

EXHIBIT A

BEFORE THE  
WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

NW NATURAL  
SUPPORTING MATERIALS

Annual Purchased Gas Cost and  
Deferred Gas Cost Amortization Adjustments

NWN WUTC Advice No. 18-05 / UG-180785

September 13, 2018

# NW NATURAL

## EXHIBIT A

### Supporting Materials

#### Annual Purchased Gas Cost and Deferred Gas Cost Amortization Adjustments

NWN WUTC ADVICE NO. 18-05 / UG-180785

<b>Description</b>	<b>Page</b>
Summary of Temporary Increments	1
Calculation of Increments Allocated on the Equal Cent Per Therm Basis	2
Calculation of Effect on Customer Average Bill by Rate Schedule	3
Summary of Deferred Accounts	4
191420 Washington WACOG Deferral	5
191421 Washington Amortization of WACOG	6
191430 Washington Demand Accrual	7
191431 Washington Amortization of Demand	8
254302 Washington Storage Sharing	9
Summary of Total Commodity Costs	10
Summary of Total Demand Charges	12
Derivation of Washington Per Therm Non-Commodity Charges	13
Calculation of Winter WACOG	14
Effects on Revenue	15
Comfort Zone Newsletter	16

NW Natural  
 Rates & Regulatory Affairs  
 2018-2019 PGA Filing - Washington: September Filing  
 Summary of TEMPORARY Increments

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69

Schedule	Block	REMOVE	REMOVE	ADD	ADD	ADD	Total Proposed PGA Temporarities	Net Effect of PGA Temps
		Current Temporarities	PGA Current Temporarities	WACOG Deferral	Demand Deferral FIRM	Demand Deferral INTERR		
		A	B	C	D	E	E = B+C+D	F = E-A
1R		0.01700	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
1C		0.00820	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
2R		(0.00426)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
3 CFS		(0.00867)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
3 IFS		(0.03531)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
27		(0.01537)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
41C Firm Sales	Block 1	(0.01511)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 2	(0.01806)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
41C Interr Sales	Block 1	0.00685	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 2	0.00407	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
41 Firm Trans	Block 1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
41I Firm Sales	Block 1	(0.03580)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 2	(0.03629)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
41I Interr Sales	Block 1	(0.01257)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 2	(0.01304)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
42C Firm Sales	Block 1	(0.02318)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 2	(0.02494)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 3	(0.02845)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 4	(0.03076)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 5	(0.03383)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 6	(0.03768)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
42I Firm Sales	Block 1	(0.03748)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 2	(0.03775)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 3	(0.03827)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 4	(0.03861)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 5	(0.03907)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
	Block 6	(0.03964)	(0.03999)	(0.02629)	(0.02684)	0.00000	(0.05313)	(0.01314)
42 Firm Trans	Block 1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 3	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
42C Interr Sales	Block 1	(0.00761)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 2	(0.00854)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 3	(0.01042)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 4	(0.01164)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 5	(0.01328)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 6	(0.01532)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
42I Interr Sales	Block 1	(0.01238)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 2	(0.01282)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 3	(0.01369)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 4	(0.01426)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 5	(0.01504)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
	Block 6	(0.01599)	(0.01656)	(0.02629)	0.00000	(0.00937)	(0.03566)	(0.01910)
42 Inter Trans	Block 1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 3	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Block 6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
43 Firm Trans		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
43 Interr Trans		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Intentionally blank

Sources:

Direct Inputs	17-18 PGA			
Equal ¢ per therm		Column D	Column G	Column J
Equal % of margin				
Tariff Schedules:				
Schedule #		Sched 201	Sched 201	Sched 201

NW Natural  
 Rates & Regulatory Affairs  
 2018-2019 PGA Filing - Washington: September Filing  
 Calculation of Increments Allocated on the EQUAL CENT PER THERM BASIS

