

AVISTA UTILITIES

2020 Washington PGA Filing

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Input Tab, Page 5

ATTACHMENT “D”

Workpapers

July 31, 2020

Title	Description	Page Number
TARRIF CHANGE COMPARISONS		
Total Revenue Change'!A1	Total Revenue Change by Rate Schedule	2
Rate Schedule Change 150'!A1	Rate Schedule 150 current, proposed and changes	3
Rate Schedule Change 155'!A1	Rate Schedule 155 current, proposed and changes	4
PGA COMPONENT CALCULATIONS		
Input'!A1	Input for Commodity	5
Commodity!A1	Commodity output and WACOG calculation	6
Demand'!A1	Demand output and WACOG calculation	7
Input - Demand Contracts	Input - Demand Contracts	8
Input - Amortization Balances'!A1	Amortization balances Input	9
Amortization Calculation'!A1	Amortization calculation by rate schedule	10
OTHER		
Conversion Factor'!A1	Revenue Conversion Factor	11

**Avista Utilities
State of Washington
Total Revenue Change**

	Total Revenue Change			% Change Calculation	
	Rate Schedule 150	Rate Schedule 155	Total	Total GRC Billed Revenue*	% Change
Rate Schedule 101/102	\$ 1,366,462	\$ (1,524,131)	\$ (157,669)	\$ 119,141,053	-0.1%
Rate Schedule 111/112	\$ 595,671	\$ (670,739)	\$ (75,068)	\$ 38,441,296	-0.2%
Rate Schedule 131/132	\$ 8,823	\$ -	\$ 8,823	\$ 455,396	1.9%
Rate Schedule 146/126,116	\$ -	\$ -	\$ -	\$ 3,448,777	0.0%
Rate Schedule 148	\$ -	\$ -	\$ -	\$ 1,441,933	0.0%
Total	\$ 1,970,956	\$ (2,194,870)	\$ (223,914)	\$ 162,928,455	-0.1%

*Normalized Billing Determinants, priced at current rates.

Avista Utilities
State of Washington
Rate Schedule Changes for 150
(Commodity and Demand)

Summary of Changes	Rate Schedule 150					
	Without Revenue Sensitive Costs			With Revenue Sensitive Costs		
	Demand	Commodity	Total Gas Cost Rate	Demand	Commodity	Total Gas Cost Rate
Present						
Rate Schedule 101/102	\$0.09651	\$0.15284	\$0.24935	\$0.10121	\$0.16029	\$0.26150
Rate Schedule 111/112*	\$0.08727	\$0.15284	\$0.24011	\$0.09152	\$0.16029	\$0.25181
Rate Schedule 131/132	\$0.05591	\$0.15284	\$0.20875	\$0.05863	\$0.16029	\$0.21892
Rate Schedule 146/126,116	\$0.00054	\$0.00000	\$0.00054	\$0.00056	\$0.00000	\$0.00056
Proposed						
Rate Schedule 101/102	\$0.09822	\$0.16167	\$0.25989	\$0.10276	\$0.16914	\$0.27190
Rate Schedule 111/112*	\$0.08835	\$0.16167	\$0.25002	\$0.09243	\$0.16914	\$0.26157
Rate Schedule 131/132	\$0.05640	\$0.16167	\$0.21807	\$0.05901	\$0.16914	\$0.22815
Rate Schedule 146/126,116	\$0.00054	\$0.00000	\$0.00054	\$0.00056	\$0.00000	\$0.00056
Change						
Rate Schedule 101/102	\$0.00171	\$0.00883	\$0.01054	\$0.00155	\$0.00885	\$0.01040
Rate Schedule 111/112	\$0.00108	\$0.00883	\$0.00991	\$0.00091	\$0.00885	\$0.00976
Rate Schedule 131/132	\$0.00049	\$0.00883	\$0.00932	\$0.00038	\$0.00885	\$0.00923
Rate Schedule 146/126,116	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000

