

BEFORE THE
WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

UG-__
GENERAL RATE APPLICATION
OF
NORTHWEST NATURAL GAS COMPANY

December 18, 2020

Direct Exhibit of Kyle W. Walker

REVENUE REQUIREMENT

Exh. KTW-3

NW Natural
Washington Rate Case
Test Year Based on Twelve Months Ended September 30, 2020

Exh. KTW-3
Page 1

Line No.	System Test Year Results (a)	Washington Test Year Results (b)
Operating Revenues		
1	\$673,591,721	\$71,678,740
2	20,321,482	2,292,849
3	4,009,579	(2,096,029)
4	697,922,782	71,875,561
Operating Revenue Deductions		
5	265,456,711	24,325,147
6	976,008	110,387
7	180,287,822	18,749,534
8	446,720,541	43,185,068
9	6,623,746	1,405,066
10	4,997,153	0
11	21,903,232	1,671,587
12	29,244,021	3,814,799
13	93,582,173	10,935,860
14	603,070,867	61,012,380
15	\$94,851,915	\$10,863,181
16	1,439,914,128	\$194,666,559
17	6.59%	5.58%
18	8.73%	6.68%

NW Natural
Operations and Maintenance Expense: Allocation of System Amounts
Test Year Based on Twelve Months Ended September 30, 2020

Exh. KTW-3
Page 2

	ACTUAL System	ACTUAL Washington	ACTUAL Oregon
Natural Gas Storage			
Underground Storage Expense			
Operation			
816 Wells Expense	487,247	52,671	434,576
818 Compressor Station Expense	135,731	14,672	121,058
819 Compressor Station Fuel	0	0	0
820 Measuring and Regulator Station Expense	2,445,855	263,110	2,182,745
821 Purification Expense	70,363	7,606	62,757
Maintenance			
832 Wells Expense	205,582	22,223	183,359
834 Storage Maint. Expense of Compressor Equip	628,917	67,986	560,931
Total Underground Storage Expense	3,973,696	428,270	3,545,426
Other Storage Expense			
Operation			
840 Supervision and Engineering	106,090	11,468	94,621
Total Other Storage Expense	106,090	11,468	94,621
Liquified Natural Gas Expense			
Operation			
844 Supervision and Engineering	1,849,734	199,956	1,649,778
845 LNG Fuel Expense - Credit Liquef Costs	(85,796)	(9,275)	(76,521)
Maintenance			
847 Supervision and Engineering	1,194,491	129,126	1,065,365
Total Liquified Natural Gas Expense	1,194,491	129,126	1,065,365
Total Natural Gas Storage	2,958,429	319,807	2,638,622
Transmission Expense			
Operation			
856 Mains Expense	2,373,605	159,628	2,213,977
Maintenance			
863 Maintenance of Mains	(22,364)	(4,115)	(18,249)
Total Transmission Expense	2,351,241	155,513	2,195,728
Distribution Expense			
Operation			
870 Supervision and Engineering	3,291,044	281,710	3,009,334
874 Mains and Services Expense	13,497,564	1,477,394	12,020,170
875 Measuring and Regulator Station Expense - General	269,672	25,079	244,593
877 Measuring and Regulator Station Expense - City Gate	589,961	53,337	536,624
878 Meter and House Regulator Expense	6,677,277	768,063	5,909,213
879 Customer Installation Expense	11,359,149	1,300,270	10,058,879
880 Other Expense	1,328,944	138,491	1,190,453
881 Rents	192,111	25,534	166,577

NW Natural
Operations and Maintenance Expense: Allocation of System Amounts
Test Year Based on Twelve Months Ended September 30, 2020

