Line		Test Year	A di a tura a ra ta	Test Year
No.	-	Results	Adjustments (b)	Adjusted (c)
	Operating Revenues	(a)	(b)	(6)
1	Sale of Gas	\$64,503,221	\$3,051,778	\$67,554,999
2	Transportation	2,428,043	\$3,031,778 0	2,428,043
3	Miscellaneous Revenues	-3,092,584	-707,936	-3,800,520
4	Total Operating Revenues	63,838,679	2,343,843	66,182,522
7	Margin	03,030,079	2,343,043	41,255,712
	Operating Revenue Deductions			41,233,712
5	Gas Purchased	\$23,742,026	\$1,184,784	\$24,926,810
6	Uncollectible Accrual for Gas Sales	74,083	9,811	83,894
7	Other Operating & Maintenance Expenses	•	-641,108	•
8	Total Operating & Maintenance Expenses	18,224,986 42,041,095	553,488	17,583,878 42,594,582
0	Total Operating & Maintenance Expense	42,041,093	333,400	42,394,302
9	Federal Income Tax	721,647	356,026	1,077,673
10	Property Taxes	1,752,161	0	1,752,161
11	Other Taxes	3,619,386	94,972	3,714,358
12	Depreciation & Amortization	9,476,820	0	9,476,820
	•			
13	Total Operating Revenue Deductions	\$57,611,109	\$1,004,486	\$58,615,595
14	Net Operating Revenues	\$6,227,571	\$1,339,357	\$7,566,927
	Net operating Revenues	ΨΟ,ΖΖΤ,ΟΤΤ	Ψ1,337,337	Ψ1,300,721
	Average Rate Base			
15	Utility Plant in Service	\$344,634,123	\$671	\$344,634,795
16	Accumulated Depreciation	-138,174,714	0	-138,174,714
17	Net Utility Plant	206,459,410	671	206,460,081
		200/107/110	0	2007.00700.
18	Working Capital	909,782	0	909,782
19	Storage Gas	1,946,972	0	1,946,972
20	Customer Advances	-756,956	0	-756,956
21	Leasehold Improvements	17,502	0	17,502
22	Accumulated Deferred Income Taxes	-41,147,775	0	-41,147,775
23	Total Rate Base	\$167,428,936	\$671	\$167,429,607
24	Rate of Return	2 720/		4.52%
24	Nate of Return	3.72%	=	4.32%
25	Return on Common Equity	2.39%		4.12%

NW Natural State Allocation Factors Updated for year ended 2018 data

	System	Washington	Oregon
Customers			
Total Customers			
December 2018	750,421	84,650	665,771
December 2017	737,873	81,842	656,031
Average	744,147	83,246	660,901
% of System		11.19%	88.81%
Residential Customers			
December 2018	680,134	77,357	602,777
December 2017	668,803	74,805	593,998
Average	674,469	76,081	598,388
% of System		11.28%	88.72%
Commercial Customers			
December 2018	69,087	7,192	61,895
December 2017	67,881	6,937	60,944
Average	68,484	7,065	61,420
% of System		10.32%	89.68%
Industrial Customers			
December 2018	1,200	101	1,099
December 2017	1,189	100	1,089
Average	1,195	101	1,094
% of System		8.41%	91.59%
The Dalles			
December 2018	8,318	2,103	6,215
December 2017	8,119	2,040	6,079
Average	8,219	2,072	6,147
% of System		25.21%	74.79%
Portland / Vancouver			
December 2018	533,590	82,547	451,043
December 2017	524,992	79,802	445,190
Average	529,291	81,175	448,117
% of System		15.34%	84.66%
Portland / Vancouver Commercial			
December 2018	45,081	6,976	38,105
December 2017	44,470	6,724	37,746
Average	44,776	6,850	37,926
% of System		15.30%	84.70%

Firm Sales Delivered % of System	707,286,110	74,457,613 10.53%	632,828,497 89.47%
Sales Volumes % of System	757,920,725	75,761,489 10.00%	682,159,236 90.00%
Sendout Volumes % of System	1,139,020,655	96,359,078 8.46%	1,042,661,577 91.54%
3-factor formula (simple average) Gross Plant Directly Assigned Number of Employees Directly Assigned Number of Customers	_	11.77% 10.77% 11.19%	88.23% 89.23% 88.81%
Average		11.24%	88.76%

Derivation of factor for 3-factor - Gross Plant Directly Assigned

December 31, 2018	System	Washington	Oregon
Intangible - Other	84,795	447	84,348
Production	675,198		675,198
Transmission	182,352,775	1,115,001	181,237,774
Distribution	2,264,469,664	292,099,081	1,972,370,583
December 31, 2017	System	Washington	Oregon
Intangible	84,795	447	84,348
Production	675,198		675,198
Transmission	166,587,143	1,114,674	165,472,470
Distribution	2,161,775,493	267,685,383	1,894,090,110
Average	System	Washington	Oregon
Intangible - Other	84,795	447	84,348
Production	675,198	0	675,198
Transmission	174,469,959	1,114,837	173,355,122
Distribution	2,213,122,578	279,892,232	1,933,230,346
Gross Plant Directly Assigned	2,388,352,531	281,007,516	2,107,345,014
% of System		11.77%	88.23%