Revenue Change				
Revenue at Present Rates				
	Volume	Demand	Commodity	Total
Rate Schedule 101/102	131,390,586	13,298,041	21,060,597	\$ 34,358,638
Rate Schedule 111/112*	61,031,814	5,585,632	9,782,789	\$ 15,368,421
Rate Schedule 131/132	955,955	56,048	153,230	\$ 209,278
Rate Schedule 146/126,116	35,733,806	20,011	-	\$ 20,011
Total	229,112,161	18,959,732	30,996,616	49,956,348
Revenue at Proposed Rates				
Rate Schedule 101/102	131,390,586	13,501,697	22,223,404	\$ 35,725,100
Rate Schedule 111/112*	61,031,814	5,641,171	10,322,921	\$ 15,964,092
Rate Schedule 131/132	955,955	56,411	161,690	\$ 218,101
Rate Schedule 146/126,116	35,733,806	20,011	-	\$ 20,011
Total	229,112,161	18,959,732	30,996,616	51,927,304
Revenue Change				
Rate Schedule 101/102	131,390,586	203,656	1,162,807	\$ 1,366,462
Rate Schedule 111/112*	61,031,814	55,539	540,132	\$ 595,671
Rate Schedule 131/132	955,955	363	8,460	\$ 8,823
Rate Schedule 146/126,116	35,733,806	-	-	\$ -
Total	229,112,161	259,558	1,711,399	1,970,956

Avista Utilities
State of Washington
Rate Schedule Changes for 155
Amortization Rate

Summary of Changes	Rate Schedule 155	
	Total Gas Cost Rate Without Revenue Sensitive Costs	Total Gas Cost Rate With Revenue Sensitive Costs
Present		
Rate Schedule 101/102	\$0.00409	\$0.00429
Rate Schedule 111	\$0.01035	\$0.01085
Rate Schedule 131	\$0.00000	\$0.00000
Rate Schedule 146	\$0.00000	\$0.00000
Proposed		
Rate Schedule 101/102	(\$0.00699)	(\$0.00731)
Rate Schedule 111	(\$0.00013)	(\$0.00014)
Rate Schedule 131	\$0.00000	\$0.00000
Rate Schedule 146	\$0.00000	\$0.00000
Change		
Rate Schedule 101/102	\$0.01108	(\$0.01160)
Rate Schedule 111	\$0.01048	(\$0.01099)
Rate Schedule 131	\$0.00000	\$0.00000
Rate Schedule 146	\$0.00000	\$0.00000

RCF

1.04619

Note: 112, 122, and 132 receive annual lump sum payments for their portion of the deferral and therefore are not included in the overall amortization rate. Rate schedules 116 and 126 would also receive annual lump sum payments.

Revenue Change		
Revenue at Present Rates		
	Volume	Revenue
Rate Schedule 101/102	131,390,586	\$ 563,666
Rate Schedule 111	61,031,814	\$ 662,195
Rate Schedule 131	955,955	\$ -
Rate Schedule 146		\$ -
Total	193,378,355	1,225,861
Revenue at Proposed Rates		
Rate Schedule 101/102	131,390,586	\$ (960,465)
Rate Schedule 111	61,031,814	\$ (8,544)
Rate Schedule 131	955,955	\$ -
Rate Schedule 146	-	\$ -
Total	193,378,355	(969,009)
Revenue Change		
Rate Schedule 101/102	131,390,586	\$ (1,524,131)
Rate Schedule 111	61,031,814	\$ (670,739)
Rate Schedule 131	955,955	\$ -
Rate Schedule 146	-	\$ -
Total	193,378,355	(2,194,870)

STATE OF WASHINGTON
ANNUAL PGA FILING

*AN -- Allocated North sum of Washington + Idaho

Line

No.