Exh. KTW-3
Page 3

	ACTUAL System	ACTUAL Washington	ACTUAL Oregon
Maintenance			
885 Supervision and Engineering	6,200,139	326,199	5,873,940
887 Mains	2,779,796	150,840	2,628,956
889 Measuring and Regulator Station Expense - General	1,690,339	151,328	1,539,011
891 Measuring and Regulator Station Expense - City Gate	304,395	23,158	281,236
892 Services	1,127,526	125,489	1,002,036
893 Meters and House Regulators	3,956,270	420,309	3,535,961
894 Other Equipment	39,723	2,255	37,467
Total Distribution Expense	53,303,909	5,269,457	48,034,452
Customer Accounts Expense			
Operation			
901 Supervision	1,975,469	227,772	1,747,697
902 Meter Reading Expenses	1,027,731	117,251	910,480
903 Customer Records and Collection Expense	16,368,150	1,874,090	14,494,060
904 Uncollectible Accounts	976,008	110,387	865,621
Total Customer Accounts Expense	20,347,358	2,329,499	18,017,859
Customer Service and Informational			
Operation			
907 Supervision	3,079	358	2,721
908 Customer Assistance Expense	3,396,697	410,623	2,986,074
909 Customer Information Expense	2,541,770	293,066	2,248,704
910 Miscellaneous Customer Service Expense	447,995	52,145	395,850
Total Customer Service and Informational	6,389,542	756,193	5,633,348
Sales Expense			
Operation			
911 Supervision	105,761	12,194	93,567
912 Demonstration and Selling Expense	1,967,771	227,069	1,740,702
913 Advertising	490,927	56,603	434,324
916 Miscellaneous Sales Expense	0	0	0
Total Sales Expense	2,564,459	295,866	2,268,593
Administrative and General Expense			
Operation			
921 Office Supplies and Expense	69,094,833	7,938,076	61,156,757
922 Administrative Expenses Transferred - Credit	(22,544,531)	(2,522,525)	(20,022,006)
924 Property Insurance Premium	3,629,754	397,821	3,231,933
925 Injuries and Damages	159,831	17,518	142,314
926 Employee Pensions and Benefits	25,566,574	2,024,922	23,541,652
928 Regulatory Commission Expense	0	0	0
930 Miscellaneous General Expense	3,228,456	354,133	2,874,324
931 Rents	4,873,765	532,521	4,341,243
Maintenance			
935 Maintenance of General Plant	5,260,425	551,383	4,709,041
Total Administrative and General Expense	89,269,107	9,293,848	79,975,259
Total Operations and Maintenance Expense	181,263,830	18,859,921	162,403,909
Percent of Total	100.00%	10.40%	89.60%

Note: O&M above excludes amounts that are not intended to be recoverable in ratemaking.
O&M based on Regulatory application of Pension related costs in O&M (costs map to Non-Operating for GAAP).

	Oregon	Washington
1 Customers-all	88.470%	11.530%
2 Customers-Residential	88.360%	11.640%
3 Customers-Commercial	89.520%	10.480%
4 Customers-Industrial	91.460%	8.540%
5 Customers-The Dalles	74.820%	25.180%
6 3-factor	89.040%	10.960%
7 firm volumes	89.190%	10.810%
8 sales volumes	89.700%	10.300%
9 sendout volumes	91.440%	8.560%
10 sales/sendout volumes	90.570%	9.430%
14 Payroll	89.973%	10.027%
15 Admin Transfer	88.722%	11.278%
16 Employee Cost	89.011%	10.989%
17 Regulatory	70.000%	30.000%
18 Telemetry	88.889%	11.111%
19 Direct-Wa	0.000%	100.000%
20 Direct-Or	100.000%	0.000%
21 Gross plant direct assign	88.030%	11.970%
22 Transmission	98.778%	1.222%
23 Depreciation	88.444%	11.556%
25 Distribution	85.735%	14.265%
26 Perimeter	93.750%	6.250%
27 Environmental Admin Costs	96.680%	3.320%
28 Rate Base	86.481%	13.519%
29 Accumulated Depreciation	89.328%	10.672%

Washington

<u>Line No.</u>	<u>Amount (a)</u>
1 Utility Income before Interest and Taxes	\$12,268,247
2 Interest on Historic Average Rate Base	<u>4,490,958</u>
3 Pre-Tax Net Income	7,777,289
4 Permanent Differences	866,936
5 Pre Tax Income Adjusted for Permanents	8,644,225
6 Tax Rate	<u>21.00%</u>
7 Federal Income Tax Before Credits	\$1,815,287
8 Federal Tax Credits & EDIT Amortization	(410,221)
9 Federal Income Tax	<u><u>\$1,405,066</u></u>