Allocation Factors - Summary	Washington	Oregon
Customers-all	11.190%	88.810%
Customers-Residential	11.280%	88.720%
Customers-Commercial	10.320%	89.680%
Customers-Industrial	8.410%	91.590%
Customers-The Dalles	25.210%	74.790%
3-factor	11.240%	88.760%
firm sales volumes	10.530%	89.470%
sales volumes	10.000%	90.000%
sendout volumes	8.460%	91.540%
sales/sendout volumes	9.230%	90.770%
Customers Portland/Vancouver	15.340%	84.660%
Customers Portland/Vancouver 80%	12.272%	87.730%
Customers Portland/Vancouver Commercial	15.300%	84.700%
Payroll	10.430%	89.570%
Admin Transfer	13.120%	86.880%
Employee Cost	10.765%	89.235%
Regulatory	30.000%	70.000%
Telemetering	12.766%	87.234%
Direct-Wa	100.000%	0.000%
Direct-Or	0.000%	100.000%
Gross plant direct assign	11.770%	88.230%
Depreciation	11.320%	88.680%
Rate Base	12.190%	87.810%

NW Natural
Washington Annual Commission Basis Report
Test Year Based on Twelve Months Ended December 31, 2018
Pate Base

		2017 Dec	2018	2018	2018 Mar	2018	2018	2018	2018	2018	2018	2018	2018	2018 December	Dec 17 - Dec 18
SYSTEM		Dec	Jan	Feb	Mar	Apr	May	June	July	August	September	October	November	December	12 month average
		System													
Gross Plant															
Intangible	Software Other	105,175,574 84,795	105,211,287 84,795	105,976,732 84,795	105,934,961 84,795	105,959,178 84,795	105,958,907 84,795	106,339,619 84,795	106,349,582 84,795	106,337,338 84,795	110,918,040 84,795	117,106,962 84,795	117,131,354 84,795	117,067,789 84,795	108,695,470 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		166,587,143	166,646,960	166,671,736	167,823,514	167,860,782	168,195,225	168,592,916	168,666,086	168,694,327	169,634,549	182,050,579	182,332,370	182,352,775	170,969,917
Distribution General		2,161,775,493 203,449,576	2,168,079,145 204,764,289	2,171,328,431 204,751,538	2,183,114,102 204,997,170	2,187,035,912 205,074,607	2,194,049,822 206,035,569	2,203,962,401 211,240,927	2,209,442,463 213,172,505	2,217,186,171 213,337,418	2,226,387,112 213,584,984	2,249,223,707 228,336,679	2,255,108,336 211,646,008	2,264,986,007 213,210,437	2,206,524,863 210,439,308
General		203,449,576	204,764,269	204,751,556	204,997,170	205,074,607	200,035,569	211,240,927	213,172,505	213,337,410	213,304,904	220,330,079	211,040,000	213,210,437	210,439,300
Storage and storage transmission		314,220,159	314,242,931	318,058,925	318,088,443	318,113,158	318,098,137	320,408,990	320,417,502	320,416,360	321,048,969	332,946,041	333,360,831	333,651,718	321,594,685
CNG and LNG		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
Gas Reserves		187,536,465	187,536,465	187,536,465	187,536,465	187,536,465	187,536,465	187,536,465	187,307,385	187,307,385	187,307,385	187,307,385	187,307,385	187,307,385	187,431,470
Total Gross Plant (less Gas Reser	ves)	2,955,758,707	2,963,495,374	2,971,338,124	2,984,508,953	2,988,594,399	2,996,888,423	3,015,095,615	3,022,598,900	3,030,522,375	3,046,124,415	3,114,214,730	3,104,129,661	3,115,819,487	3,022,775,005
Accumulated Depreciation															
Intangible Production Transmission Distribution General		(63,238,775) (691,036) (36,441,032) (1,001,460,546) (63,488,973)	(63,483,064) (691,036) (36,857,901) (1,004,738,482) (64,426,775)	(63,728,791) (691,036) (37,276,169) (1,008,257,483) (65,015,476)	(63,975,818) (691,036) (37,694,607) (1,011,729,124) (65,719,467)	(64,222,814) (691,036) (38,115,049) (1,015,259,308) (66,633,360)	(64,469,852) (691,036) (38,535,522) (1,019,060,727) (67,190,286)	(64,717,574) (691,036) (38,957,364) (1,022,176,197) (68,123,218)	(64,965,998) (691,036) (39,379,388) (1,025,018,669) (69,117,454)	(65,214,417) (691,036) (39,801,543) (1,028,199,175) (70,114,552)	(65,471,040) (691,036) (40,224,172) (1,032,025,125) (71,001,288)	(65,747,004) (691,036) (40,661,659) (1,034,917,360) (71,634,467)	(66,198,671) (691,036) (40,944,303) (1,038,774,955) (56,883,199)	(66,650,465) (691,036) (41,227,169) (1,042,694,700) (57,514,633)	(64,761,639) (691,036) (38,940,148) (1,021,852,852) (66,363,445)
Storage and storage transmission		(135,042,844)	(135,668,643)	(136,299,148)	(136,931,900)	(137,565,119)	(138,197,975)	(138,833,128)	(139,469,792)	(140,106,458)	(140,744,215)	(141,397,782)	(141,944,981)	(142,496,991)	(138,827,422)
CNG and LNG		(2,131,737)	(2,134,382)	(2,137,026)	(2,139,671)	(2,142,315)	(2,144,959)	(2,147,604)	(2,150,248)	(2,152,893)	(2,155,537)	(2,158,182)	(2,164,844)	(2,171,506)	(2,148,274)
Gas Reserves		(87,779,706)	(89,232,293)	(90,487,052)	(91,852,460)	(93,126,613)	(94,418,061)	(95,595,918)	(96,926,684)	(98,419,429)	(99,835,236)	(101,215,216)	(102,899,863)	(104,463,650)	(95,844,209)
Total Accumulated Depreciation (less Gas Rese	(1,302,494,942)	(1,308,000,282)	(1,313,405,130)	(1,318,881,623)	(1,324,629,001)	(1,330,290,357)	(1,335,646,120)	(1,340,792,586)	(1,346,280,073)	(1,352,312,413)	(1,357,207,490)	(1,347,601,989)	(1,353,446,498)	(1,333,584,815)
Storage Gas Customer Advances Leasehold Improvements		18,488,587 (3,965,149) 279,959	18,486,971 (4,041,490) 257,040	18,484,666 (4,107,884) 233,207	18,482,827 (4,087,078) 209,374	18,480,562 (4,163,334) 201,172	18,478,826 (4,268,622) 177,426	18,478,349 (4,367,025) 156,587	18,501,807 (4,494,194) 134,747	18,500,225 (4,608,550) 112,135	18,498,669 (4,686,796) 89,428	18,497,192 (4,206,528) 66,721	18,495,687 (4,305,651) 63,035	18,494,189 (4,410,555) 59,348	18,489,764 (4,293,750) 155,877
Total Rate Base Excluding ADIT and	d WC	1,668,067,162	1,670,197,612	1,672,542,982	1,680,232,453	1,678,483,797	1,680,985,695	1,693,717,406	1,695,948,675	1,698,246,112	1,707,713,303	1,771,364,625	1,770,780,744	1,776,515,972	1,703,542,081