VOLUME FORECAST													Total
Demand Forecast	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Total
Rate Schedule 101/102	15,717,991	21,723,608	23,303,433	19,987,878	15,944,593	10,328,109	4,801,381	2,836,645	2,298,200	2,205,754	3,108,274	9,134,720	131,390,586
Rate Schedule 111/112/121/122	7,140,073	8,867,081	9,371,854	7,958,872	6,638,255	4,636,742	2,477,620	1,904,555	1,885,523	1,978,051	2,611,853	5,561,335	61,031,814
FIRM DEMAND THERMS	22,858,064	30,590,689	32,675,287	27,946,750	22,582,848	14,964,851	7,279,001	4,741,200	4,183,723	4,183,805	5,720,127	14,696,055	192,422,400
Rate Schedule 131/132	112,149	119,039	129,864	115,311	96,817	74,635	48,079	42,401	48,091	38,185	41,385	89,999	955,955
COMMODITY THERMS (SALES)	22,970,213	30,709,728	32,805,151	28,062,061	22,679,665	15,039,486	7,327,080	4,783,601	4,231,814	4,221,990	5,761,512	14,786,054	193,378,355
Fuel (1.5% ESTIMATE)	342,871	458,860	490,129	419,201	338,743	224,473	109,185	71,118	62,756	62,757	85,802	220,441	2,886,336
TOTAL PURCHASE THERMS	23,313,084	31,168,588	33,295,280	28,481,262	23,018,408	15,263,959	7,436,265	4,854,719	4,294,570	4,284,747	5,847,314	15,006,495	196,264,691
COMMODITY													Total
Commodity Allocation (based on Calendar													
Volumes)	68.68%	68.68%	68.68%	68.68%	68.68%	68.68%	68.68%	68.68%	68.68%	68.68%	68.68%	68.68%	68.68%
Hedges	10.00												
Executed													
AN* System Total Volumes (Th)	19,125,000	19,762,500	19,762,500	17,850,000	19,762,500	2,812,500	2,906,250	2,812,500	2,906,250	2,906,250	2,812,500	2,906,250	116,325,000
AN* System Total Dollars (\$)	\$ 3,396,853	\$ 3,510,082	\$ 3,510,082	\$ 3,170,396	\$ 3,510,082	\$ 401,878	\$ 415,274	\$ 401,878	\$ 415,274	\$ 415,274	\$ 401,878	\$ 415,274	\$ 19,964,225
WA Volumes (Th)	13,135,050	13,572,885	13,572,885	12,259,380	13,572,885	1,931,625	1,996,013	1,931,625	1,996,013	1,996,013	1,931,625	1,996,013	79,892,012
WA Dollars (\$)	2,332,959	2,410,724	2,410,724	2,177,428	2,410,724	276,010	285,210	276,010	285,210	285,210	276,010	285,210	13,711,429
WACOG	\$ 0.17761	\$ 0.17761	\$ 0.17761	\$ 0.17761	\$ 0.17761	\$ 0.14289	\$ 0.14289	\$ 0.14289	\$ 0.14289	\$ 0.14289	\$ 0.14289	\$ 0.14289	\$ 0.171620
Deferred Exchange Credits	<i>please note the Deferred Exchange Agreement is currently in the final negotiation phases with an effective date of 04.15. These estimates reflect the most recent potential settlement position.</i>												
AN* Deferred Exchange	\$ (375,000)	\$ (375,000)	\$ (375,000)	\$ (375,000)	\$ (375,000)	\$ (406,250)	\$ (437,500)	\$ (437,500)	\$ (437,500)	\$ (437,500)	\$ (437,500)	\$ (437,500)	(4,906,250)
WA Deferred Exchange	\$ (257,550)	\$ (257,550)	\$ (257,550)	\$ (257,550)	\$ (257,550)	\$ (279,013)	\$ (300,475)	\$ (300,475)	\$ (300,475)	\$ (300,475)	\$ (300,475)	\$ (300,475)	(3,369,613)
Price Forecast (per Dth)	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	
Pricing date of June 30, 2020													
AECO	[REDACTED]												
Sumas													
Rockies													
Basin Weighting (1-year average actual)													
AECO													
Sumas													
Rockies													
Basin-Weighted Index Price	[REDACTED]												
Index Volumes													
Index \$													
Embedded Charges													
Variable Transportation	\$ 38,046	\$ 39,375	\$ 36,780	\$ 29,316	\$ 32,005	\$ 41,895	\$ 35,901	\$ 30,591	\$ 33,591	\$ 22,151	\$ 29,205	\$ 30,735	399,591
TOTAL Commodity	\$ 3,904,789	\$ 5,430,158	\$ 5,937,209	\$ 5,015,130	\$ 3,894,819	\$ 2,172,065	\$ 863,875	\$ 456,282	\$ 386,095	\$ 375,372	\$ 639,082	\$ 2,188,220	\$ 31,263,096