System	September 2019 (a)	October 2019 (b)	November 2019 (c)	December 2019 (d)	January 2020 (e)	February 2020 (f)	March 2020 (g)	April 2020 (h)	May 2020 (i)	June 2020 (j)	July 2020 (k)	August 2020 (l)	September 2020 (m)	13 Month AMA (n)
Gross Plant														
Intangible Software	123,274,685	124,781,270	124,835,762	126,083,551	126,361,928	126,902,292	127,269,224	128,070,084	142,483,946	142,561,912	142,850,694	143,502,504	148,078,451	132,614,978
Intangible Other	84,795	84,795	84,795	84,795	84,795	84,795	84,795	84,795	84,795	84,795	84,795	84,795	84,795	84,795
Production	675,198	675,198	675,198	675,198	675,198	675,198	675,198	675,198	675,198	675,198	675,198	675,198	675,198	675,198
Transmission	189,500,741	191,385,639	191,639,509	192,013,583	192,106,204	192,161,416	192,375,287	192,371,066	192,536,004	192,560,956	192,784,607	192,809,906	194,512,129	192,229,218
Distribution	2,327,611,703	2,338,705,080	2,345,896,964	2,373,283,800	2,382,356,019	2,388,897,736	2,401,160,967	2,406,620,571	2,417,848,886	2,427,637,709	2,433,654,068	2,444,067,223	2,453,023,844	2,395,870,566
General	11,648,060	11,652,361	11,652,361	11,652,361	11,657,757	11,657,757	11,657,757	11,652,361	11,655,419	12,629,044	12,633,408	12,629,291	12,639,875	11,939,487
Land	74,934,550	74,964,042	74,966,479	74,981,091	74,985,644	74,992,224	75,303,801	75,340,239	75,344,263	75,391,362	75,393,744	75,464,986	75,474,055	75,194,348
Structures	147,786,587	149,953,583	149,818,567	157,236,229	159,856,638	161,443,203	170,437,366	175,084,820	180,905,119	184,938,571	185,421,792	186,044,442	189,557,929	169,151,049
Storage and storage transmission	334,179,676	336,469,533	336,485,827	338,708,361	338,721,539	338,714,043	339,293,940	339,301,387	341,466,981	341,483,442	341,577,205	341,578,124	341,578,135	339,306,607
CNG and LNG Refueling	3,790,768	3,790,768	3,790,768	3,790,768	3,790,768	3,790,768	3,790,768	3,790,768	3,790,768	3,790,768	3,790,768	3,790,768	3,790,768	3,790,768
Total Gross Plant	3,213,486,763	3,232,462,270	3,239,846,232	3,278,509,738	3,290,596,490	3,299,319,433	3,322,049,103	3,332,991,289	3,366,791,380	3,381,753,757	3,388,866,280	3,400,647,238	3,419,415,180	3,320,857,015
Reserve														
Intangible Software	(70,817,474)	(71,308,177)	(71,803,279)	(72,302,109)	(72,842,194)	(73,357,372)	(73,875,107)	(74,396,154)	(74,960,175)	(74,891,941)	(75,513,964)	(76,136,297)	(76,778,333)	(73,765,389)
Intangible Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Production	(691,036)	(691,036)	(691,036)	(691,036)	(691,036)	(691,036)	(691,036)	(691,036)	(691,036)	(691,036)	(691,036)	(691,036)	(691,036)	(691,036)