NW Natural Washington Annual Commission Basis Report Test Year Based on Twelve Months Ended December 31, 2018 Rate Base

		2017	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	Dec 17 - Dec 18
OREGON		2017	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	Dec 17 - Dec 18
		Dec	Jan	Feb	Mar	Apr	May	June	July	August	September	October	November	December	12 month average
Gross Plant		OREGON													
Intangible	Software	93,753,506	93,438,144	94,117,936	94,080,839	94,102,346	94,102,105	94,440,215	94,449,064	94,438,190	98,506,311	104,002,693	104,024,356	103,967,904	96,546,909
ū	Other	84,348	84,348	84,348	84,348	84,348	84,348	84,348	84,348	84,348	84,348	84,348	84,348	84,348	84,348
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		165,472,470	165,531,959	165,556,735	166,708,513	166,745,781	167,080,224	167,477,915	167,551,085	167,579,325	168,519,547	180,935,578	181,217,369	181,237,774	169,854,930
Distribution		1,894,090,110	1,899,432,648	1,902,322,963	1,911,449,429	1,914,332,013	1,919,515,063	1,926,032,269	1,931,481,725	1,937,309,012	1,945,089,164	1,960,387,367	1,964,259,722	1,972,774,321	1,928,753,632
General		187,604,643	182,154,428	182,143,147	182,361,205	182,429,974	183,282,734	187,904,156	189,618,642	189,765,263	189,985,925	203,290,915	188,456,071	189,869,806	187,510,807
Storage and storage transmissio	n	288.038.562	284.628.050	288.042.220	288.068.630	288.090.742	288.077.303	290.144.823	290.152.439	290.151.417	290.717.413	301.361.722	301.732.835	301.993.092	291.348.619
CNG and LNG		3,406,764	3,364,686	3,364,686	3,364,686	3,364,686	3,364,686	3,364,686	3,364,686	3,364,686	3,364,686	3,364,686	3,364,686	3,364,686	3,366,439
Gas Reserves		187,536,465	187,536,465	187,536,465	187,536,465	187,536,465	187,536,465	187,536,465	187,307,385	187,307,385	187,307,385	187,307,385	187,307,385	187,307,385	187,431,470
Total Gross Plant (less Gas Res	serves)	2,633,125,601	2,629,309,462	2,636,307,232	2,646,792,849	2,649,825,089	2,656,181,662	2,670,123,611	2,677,377,188	2,683,367,439	2,696,942,592	2,754,102,508	2,743,814,585	2,753,967,129	2,678,140,882
Accumulated Depreciation															
Intangible		(56.371.044)	(56.379.309)	(56.597.539)	(56.816.924)	(57,036,281)	(57,255,676)	(57.475.678)	(57,696,302)	(57.916.923)	(58.144.831)	(58.389.914)	(58.791.040)	(59.192.278)	(57.523.507)
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		(36,292,976)	(36,707,940)	(37,124,304)	(37,540,837)	(37,959,375)	(38,377,942)	(38,797,880)	(39,217,999)	(39,638,249)	(40,058,974)	(40,494,555)	(40,775,453)	(41,056,572)	(38,780,690)
Distribution		(894,057,390)	(896,815,786)	(899,781,619)	(902,696,169)	(905,689,096)	(908,993,049)	(911,597,566)	(914,283,887)	(916,921,957)	(920,162,825)	(922,509,976)	(925,752,660)	(929,062,592)	(911,397,048)
General		(57,849,356)	(58,108,215)	(58,639,016)	(59,272,149)	(60,091,591)	(60,594,188)	(61,430,531)	(62,321,293)	(63,214,596)	(64,009,944)	(64,580,982)	(51,499,019)	(52,070,776)	(59,893,466)
Storage and storage transmissio	n	(125,136,221)	(122,217,010)	(122,786,821)	(123,358,625)	(123,930,854)	(124,502,751)	(125,076,709)	(125,652,013)	(126,227,319)	(126,803,607)	(127,394,035)	(127,887,874)	(128,386,017)	(125,216,561)
CNG and LNG		(1,915,792)	(1,894,477)	(1,896,824)	(1,899,172)	(1,901,519)	(1,903,866)	(1,906,213)	(1,908,561)	(1,910,908)	(1,913,255)	(1,915,602)	(1,921,515)	(1,927,429)	(1,907,794)
Gas Reserves		(87,779,706)	(89,232,293)	(90,487,052)	(91,852,460)	(93,126,613)	(94,418,061)	(95,595,918)	(96,926,684)	(98,419,429)	(99,835,236)	(101,215,216)	(102,899,863)	(104,463,650)	(95,844,209)
Total Accumulated Depreciation	n (less Gas Rese	(1,172,313,814)	(1,172,813,774)	(1,177,517,160)	(1,182,274,912)	(1,187,299,751)	(1,192,318,507)	(1,196,975,613)	(1,201,771,091)	(1,206,520,987)	(1,211,784,471)	(1,215,976,100)	(1,207,318,597)	(1,212,386,699)	(1,195,410,102)
Storage Gas		16,541,739	16,540,293	16,538,230	16,536,585	16,534,559	16,533,006	16,532,579	16,553,567	16,552,152	16,550,759	16,549,438	16,548,092	16,546,751	16,542,792
Customer Advances		(3,296,312)	(3,358,338)	(3,411,639)	(3,388,561)	(3,449,468)	(3,533,136)	(3,601,401)	(3,698,590)	(3,790,101)	(3,839,571)	(3,418,458)	(3,503,297)	(3,601,643)	(3,536,795)
Leasehold Improvements		248,939	228,148	206,994	185,840	178,560	157,483	138,987	119,601	99,531	79,376	59,222	55,950	52,678	138,375
Total Rate Base Excluding ADIT	and WC	1,474,306,153	1,469,905,791	1,472,123,658	1,477,851,803	1,475,788,988	1,477,020,508	1,486,218,163	1,488,580,675	1,489,708,033	1,497,948,686	1,551,316,611	1,549,596,733	1,554,578,215	1,495,875,153

