,432,776	3,390,177	6,314,734	820,346

Total Distribution Plant Depreciation Rates by Account

Account Number	Account Description	Plant in Service	Accumulated Depreciation	Net Plant	Depreciation Expense	Effective Depreciation Rate	Weighted Depreciation Rate	Distribution Weighted Rate	Term Fac Weighted Rate
360	Land & Land Rights	\$6,459,000	\$40,000	\$6,419,000	\$4,000	0.06%	0.00%	0.00%	
361	Structures & Improvements	\$28,173,000	\$4,791,000	\$23,382,000	\$394,000	1.40%	0.04%	0.03%	
362	Station Equipment	\$95,242,000	\$23,825,000	\$71,417,000	\$1,604,000	1.68%	0.16%	0.13%	
363	Storage Battery Equipment	\$2,670,000	\$475,000	\$2,195,000	\$111,000	4.16%	0.01%	0.02%	
364	Poles, Towers & Fixtures	\$268,958,000	\$60,349,000	\$208,609,000	\$5,268,000	1.96%	0.54%	0.51%	
365	OH Conductors & Devices	\$174,173,000	\$50,028,000	\$124,145,000	\$4,147,000	2.38%	0.39%	0.49%	
366	UG Conduit	\$78,792,000	\$23,171,000	\$55,621,000	\$1,802,000	2.29%	0.17%	0.20%	
367	UG Conductors & Devices	\$141,215,000	\$70,616,000	\$70,599,000	\$6,893,000	4.88%	0.45%	1.66%	
368	Line Transformers	\$185,646,000	\$52,777,000	\$132,869,000	\$3,301,000	1.78%	0.31%		1.01%
369	Services	\$111,541,000	\$45,690,000	\$65,851,000	\$2,537,000	2.27%	0.20%		0.99%
370	Meters	\$0	\$0	\$0	\$0	0.00%	0.00%		0.00%
Totals		\$1,092,869,000	\$331,762,000	\$761,107,000	\$26,061,000	2.3846%	2.3846%	3.0497%	1.9938%
						Revenue Conversion Factor (Before FIT)		95.5631%	
						Grossed-up Depreciation Rate		2.4954%	

***From UE-190334 Cost of Service (Knox)**
 Allocations to Rate Schedules

Allocator
 C01
 E01
 D02

Not Used

Plant in Service

Account	Total	Schedule 001	Schedule 011/012	Schedule 021/022	Schedule 031/032	Schedule 25	Sch 41-49
361	28,173,000	14,207,063	3,551,865	7,435,623	921,768	1,917,125	139,556
362	95,242,000	48,633,788	12,158,785	25,453,713	3,155,408	5,362,577	477,729
363	2,670,000	1,310,724	327,690	686,000	85,041	247,670	12,875
364	268,958,000	138,522,512	34,631,592	72,438,147	8,987,476	11,645,881	2,732,392
365	174,173,000	90,080,831	22,520,834	47,126,076	5,844,532	7,715,864	884,863
366	78,792,000	40,983,945	10,246,271	21,025,394	2,659,078	3,474,727	402,585
367	141,215,000	73,077,032	18,289,766	37,588,373	4,741,309	6,820,685	717,835
Subtotals	789,223,000	406,815,895	101,706,803	211,753,326	26,394,612	37,184,529	5,367,835
368	185,646,000	102,854,647	25,714,377	49,393,325	6,673,310	0	1,010,341
369	111,541,000	95,375,349	14,254,846	825,624	1,085,181	0	0
370	0	0	0	0	0	0	0
Subtotals	297,187,000	198,229,996	39,969,223	50,218,949	7,758,491	0	1,010,341
Totals	1,086,410,000	605,045,891	141,676,026	261,972,275	34,153,103	37,184,529	6,378,176