Transmission	(43,275,683)	(43,571,193)	(43,868,332)	(44,166,051)	(44,464,096)	(44,762,261)	(45,060,633)	(45,359,171)	(45,657,832)	(45,956,645)	(46,255,650)	(46,554,850)	(46,855,405)	(45,061,855)
Distribution	(1,074,144,075)	(1,077,556,318)	(1,081,383,353)	(1,084,945,810)	(1,089,103,715)	(1,092,819,126)	(1,096,280,839)	(1,099,277,957)	(1,102,803,754)	(1,105,745,924)	(1,107,580,268)	(1,111,538,084)	(1,114,283,725)	(1,095,270,754)
General	(437,351)	(437,351)	(437,351)	(437,351)	(437,351)	(437,351)	(437,351)	(437,351)	(437,351)	(437,351)	(437,351)	(437,351)	(437,351)	(437,351)
Land	(13,126,978)	(13,268,757)	(13,410,567)	(13,552,391)	(13,694,234)	(13,836,088)	(13,978,243)	(14,120,728)	(14,263,250)	(14,230,523)	(14,373,140)	(14,515,826)	(14,658,591)	(13,928,044)
Structures	(50,719,922)	(51,885,423)	(49,728,388)	(50,641,827)	(51,131,891)	(52,399,011)	(53,436,277)	(54,498,100)	(55,735,591)	(57,057,148)	(58,398,037)	(59,565,175)	(60,733,756)	(54,183,642)
Storage and storage transmission	(147,473,205)	(148,491,945)	(149,048,873)	(149,607,170)	(150,166,871)	(150,726,650)	(151,286,713)	(151,847,181)	(152,409,565)	(152,973,977)	(153,538,672)	(154,102,993)	(154,667,557)	(151,272,583)
CNG and LNG Refueling	(2,231,464)	(2,238,126)	(2,244,788)	(2,251,450)	(2,258,112)	(2,264,774)	(2,271,436)	(2,278,098)	(2,284,760)	(2,291,422)	(2,298,084)	(2,304,746)	(2,311,408)	(2,271,436)
Total Reserve	(1,402,917,187)	(1,409,448,325)	(1,412,615,965)	(1,418,595,196)	(1,424,789,500)	(1,431,293,668)	(1,437,317,635)	(1,442,905,774)	(1,449,243,315)	(1,454,275,966)	(1,459,086,202)	(1,465,846,358)	(1,471,417,161)	(1,436,882,090)
Storage Gas	22,721,950	22,720,796	22,719,544	22,718,208	22,716,520	22,714,910	22,713,527	22,711,937	22,710,187	22,708,216	22,706,315	22,704,390	22,702,467	22,713,063
Customer Advances	(5,197,343)	(5,293,473)	(5,408,334)	(7,367,884)	(7,532,633)	(7,655,812)	(5,635,851)	(5,756,413)	(5,848,989)	(6,008,002)	(6,138,375)	(6,309,949)	(6,434,528)	(6,230,971)
Leasehold Improvements	14,282,973	16,494,833	20,058,021	23,370,721	27,497,733	28,885,297	29,561,221	29,835,735	30,062,468	30,152,104	30,318,544	30,253,649	30,052,942	26,554,857
Deferred Taxes	(486,492,797)	(485,688,561)	(485,362,946)	(485,537,544)	(486,016,873)	(486,423,125)	(488,068,047)	(488,413,793)	(488,465,958)	(488,259,063)	(488,017,847)	(487,816,112)	(487,713,388)	(487,097,747)
Subtotal Rate Base	1,355,884,358	1,371,247,540	1,379,236,551	1,413,098,042	1,422,471,736	1,425,547,034	1,443,302,318	1,448,462,981	1,476,005,775	1,486,071,046	1,488,648,715	1,493,632,858	1,506,605,511	1,439,914,128
Average Rate Base														1,506,605,511
Average Deferred Taxes														487,097,747
Ending Deferred Taxes														(487,713,388)
Total Rate Base														\$1,505,989,870