NW Natural Washington Annual Commission Basis Report Test Year Based on Twelve Months Ended December 31, 2018 Rate Base

		2017	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	Dec 17 - Dec 18
WASHINGTON		2017	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	Dec 17 - Dec 18
		Dec	Jan	Feb	Mar	Apr	May	June	July	August	September	October	November	December	12 month average
Gross Plant		WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON	WASHINGTON
Intangible	Software	11,422,067	11,773,143	11.858.796	11.854.122	11.856.832	11.856.802	11.899.403	11,900,518	11,899,148	12.411.729	13.104.269	13.106.999	13.099.886	12,148,561
, and the second	Other	447	447	447	447	447	447	447	447	447	447	447	447	447	447
Production															0
Transmission		1.114.674	1,115,001	1,115,001	1.115.001	1,115,001	1,115,001	1.115.001	1.115.001	1.115.001	1,115,001	1,115,001	1.115.001	1,115,001	1.114.987
Distribution		267,685,383	268,646,497	269,005,469	271,664,674	272,703,899	274,534,759	277,930,132	277,960,738	279,877,160	281,297,949	288,836,340	290,848,614	292,211,686	277,771,230
General		15,844,933	22,609,861	22,608,392	22,635,965	22,644,633	22,752,835	23,336,771	23,553,862	23,572,155	23,599,059	25,045,764	23,189,936	23,340,631	22,928,501
		.,						.,	.,,				.,	.,	
Storage and storage transmission		26,181,597	29,614,881	30.016.705	30.019.813	30,022,416	30.020.834	30.264.167	30,265,063	30.264.943	30.331.556	31.584.318	31.627.995	31,658,626	30.246.067
CNG and LNG		384,005	426,082	426.082	426,082	426,082	426.082	426,082	426,082	426.082	426,082	426,082	426,082	426,082	424.329
Total Gross Plant (less Gas Reserves	3)	322.633.106	334,185,913	335.030.892	337,716,104	338.769.310	340.706.760	344.972.004	345.221.712	347,154,935	349.181.823	360.112.221	360.315.075	361,852,359	344,634,123
	,		,,	,,	,,	,,		,		,,	,	,	,,	,,	
Accumulated Depreciation															
Intangible		(6,867,731)	(7,103,755)	(7,131,252)	(7,158,894)	(7,186,533)	(7,214,176)	(7,241,897)	(7,269,695)	(7,297,493)	(7,326,209)	(7,357,090)	(7,407,631)	(7,458,187)	(7,238,132)
Production		0	0	0	0	0	0	0	0	0	0	0	0	0	,
Transmission		(148,056)	(149,960)	(151,865)	(153,770)	(155,675)	(157,580)	(159,484)	(161,389)	(163,294)	(165,199)	(167,104)	(168,850)	(170,597)	(159,458)
Distribution		(107,403,156)	(107,922,696)	(108,475,865)	(109,032,956)	(109,570,211)	(110,067,678)	(110,578,630)	(110.734.782)	(111,277,218)	(111,862,300)	(112,407,384)	(113,022,294)	(113,632,107)	
General		(5,639,617)	(6,318,560)	(6,376,460)	(6,447,318)	(6,541,769)	(6,596,098)	(6,692,686)	(6,796,161)	(6,899,957)	(6,991,343)	(7,053,486)	(5,384,180)	(5,443,857)	
		,	(, , , , , , , ,			(, , , , , , , , , , , , , , , , , , ,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(.,,,,	(, , , , , , ,	,	(, , , , , , , , , , , , , , , , , , ,	(, , ,	(, , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Storage and storage transmission		(9,906,623)	(13,451,633)	(13,512,327)	(13,573,275)	(13,634,266)	(13,695,225)	(13,756,419)	(13,817,779)	(13,879,139)	(13,940,608)	(14,003,748)	(14,057,107)	(14,110,973)	(13,610,860)
CNG and LNG		(215,945)	(239,904)	(240,202)	(240,499)	(240,796)	(241,093)	(241,391)	(241,688)	(241,985)	(242,282)	(242,580)	(243,328)	(244,077)	