Avista Utilities
 State of Washington
 Gas Cost Calculation (per Therm)

	Executed Hedges		Index Cost		Total Cost to Serve Average Load (including fuel)		Variable Charges	Deferred Exchange	Total Estimated Commodity Costs	Sales Volumes (to customers)	WACOG
	Volumes (a)	Dollars (b)	Volumes (c)	Dollars (d)	Volumes e) = (a) + (c)	Dollars (f) = (b) + (d)	Dollars (g)	Dollars (h)	Dollars (i)	(j)	(k)
Nov-19	13,135,050	\$ 2,332,959	10,178,034	\$ 1,791,334	23,313,084	\$ 4,124,293	\$ 38,046	\$ (257,550)	\$ 3,904,789	22,970,213	\$ 0.16999
Dec-19	13,572,885	\$ 2,410,724	17,595,703	\$ 3,237,609	31,168,588	\$ 5,648,333	\$ 39,375	\$ (257,550)	\$ 5,430,158	30,709,728	\$ 0.17682
Jan-20	13,572,885	\$ 2,410,724	19,722,395	\$ 3,747,255	33,295,280	\$ 6,157,979	\$ 36,780	\$ (257,550)	\$ 5,937,209	32,805,151	\$ 0.18098
Feb-20	12,259,380	\$ 2,177,428	16,221,882	\$ 3,065,936	28,481,262	\$ 5,243,364	\$ 29,316	\$ (257,550)	\$ 5,015,130	28,062,061	\$ 0.17872
Mar-20	13,572,885	\$ 2,410,724	9,445,523	\$ 1,709,640	23,018,408	\$ 4,120,364	\$ 32,005	\$ (257,550)	\$ 3,894,819	22,679,665	\$ 0.17173
Apr-20	1,931,625	\$ 276,010	13,332,334	\$ 2,133,173	15,263,959	\$ 2,409,183	\$ 41,895	\$ (279,013)	\$ 2,172,065	15,039,486	\$ 0.14442
May-20	1,996,013	\$ 285,210	5,440,252	\$ 843,239	7,436,265	\$ 1,128,449	\$ 35,901	\$ (300,475)	\$ 863,875	7,327,080	\$ 0.11790
Jun-20	1,931,625	\$ 276,010	2,923,094	\$ 450,156	4,854,719	\$ 726,166	\$ 30,591	\$ (300,475)	\$ 456,282	4,783,601	\$ 0.09538
Jul-20	1,996,013	\$ 285,210	2,298,557	\$ 367,769	4,294,570	\$ 652,979	\$ 33,591	\$ (300,475)	\$ 386,095	4,231,814	\$ 0.09124
Aug-20	1,996,013	\$ 285,210	2,288,734	\$ 368,486	4,284,747	\$ 653,696	\$ 22,151	\$ (300,475)	\$ 375,372	4,221,990	\$ 0.08891
Sep-20	1,931,625	\$ 276,010	3,915,689	\$ 634,342	5,847,314	\$ 910,352	\$ 29,205	\$ (300,475)	\$ 639,082	5,761,512	\$ 0.11092
Oct-20	1,996,013	\$ 285,210	13,010,482	\$ 2,172,750	15,006,495	\$ 2,457,960	\$ 30,735	\$ (300,475)	\$ 2,188,220	14,786,054	\$ 0.14799
	79,892,012	\$ 13,711,429	116,372,679	\$ 20,521,689	196,264,691	\$ 34,233,118	\$ 399,591	\$ (3,369,613)	\$ 31,263,096	193,378,355	\$ 0.16167
Average	79,892,012	\$ 0.17162 40.7%	\$ 0.1763 59.3%	\$ 0.1744							

RCF: 1.046190

Proposed Rate	
Proposed WACOG without RCF	\$ 0.16167
Proposed WACOG with RCF	\$ 0.16914