	September 2019	October 2019	November 2019	December 2019	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020	July 2020	August 2020	September 2020	13 Month AMA
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
Washington														
Gross Plant														
Intangible Software	14,213,571	14,387,280	14,393,563	14,537,433	14,569,530	14,631,834	14,674,142	14,766,481	16,428,399	16,437,388	16,470,685	16,545,839	17,073,445	15,290,507
Intangible Other	447	447	447	447	447	447	447	447	447	447	447	447	447	447
Production	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transmission	1,115,001	1,115,001	1,115,001	1,115,001	1,115,001	1,115,202	1,115,202	1,115,202	1,115,634	1,115,634	1,115,634	1,115,634	1,115,634	1,115,289
Distribution	300,721,253	302,557,318	303,717,984	305,117,836	306,141,865	306,987,779	308,279,157	308,706,366	309,364,405	310,383,260	311,310,825	312,479,515	313,208,956	307,667,618
General	16,197,410	16,434,913	16,420,115	17,233,091	17,520,287	17,694,175	18,679,935	19,189,296	19,827,201	20,269,267	20,322,228	20,390,471	20,775,549	18,538,955
Land	1,818,368	1,819,039	1,819,039	1,819,039	1,819,882	1,819,882	1,819,882	1,819,039	1,819,517	1,971,508	1,972,190	1,971,547	1,973,199	1,863,862
Structures	6,108,812	6,111,216	6,111,415	6,112,606	6,112,977	6,113,514	6,138,914	6,141,884	6,142,213	6,146,052	6,146,246	6,152,054	6,152,793	6,129,991
Storage and storage transmission	32,557,523	32,805,057	32,806,818	33,047,074	33,048,498	33,047,688	33,110,375	33,111,180	33,345,281	33,347,060	33,357,196	33,357,295	33,357,296	33,111,744
CNG and LNG Refueling	415,468	415,468	415,468	415,468	415,468	415,468	415,468	415,468	415,468	415,468	415,468	415,468	415,468	415,468
Total Gross Plant	373,147,853	375,645,740	376,799,851	379,397,996	380,743,957	381,825,989	384,233,522	385,265,364	388,458,564	390,086,086	391,110,920	392,428,270	394,072,789	384,133,882
Reserve														
Intangible Software	(8,165,255)	(8,221,833)	(8,278,918)	(8,336,433)	(8,398,705)	(8,458,105)	(8,517,800)	(8,577,877)	(8,642,908)	(8,635,041)	(8,706,760)	(8,778,515)	(8,852,542)	(8,505,149)
Intangible Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Production	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transmission	(186,319)	(188,066)	(189,812)	(191,559)	(193,306)	(195,053)	(196,800)	(198,547)	(200,295)	(202,043)	(203,790)	(205,538)	(207,286)	(196,801)
Distribution	(118,805,565)	(119,412,666)	(120,011,075)	(120,607,643)	(121,208,638)	(121,764,581)	(122,251,228)	(122,713,206)	(123,198,644)	(123,697,435)	(124,120,785)	(124,695,494)	(125,081,795)	(122,135,423)
General	(5,558,903)	(5,686,642)	(5,450,231)	(5,550,344)	(5,604,055)	(5,742,932)	(5,856,616)	(5,972,992)	(6,108,621)	(6,253,463)	(6,400,425)	(6,528,343)	(6,656,420)	(5,938,527)
Land	(68,274)	(68,274)	(68,274)	(68,274)	(68,274)	(68,274)	(68,274)	(68,274)	(68,274)	(68,274)	(68,274)	(68,274)	(68,274)	(68,274)
Structures	(1,070,137)	(1,081,695)	(1,093,256)	(1,104,818)	(1,116,381)	(1,127,945)	(1,139,534)	(1,151,150)	(1,162,768)	(1,160,100)	(1,171,727)	(1,183,359)	(1,194,997)	(1,135,442)
Storage and storage transmission	(14,740,458)	(14,844,797)	(14,899,214)	(14,953,779)	(15,008,496)	(15,063,221)	(15,117,977)	(15,172,776)	(15,227,783)	(15,283,009)	(15,338,265)	(15,393,482)	(15,448,724)	(15,116,449)
CNG and LNG Refueling	(244,568)	(245,299)	(246,029)	(246,759)	(247,489)	(248,219)	(248,949)	(249,680)	(250,410)	(251,140)	(251,870)	(252,600)	(253,330)	(248,949)
Total Reserve	(148,839,480)	(149,749,272)	(150,236,810)	(151,059,610)	(151,845,344)	(152,668,330)	(153,397,178)	(154,104,501)	(154,859,703)	(155,550,505)	(156,261,897)	(157,105,606)	(157,763,368)	(153,345,015)
Storage Gas	2,456,243	2,456,118	2,455,983	2,455,838	2,455,656	2,455,482	2,455,332	2,455,160	2,454,971	2,454,758	2,454,553	2,454,345	2,454,137	2,455,282
Customer Advances	(926,663)	(958,065)	(972,158)	(982,286)	(994,615)	(1,010,081)	(1,022,323)	(1,026,535)	(1,045,749)	(1,087,855)	(1,108,371)	(1,132,864)	(1,157,048)	(1,031,897)
Leasehold Improvements	1,565,414	1,807,834	2,198,359	2,561,431	3,013,752	3,165,829	3,239,910	3,269,997	3,294,847	3,304,671	3,322,912	3,315,800	3,293,802	2,910,412
Deferred Taxes	(40,065,866)	(40,118,163)	(40,205,920)	(40,226,608)	(40,303,489)	(40,373,696)	(40,548,054)	(40,611,980)	(40,650,412)	(40,666,488)	(40,679,409)	(40,695,762)	(40,720,700)	(40,456,105)
Subtotal Rate Base	187,337,500	189,084,191	190,039,305	192,146,761	193,069,915	193,395,191	194,961,209	195,247,505	197,652,518	198,540,666	198,838,708	199,264,182	200,179,612	194,666,559

Line No.	Percent of Total Capital	Average Cost	Weighted Cost	
	(a)	(b)	(c)	
Cost of Capital				
1	Long Term Debt	50.00%	4.597%	2.299%
2	Short Term Debt	1.00%	0.756%	0.008%
3	Common Stock	49.00%	9.400%	4.606%
4	Total	100.00%		6.913%
Revenue Sensitive Costs				
5	Gas Sales	96.552%		
6	Transportation	3.108%		
7	Other	0.340%		
8	Subtotal	100.000%		
9	O & M - Uncollectible	0.105%		
10	WA Utility Tax	3.852%		
11	WUTC Fee	0.200%		
12	Total Rev Sensitive Costs Incl Tax	4.1569%		
13	Federal Taxable Income	95.843%		
14	Federal Income Tax	20.127%		
15	Total Income Taxes	20.127%		
16	Total Rev Sensitive Costs Incl Tax	24.284%		
17	Utility Operating Income	75.716%		
18	Net-to-gross factor	132.072%		
19	Interest Coordination Factor	2.307%		
20	Federal tax rate	21.000%		
21	Uncollectible Accounts	0.105%		