		, .,		, . ,	,,	,,		, , , , ,	(, , , , , ,	, ,	, . ,	, , , , , ,	, , . ,	, , , ,	,,,
Total Accumulated Depreciation (les	s Gas Rese	(130,181,128)	(135, 186, 508)	(135,887,970)	(136,606,712)	(137,329,250)	(137,971,850)	(138,670,508)	(139,021,494)	(139,759,086)	(140,527,942)	(141,231,390)	(140,283,392)	(141,059,799)	(138,174,714)
, , , , , , , , , , , , , , , , , , , ,		, . , . ,	, , ,		,			, , , ,		, . , . , . ,	,,	, . , . ,	,,, ,	, ,	
Storage Gas		1,946,848	1,946,678	1,946,435	1,946,242	1,946,003	1,945,820	1,945,770	1.948.240	1.948.074	1,947,910	1,947,754	1,947,596	1,947,438	1,946,972
Customer Advances		(668,837)	(683, 153)	(696,246)	(698,518)	(713,866)	(735,487)	(765,624)	(795,604)	(818,449)	(847,226)	(788,071)	(802,354)	(808,912)	
Leasehold Improvements		31,019	28,891	26,212	23,534	22,612	19.943	17,600	15,146	12,604	10,052	7,499	7.085	6,671	17,502
			,	,	,	/	,	,			,	.,	.,	-,	
Total Rate Base Excluding ADIT and W	vc	193,761,009	200,291,821	200,419,324	202,380,650	202,694,809	203,965,187	207,499,243	207,368,000	208,538,079	209,764,617	220,048,014	221,184,011	221,937,757	207,666,928
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	222/271/021	222,117,021	,000,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	222,700,107		,000,000				,.0.,0	,,,,,,,,,	,500,720

Rate Base Average Allocation Factors			
•	<u>OR</u>	WA	SYSTEM
Gross Plant Average Factor	2,678,140,882 88,60%	344,634,123 11.40%	3,022,775,005
	88.0078	11.4076	
Accumulated Deprec Average Factor	(1,195,410,102)	(138,174,714)	(1,333,584,815)
	89.64%	10.36%	
Leasehold Improvement Average Factor	138,375	17,502	155,877
	88.77%	11.23%	
Customer Advance Average Factor	(3,536,795)	(756,956)	(4,293,750)
· ·	82.37%	17.63%	
Gross Plant Growth Factor	120.841.528	39.219.253	160.060.781
	75.50%	24.50%	
Average Total Rate Base	1.495.875.153	207,666,928	1.703.542.081
•	87.81%	12.19%	

NW Natural Washington Annual Commission Basis Report Test Year Based on Twelve Months Ended December 31, 2018 Rate Base

Extracts from Balance Sheet	2017 December 2017	2018 January 2018	2018 February 2018	2018 March 2018	2018 April 2018	2018 May 2018	2018 June 2018	2018 July 2018	2018 August 2018	2018 September 2018	2018 October 2018	2018 November 2018	2018 December 2018	Dec 17 - Dec 18
Leasehold Improvement														
WA Leasehold Improvements (direct+3-factor on the re System Leasehold Improvements	31,019 279,959	28,891 257,040	26,212 233,207	23,534 209,374	22,612 201,172	19,943 177,426	17,600 156,587	15,146 134,747	12,604 112,135	10,052 89,428	7,499 66,721	7,085 63,035	6,671 59,348	
Customer Advances and Deposits														
System Contributions Washinton Contributions	3,965,149 668,837	4,041,490 683,153	4,107,884 696,246	4,087,078 698,518	4,163,334 713,866	4,268,622 735,487	4,367,025 765,624	4,494,194 795,604	4,608,550 818,449	4,686,796 847,226	4,206,528 788,071	4,305,651 802,354	4,410,555 808,912	
System Deposits	5,087,361	4,954,916	4,983,513	5,003,920	4,973,562	4,947,785	4,884,692	4,804,206	4,826,896	4,800,438	4,811,487	4,830,980	4,797,147	
Gas in Storage Extract	18,488,587	18,486,971	18,484,666	18,482,827	18,480,562	18,478,826	18,478,349	18,501,807	18,500,225	18,498,669	18,497,192	18,495,687	18,494,189	