Current	
WACOG without RCF	\$ 0.15284
WACOG with RCF	\$ 0.16029

\$ 1,707,531

Avista Utilities
 Demand Gas Cost Calculation
 State of Washington

RCF 1.04619

	Total	Schedule 101/102	Schedule 111/112/121/122	Schedule 131/132	Schedule 146
Line Volumes					
1 Total Washington Demand Costs	<u>\$18,371,180</u>				
2 Total Estimated Sales Volumes	229,112,161	131,390,586	61,031,814	955,955	35,733,806
3	100%	67.94%	31.56%	0.49%	
4					
5 Coincident Peak - Three Year Average (UG-170486)	1,427,015	1,054,338	372,677		
6	100%	73.88%	26.12%	0.00%	0%
7					
8 60 % Demand Portion (based on volumes)	\$11,022,708	\$ 7,475,718	\$ 3,472,677	\$ 53,917	\$ 19,296
9 40% Demand Portion (based on Coincident Peak)	\$7,348,472	\$ 5,429,051	\$ 1,919,421	\$ -	\$ -
Total	<u>\$18,371,180</u>	<u>\$12,904,769</u>	<u>\$5,392,098</u>	<u>\$53,917</u>	<u>\$19,296</u>
10		70.24%	29.35%	0.29%	0.11%
11 Calculation of Rate - Proposed					
12 60 % Demand Portion (based on volumes)		\$ 0.05690	\$ 0.05690	\$ 0.05640	\$ 0.00054
13 40 % Demand Portion (based on Coincident Peak)		\$ 0.04132	\$ 0.03145		\$ -
14 Proposed Rate without Revenue Conversion		<u>\$ 0.09822</u>	<u>\$ 0.08835</u>	<u>\$ 0.05640</u>	<u>\$ 0.00054</u>
15					
16					
17 60 % Demand Portion (based on volumes)		\$ 0.05953	\$ 0.05953	\$ 0.05901	\$ 0.00056
18 40 % Demand Portion (based on Coincident Peak)		\$ 0.04323	\$ 0.03290	\$ -	\$ -
19 Proposed Rate with Revenue Conversion		<u>\$ 0.10276</u>	<u>\$ 0.09243</u>	<u>\$ 0.05901</u>	<u>\$ 0.00056</u>

Avista Utilities
 WA Gas Operations
 Demand Cost Calculation (per Therm)

Line No.	Description	Estimated Demand Expense (AN)	Allocator	5 Day Peak Allocation Percentage	WA Allocation
1	Northwest Pipeline Corporation (NWP)	\$ 16,286,603	WA System Allocated	69.12%	\$ 11,257,300
2					
3	TC Energy - Gas Transmission Northwest	\$ 2,178,176	WA System Allocated	69.12%	\$ 1,505,555
4					
5	Total Fixed Domestic Transportation Costs	18,464,779			\$ 12,762,855
6					
7	TC Energy - AB (NOVA System)	\$ 4,598,568	WA System Allocated	69.12%	\$ 3,178,530
8					
9	TC Energy - BC (Foothills Pipe Line Ltd.)	\$ 2,419,608	WA System Allocated	69.12%	\$ 1,672,433
10					
11	Enbridge - Westcoast Energy Inc	\$ 1,095,720	WA System Allocated	69.12%	\$ 757,362
12					
13	Total Fixed Canadian Transportation Costs	\$ 8,113,896			\$ 5,608,325
14					
15	Total Fixed Pipeline Charges	\$ 26,578,675			\$ 18,371,180
16					
17	Demand Costs	\$ 26,578,675			\$ 18,371,180
18	Demand Volumes				192,422,400
19	Demand Rate			Check	\$ 0.09547

Avista Utilities
 State of Washington
 Schedule 155 - Temporary Refunds/Charges

Amortization Acct 191000 Est. Balance At 6/30/20	Current Deferrals (Acct 191010) At 6/30/20	Total For Amortization Effective 11/01/2020
\$ -	\$ (5,943.07)	
\$ -	\$ (103,862.89)	
\$ -	\$ (90.96)	
	\$ (109,896.92)	
\$ 281,156	\$ (1,182,498)	\$ (901,342)
\$ 114,838	\$ (123,028)	\$ (8,190)
\$ -	\$ -	\$ -
	\$ -	\$ -
\$ 395,994	\$ (1,305,526)	\$ (909,532)
<hr/>		
395,994.00	(1,415,422.92)	(909,532.00)
<hr/>		

paid out in November based on actual balance as of October 31, 2019.