Accumulated Depreciation

Account	Schedule 001	Schedule 011/012	Schedule 021/022	Schedule 031/032	Schedule 25	Sch 41-49
361	4,791,000	604,017	1,264,476	156,753	326,019	23,732
362	23,825,000	3,041,547	6,367,303	789,332	1,341,461	119,505
363	475,000	58,297	122,041	15,129	44,061	2,291
364	60,349,000	7,770,663	16,253,726	2,016,617	2,613,112	613,096
365	50,028,000	6,468,697	13,536,101	1,678,735	2,216,240	254,161
366	23,171,000	3,013,204	6,183,108	781,977	1,021,841	118,391
367	70,616,000	9,135,983	18,796,449	2,370,940	3,410,753	358,961
Subtotals	233,255,001	30,092,408	62,523,204	7,809,483	10,973,487	1,490,137
368	52,777,000	7,310,299	14,041,948	1,897,145	0	287,228
369	45,690,000	5,839,144	338,196	444,518	0	0
370	0	0	0	0	0	0
Subtotals	98,467,000	13,149,443	14,380,144	2,341,663	0	287,228
Totals	331,722,001	188,674,804	76,903,348	10,151,146	10,973,487	1,777,365

Net Plant

Account	Schedule 001	Schedule 011/012	Schedule 021/022	Schedule 031/032	Schedule 25	Sch 41-49
361 Structures & Improvements	23,382,000	11,791,060	2,947,848	6,171,147	765,015	1,591,106
362 Station Equipment	71,417,000	36,467,936	19,086,410	2,366,076	4,021,116	358,224
363 Storage Battery Equipment	2,195,000	1,077,543	269,393	563,959	69,912	203,609
364 Poles, Towers & Fixtures	208,609,000	107,440,726	26,860,929	56,184,421	6,970,859	9,032,769
365 OH Conductors & Devices	124,145,000	64,206,765	16,052,137	33,589,975	4,165,797	5,499,624
366 UG Conduit	55,621,000	28,931,465	7,233,067	14,842,286	1,877,101	2,452,886
367 UG Conductors & Devices	70,599,000	36,534,118	9,133,783	18,791,924	2,370,369	3,409,932
Subtotals	555,967,999	286,449,613	71,614,395	149,230,122	18,585,129	26,211,042
368 Line Transformers	132,869,000	73,614,267	18,404,078	35,351,377	4,776,165	0
369 Services	65,851,000	56,307,207	8,415,702	487,428	640,663	0
370 Meters	0	0	0	0	0	0
Subtotals	198,720,000	129,921,474	26,819,780	35,838,805	5,416,828	0
Totals	754,687,999	416,371,087	98,434,175	185,068,927	24,001,957	26,211,042

Depreciation Expense

Account	Schedule 001	Schedule 011/012	Schedule 021/022	Schedule 031/032	Schedule 25	Sch 41-49
361 Structures & Improvements	394,000	198,686	49,673	103,987	12,891	26,811
362 Station Equipment	1,604,000	819,056	204,770	428,674	53,141	90,313
363 Storage Battery Equipment	111,000	54,492	13,623	28,519	3,535	10,296
364 Poles, Towers & Fixtures	5,268,000	2,713,199	678,319	1,418,824	176,035	228,104
365 OH Conductors & Devices	4,147,000	2,144,795	536,213	1,122,056	139,156	183,712
366 UG Conduit	1,802,000	937,317	234,336	480,858	60,814	79,468
367 UG Conductors & Devices	6,893,000	3,567,043	891,786	1,834,767	231,433	332,932
Subtotals	20,219,000	10,434,588	2,608,720	5,417,685	677,005	951,636
368 Line Transformers	3,301,000	1,828,875	457,231	878,270	118,659	0
369 Services	2,537,000	2,169,313	324,226	18,779	24,682	0
370 Meters	0	0	0	0	0	0
Subtotals	5,838,000	3,998,188	781,457	897,049	143,341	0
Totals	26,057,000	14,432,776	3,390,177	6,314,734	820,346	951,636

Totals 147,331

Revenue Conversion Factor
Washington - Electric System
Twelve Months Ended December 31, 2018

<u>Line No.</u>	<u>Description</u>	<u>Factor</u>
1	Revenues	1.000000
	Expense:	
2	Uncollectibles	0.003782
3	Commission Fees	0.002000
4	Washington Excise Tax	0.038587
5	Total Expense	<u>0.044369</u>
6	Net Operating Income Before FIT	0.955631
7	Federal Income Tax @ 21%	<u>0.200683</u>
8	REVENUE CONVERSION FACTOR	<u><u>0.754948</u></u>