NW Natural Washington Annual Commission Basis Report Twelve Months Ended December 31, 2018

Deferred Income Taxes

32

2017 December Balances:					
			SYS	Washington	Oregon
	Federal	State	Total	Allocation	Allocation
•					
Accumulated Deferred Income Tax - Depreciation	(356,970,635)	(73,842,204)	(430,812,839)	(39,659,676)	(391,153,163)
Accumulated Deferred Income Tax - Encana	(28,042,242)	(5,874,791)	(33,917,033)	0	(33,917,033)
Accumulated Deferred Income Tax - Other	(13,102,128)	(1,301,866)	(14,403,994)	(1,404,586)	(12,999,408)
2017 Balances	(398,115,005)	(81,018,861)	(479,133,866)	(41,064,262)	(438,069,604)
2018 December Balances:					
20 TO BOSOMBOL BUILDINGS.					
_	Federal	State	SYS Total	Washington Allocation	Oregon Allocation
Accumulated Deferred Income Tax - Depreciation	(375,749,305)	(62,268,085)	(438,017,390)	(40,303,339)	(397,714,051)
Accumulated Deferred Income Tax - Encana	(26,599,176)	(4,238,338)	(30,837,514)	0	(30,837,514)
Accumulated Deferred Income Tax - Other	(17,571,937)	(2,188,948)	(19,760,885)	(927,948)	(18,060,492)
2018 Balances	(419,920,418)	(68,695,371)	(488,615,789)	(41,231,287)	(446,612,057)
Simple Average December Balances (use for Rate	D)			(41,147,775)	(442,340,830)

NW Natural Washington Annual Commission Basis Report Twelve Months Ended December 31, 2018 Tax Adjustment

	n	_
_		C

No.		Amount (a)	
1	Utility Income before Interest and Taxes	\$6,949,218	
2	Interest on Historic Average Rate Base	4,369,895	
3	Pre-Tax Net Income	2,579,323	
4	Less: Permanent Differences	857,142	11.32% Depreciation Factor
5	Taxable Income	3,436,465	
6	Tax Rate	21.00%	
7	Federal Income Tax	721,658	
8	Credits	(10)	
9	Total Tax	\$721,647	

NW Natural Washington Annual Commission Basis Report Twelve Months Ended December 31, 2018 Proforma Cost of Capital and Input Assumptions

			2		
Line		Percent of	3 month average	Weighted	
No.		Total Capital	Average Cost	Cost	
140.		(a)	(b)	(c)	
_	Cost of Capital		(-)	(=)	13 month average
1	Long Term Debt	48.91%	5.13%	2.51%	776,575,000
2	Short Term Debt	4.74%	2.11%	0.10%	75,287,500
3	Preferred Stock	0.00%	0.00%	0.00%	•
4	Common Stock	46.35%	10.10%	4.68%	736,056,348
5	Total	100.00%	=	7.29%	1,587,918,848
_	Revenue Sensitive Costs				
6	Gas Sales	102.07%			
7	Transportation	3.67%			
8	Other	-5.74%			
9	Subtotal	100.00%			
10	O & M - Uncollectible	0.109%			
11	Franchise Taxes	0.000%			
12	WA Utility Tax	3.852%			
13	WUTC Fee	0.200%			
14	State Taxable Income	95.84%			
15	State Income Tax	0.00%			
16	Federal Taxable Income	95.84%			
17	Federal Income Tax	20.13%			
18	Total Income Taxes	20.13%			
19	Total Revenue Sensitive Costs	24.29%			

20	Utility Operating Income	75.71%
21	Net-to-gross factor	1.32078
22	Interest Coordination Factor	0.0261
23	Federal tax rate	21.00%
24	State tax rate	0.00%
25	Uncollectible Accounts	0.11%

Line No.	_	Column A Page 1	Weather Normalized Gas Sales & Purchases	Miscellaneous Revenues Adjustment	Bonus Adjustment	Uncollect. Accounts Adjustment	Working Capital Adjustment	Sales, Marketing & Customer Communications Adjustment	Claims Adjustment	Clearing Adjustment	Total Adjustments	Column C Page 1
	Operating Revenues		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
1 2 3	Sale of Gas Transportation	64,503,221 2,428,043 (3,092,584)	3,051,778 0	(707,936)							3,051,778 0 (707,936)	67,554,999 2,428,043 (3,800,520)
4	Total Operating Revenues	63,838,679	3,051,778	(707,936)	0	0	0	0	0	0	2,343,843	66,182,522
5 6 7	Operating Revenue Deductions Gas Purchased Uncollectible Accrual Other Operating & Maintenance Expenses	23,742,026 74,083 18,224,986	1,184,784 3,326	0	3,995	6,485		(656,047)	10,944	0	1,184,784 9,811 (641,108)	24,926,810 83,894 17,583,878
8	Total Operating & Maintenance Expense	42,041,095	1,188,111	0	3,995	6,485	0	(656,047)	10,944	0	553,488	42,594,582
9 10 11 12	Other Taxes	721,647 1,752,161 3,619,386 9,476,820	365,402 123,658	(142,643) (28,686)	(843)	(1,362)	0	137,770	(2,298)	0	356,026 0 94,972 0	1,077,673 1,752,161 3,714,358 9,476,820
13	Total Operating Revenue Deductions	57,611,109	1,677,171	(171,329)	3,152	5,123	0	(518,277)	8,646	0	1,004,486	58,615,595
14	Net Operating Revenues	6,227,571	1,374,608	(536,607)	(3,152)	(5,123)	0	518,277	(8,646)	0	1,339,357	7,566,927
15 16		344,634,123 (138,174,714)			671				0	0	671 0	344,634,795 (138,174,714)
17	Net Utility Plant	206,459,410	0	0	671	0	0	0	0	0	671	206,460,081
18 19 20 21 22	Storage Gas Customer Advances Leasehold Improvements	909,782 1,946,972 (756,956) 17,502 (41,147,775)									0 0 0 0	909,782 1,946,972 (756,956) 17,502 (41,147,775)
23	Total Rate Base	167,428,936	0	0	671	0	0	0	0	0	671	167,429,607
24	Interest Coordination		0	0	18	0	0	0	0	0	18	18