AMORTIZATION RATE CALCULATION

Schedule 101/102					Schedule 111/121				
Amortization &					Amortization &				
Sales (Therms)	Deferral	Interest		Balance	Sales (Therms)	Deferral	Interest		Balance
		5.50%					5.50%		
Beginning Balance		Amortization		\$ (901,342)	Beginning Balance		Amortization		\$ (8,190)
Nov-20	15,717,991	\$ 107,826	\$ (3,884)	\$ (797,400)	Nov-20	7,140,073	\$ 958	\$ (35)	\$ (7,267)
Dec-20	21,723,608	\$ 149,024	\$ (3,313)	\$ (651,689)	Dec-20	8,867,081	\$ 1,190	\$ (31)	\$ (6,108)
Jan-21	23,303,433	\$ 159,862	\$ (2,621)	\$ (494,448)	Jan-21	9,371,854	\$ 1,258	\$ (25)	\$ (4,875)
Feb-21	19,987,878	\$ 137,117	\$ (1,952)	\$ (359,283)	Feb-21	7,958,872	\$ 1,068	\$ (20)	\$ (3,827)
Mar-21	15,944,593	\$ 109,380	\$ (1,396)	\$ (251,299)	Mar-21	6,638,255	\$ 891	\$ (16)	\$ (2,952)
Apr-21	10,328,109	\$ 70,851	\$ (989)	\$ (181,437)	Apr-21	4,636,742	\$ 622	\$ (12)	\$ (2,342)
May-21	4,801,381	\$ 32,938	\$ (756)	\$ (149,255)	May-21	2,477,620	\$ 332	\$ (10)	\$ (2,020)
Jun-21	2,836,645	\$ 19,459	\$ (639)	\$ (130,435)	Jun-21	1,904,555	\$ 256	\$ (9)	\$ (1,773)
Jul-21	2,298,200	\$ 15,766	\$ (562)	\$ (115,231)	Jul-21	1,885,523	\$ 253	\$ (8)	\$ (1,528)
Aug-21	2,205,754	\$ 15,132	\$ (493)	\$ (100,592)	Aug-21	1,978,051	\$ 265	\$ (6)	\$ (1,269)
Sep-21	3,108,274	\$ 21,323	\$ (412)	\$ (79,681)	Sep-21	2,611,853	\$ 350	\$ (5)	\$ (924)
Oct-21	9,134,720	\$ 62,664	\$ (222)	\$ (17,239)	Oct-21	5,561,335	\$ 746	\$ (3)	\$ (181)
	<u>131,390,586</u>	<u>901,342</u>	<u>(17,239)</u>	<u>\$ (17,239)</u>		<u>61,031,814</u>	<u>8,189</u>	<u>(180)</u>	<u>\$ (181)</u>
Rate Schedule 101, 102					Rate Schedule 111, 121				
Amortization Rate	\$	(0.00686)		(901,342)	Amortization Rate	\$	(0.00013)		(8,190)
Interest Rate	\$	(0.00013)		(17,239)	Interest Rate	\$	-		(180)
Rate Before RCF	\$	(0.00699)		(918,581)	Rate Before RCF	\$	(0.00013)		(8,370)
Tariff Rate	\$	(0.00731)			Tariff Rate	\$	(0.00014)		

AVISTA UTILITIES
Revenue Conversion Factor
Washington - Natural Gas System
TWELVE MONTHS ENDED DECEMBER 31, 2018

Line No.	Description	Factor
1	Revenues	<i>1.000000</i>
	Expense:	
2	Uncollectibles	<i>0.003781</i>
3	Commission Fees	<i>0.002000</i>
4	Washington Excise Tax	<i>0.038374</i>
5	Franchise Fees	<i>0.000000</i>
6	Total Expense	<i>0.044155</i>
7	Net Operating Income Before FIT	<i>0.955845</i>
8	Federal Income Tax @ 21%	<u><i>0.200198</i></u>
9	REVENUE CONVERSION FACTOR	<u><u><i>0.755647</i></u></u>
	REVENUE GROSS UP:	$1/(1-.044155)$ <i>1.04619</i>

Source: UG-190335