Worksheet a

	Test Period Sales in Therms	Test Period Revenue	Normalized Sales in Therms	Normalized Revenues	Normalized Rate	Net Normalizin Effect
	(a)	(b)	(c)	(d)	(e)	(f)
<u>Sales</u>						
Residential	49,654,942	\$45,624,649	50,864,022	\$46,590,396	\$0.79875	\$965,74
Commercial	21,745,578	\$17,794,469	22,650,685	\$18,497,619	\$0.77687	\$703,15
Industrial Firm	3,057,094	\$1,944,199	3,057,094	\$1,944,199	\$0.63596	9
Interruptible	1,303,876	\$522,785	1,303,876	\$522,785	\$0.40095	<u> </u>
Total Sales	75,761,490	65,886,102	77,875,677	67,554,999		1,668,89
Unbilled amounts	(1,218,186)	(\$1,382,881)				\$1,382,88
Unaccounted For Gas						
Total Sales Sendout	74,543,304	64,503,221	77,875,677	67,554,999	-	3,051,7
<u>Transportation</u>						
Firm Transportation	9,809,831	\$1,496,549	9,809,831	\$1,496,549	\$0.15256	•
Interuptible Transportation	10,787,758	\$931,494	10,787,758	\$931,494	\$0.08635	
Special Contracts	0	\$0	0	\$0		
Other Charges	0	\$0	0	\$0	-	
Total Transportation	20,597,589	\$2,428,043	20,597,589	\$2,428,043		:
Total Deliveries / Revenues	95,140,893	\$66,931,263	98,473,266	\$69,983,042	-	\$3,051,77

Cost of Gas

_	Actual Therms	Actual Costs	Normalized Therms	Normalized Costs	Normalized Rate	Normalizing Effect
Demand Incurred & Deferred	73,239,428	\$8,355,991	76,571,801	\$8,755,442	0.11987	\$399,452
Commodity Incurred & Deferred	74,543,304	\$18,422,567	77,875,677	\$19,297,582	0.26258	\$875,015
Commodity and Demand Amortizations	_	(\$3,036,533)	-	(\$3,126,215)	-	(\$89,682)
Total Cost of Gas	=	\$23,742,026	=	\$24,926,810	=	\$1,184,784

NW Natural Washington Annual Commission Basis Report Twelve Months Ended December 31, 2018 Adjustment to Miscellaneous Revenue

V	۷c	ork	sk	1e	et	b

Line No.		Washington Actual	Normalized	Adjustment	
	•	(a)	(b)	(c)	
1	Other Miscellaneous Revenues				
2	Reconnect Charges	\$53,320	\$52,295	(\$1,025)	[1]
3	Late Payment Charges	88,715	88,715	0	
4	Automated Payment Charge	5,603	5,876	273	[1]
5	Returned Check	12,228	10,991	(1,237)	[1]
6	Field Collection	32,470	31,895	(575)	[1]
7	Meter Rentals	18,185	19,324	1,139	[1]
8	Utility Property Rental	9,429	17,423	7,995	[1]
9	Curtailment Unauthorized Take	31,107	10,369	(20,738)	[1]
10	Technical Adjustments & Amortizations	(3,350,416)	(4,048,884)	(698,468)	
11	Miscellaneous	6,776	11,476	4,700	[1]
12					
13		(\$3,092,584)	(\$3,800,520)	(\$707,936)	
14					•
15					

15

16 17

18 <u>Notes:</u>

19 [1] Normalized to 3-year average

20

Worksheet c

NW Natural Washington Annual Commission Basis Report Twelve Months Ended December 31, 2018 Bonus Adjustment

Line	•	2015 paid	2016 paid	2017 paid	Three Year	2018	
No.		in 2016	in 2017	in 2018	Average	Accrual	Adjustment
	(a)	(b)	(c)	(d)	(e)	(f)	(g) = (e) - (f)
	Performance Bonus - O & M						
1	Officers/Exempt	\$6,213,593	\$5,597,391	\$6,107,412	\$5,972,799	\$5,965,097	\$7,702
2	Clerical/Hourly	0	0	0	0	0	0
3	Total	6,213,593	5,597,391	6,107,412	5,972,799	5,965,097	7,702
	Performance Bonus - Construction						
4	Officers/Exempt	2,580,181	2,594,415	2,952,686	2,709,094	2,659,157	49,937
5	Clerical/Hourly	0	0	0	0	0	0
6	Total	2,580,181	2,594,415	2,952,686	2,709,094	2,659,157	49,937
	Key Goals Bonus - O & M						
7	Officers/Exempt	0	0	0	0	0	
8	Clerical/Hourly	0	597,200	1,105,922	567,707	538,300	
9	Total	0	597,200	1,105,922	567,707	538,300	29,407
	Key Goals Bonus - Construction						
10	Officers/Exempt	0	0	0	0	0	
11	Clerical/Hourly	0	358,883	534,668	297,850	342,084	
12	Total	0	358,883	534,668	297,850	342,084	(44,234)
13	Total Adjusted O & M (line 3 + line 9)						\$37,109
14	Washington Allocation Factor				Employee Cost		10.765%
15	Adjustment to Washington - O&M				. ,		\$3,995
16	Total Adjusted Construction (line 6 + lin	ne 12)					\$5,703
17	Washington Allocation Factor	•			Gross Plant		11.770%
18	Adjustment to Washington - Rate Ba	se					\$671
. •	,	= =					+571

Adjustment takes expense from test period accrual to 3 year paid average

Uncollectible Accounts Adjustments (\$000's, except Washington amounts at lines 22-24)

Line No.		2018-2016 Total (a)	2018 Actual (b)	2017 Actual (c)	2016 Actual (d)
	Gas Revenues	(*)		ζ.,	ζ.,
1	Residential	\$1,274,666	\$415,008	\$458,763	\$400,895
2	Commercial	632,471	205,058	229,681	197,732
3	Industrial	64,749	20,943	22,757	21,048
4	Interruptible	60,997	19,535	22,173	19,289
5	Total	2,032,883	660,545	733,374	638,964
ı	Net Write-Offs				
6	Residential	1,763	457	723	583
7	Commercial	300	109	98	92
8	Industrial	152	1	27	124
9	Interruptible		-	-	
10	Total	2,215	568	848	799
,	Write-Off % - 3-Year Average				
11	Residential	0.138%	0.110%	0.158%	0.145%
12	Commercial	0.047%	0.053%	0.043%	0.047%
13	Industrial	0.235%	0.006%	0.117%	0.589%
14	Interruptible	0.000%	0.000%	0.000%	0.000%
15	Weighted Total [1]	0.109%	0.086%	0.116%	0.125%
I	Normalized Uncollectible				
16	Residential	\$574			
17	Commercial	97			
18	Industrial	49			
19	Interruptible	0			
20	Total	\$720			
21	Allocation Factor	11.190%_C	ustomers - All		
22 \	Washington Normalized Amount (X 1000)	\$80,568			
23 \	Washington Allocation of Accrued Amount	\$74,083			
24	Adjustment (Normalized less Accrued)	\$6,485			

NW Natural
Washington Annual Commission Basis Report
Investor Supplied Working Capital
Twelve Months Ended December 31, 2018

Line No.		 Average Balance
1	Current Working Capital Assets	\$ 162,458,148
2	Current Working Capital Liabilities	\$ (153,727,035)
3	Net Working Capital	\$ 8,731,114
4		
5	WA Allocation of Total Investments	10.42%
6		
	Total WA Working Capital	\$ 909,782

Worksheet e

NW Natural
Washington Annual Commission Basis Report
Twelve Months Ended December 31, 2018
Sales & Marketing and Customer Communication Adjustment

Total Disallowance - O&M

Line No.		Washington Amount	Disallowance Percent	Disallowed Amount
1	Expenses Coded to Category 2966 and 2666	\$264,842	100.0%	\$264,842
2	Expenses Coded to Account 5075 (excluding Category 2966/2666 & FERC accts 911,912,913)	16,041	100.0%	16,041
3	FERC Account 911 Supervision	1,297	100.0%	1,297
4	FERC Account 912 Demonstration & Selling	218,453	100.0%	218,453
5	FERC Account 913 Advertising	71,023	100.0%	71,023
6	FERC Account 909 Advertising	301,395	28.0%_	84,391

Worksheet f

\$656,047

NW Natural Washington Annual Commission Basis Report Twelve Months Ended December 31, 2018 Claims Expense Adjustment

Worksheet g

Line		00115	
No.	_	O&M Expense	
		(a)	(b)
1	Expensed during Test period	\$302,215	\$150,423
	Normalized Expenses		
2	Actual Claims - Ordinary	388,829	150,423
3	3-Year Average Claims - Extraordinary	10,757	0
4	Subtotal	399,586	150,423
5	Adjustment - System (line 4 - line 1)	97,371	0
6	Allocation to Washington		
	(O&M on 3-factor, const on gross plant)	11.240%	11.770%
7	Adjustment	\$10,944	\$0

NW Natural Washington Annual Commission Basis Report Twelve Months Ended December 31, 2018 Elimination of Clearing Account Balances

Line

No.		Amount
1	Adjustment to O&M	\$0
2	Allocation to Washington (3-Factor)	11.24%
3	Adjustment	\$0
4	Adjustment to Construction	\$0
5	Allocation to Washington (Gross Plant)	11.77%
6	Adjustment	\$0

Worksheet h

Clearing accounts are completely allocated by year end closing.