Line	Schedule	Block	Washington PGA Volumes page, Column F	WACOG Deferral			Demand Deferral - FIRM			Demand Deferral - INTERRUPTIBLE		
				Proposed Amount: Revenue Sensitive Multiplier Amount to Amortize:	(1,998,283) 4.372% add revenue sensitive factor (2,089,642) to all sales schedules	Multiplier (2,089,642) to all sales schedules	Increment (\$0.02629)	Volumes (2,089,642) to all firm sales	Multiplier (2,089,642) to all firm sales	Increment (\$0.02664)	Volumes (12,714) to all Interruptible sales	Multiplier (12,714) to all Interruptible sales
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63	Totals			97,119,890	79,493,752	(\$0.02629)		78,137,155	(\$0.02664)		1,356,597	(\$0.00937)
64	Sources for line 2 above:			0								
65	Inputs page											
66	Tariff Schedules:											
67	Schedule #											
68												

Line 31	Line 33	Line 35
Sched 201	Sched 201	Sched 201

NW Natural  
 Rates & Regulatory Affairs  
 2018-2019 PGA Filing - Washington: September Filing  
 PGA Effects on Average Bill by Rate Schedule  
 Calculation of Effect on Customer Average Bill by Rate Schedule [1]

	Washington PGA Normalized Volumes page, Column D	Therms in Block	Normal Therms Monthly Average use	Minimum Monthly Charge	Current 11/1/2017 Billing Rates	11/1/2017 Current Average Bill	Proposed 11/1/2018 PGA Effects Rates	Proposed 11/1/2018 PGA Effects Average Bill	Proposed 11/1/2018 PGA Effects % Bill Change
	A	B	C	D	E	F=D+(C * E)	P	Q=D+(C * P)	R
1R	204,474	N/A	19.0	\$3.47	\$1.09344	\$24.25	\$1.02320	\$22.91	-5.5%
1C	38,632	N/A	85.0	\$3.47	\$1.08423	\$95.63	\$1.01399	\$89.66	-6.2%
2R	51,583,578	N/A	57.0	\$7.00	\$0.80224	\$52.73	\$0.73200	\$48.72	-7.6%
3 CFS	17,687,989	N/A	244.0	\$15.00	\$0.80187	\$210.66	\$0.73163	\$193.52	-8.1%
3 IFS	479,219	N/A	1,426.0	\$15.00	\$0.77510	\$1,120.29	\$0.70486	\$1,020.13	-8.9%
27	506,107	N/A	57.0	\$6.00	\$0.63079	\$41.96	\$0.56055	\$37.95	-9.6%
41C Firm Sales	Block 1 1,945,641	2,000	3,747.0	\$250.00	\$0.55691		\$0.49695		
	Block 2 1,921,286	all additional			\$0.51811		\$0.45815		
<b>TOTAL</b>						<b>\$2,268.96</b>		<b>\$2,044.29</b>	<b>-9.9%</b>
41C Interr Sales	Block 1 0	2,000	0.0	\$250.00	\$0.57864		\$0.51272		
	Block 2 0	all additional			\$0.54001		\$0.47409		
<b>TOTAL</b>						<b>\$250.00</b>		<b>\$250.00</b>	<b>0.0%</b>
41 Firm Trans	Block 1 374,507	2,000	4,706.0	\$500.00	\$0.30077		\$0.30077		
	Block 2 585,464	all additional			\$0.26500		\$0.26500		
<b>TOTAL</b>						<b>\$1,818.63</b>		<b>\$1,818.63</b>	<b>0.0%</b>
411 Firm Sales	Block 1 319,582	2,000	3,808.0	\$250.00	\$0.53626		\$0.47630		
	Block 2 365,920	all additional			\$0.49991		\$0.43995		
<b>TOTAL</b>						<b>\$2,226.36</b>		<b>\$1,998.03</b>	<b>-10.3%</b>
411 Interr Sales	Block 1 0	2,000	0.0	\$250.00	\$0.55922		\$0.49330		
	Block 2 0	all additional			\$0.52290		\$0.45698		
<b>TOTAL</b>						<b>\$250.00</b>		<b>\$250.00</b>	<b>0.0%</b>
42C Firm Sales	Block 1 572,162	10,000	15,829.0	\$1,300.00	\$0.36597		\$0.30601		
	Block 2 452,310	20,000			\$0.35176		\$0.29180		
	Block 3 113,398	20,000			\$0.32347		\$0.26351		
	Block 4 1,826	100,000			\$0.30485		\$0.24489		
	Block 5 0	600,000			\$0.28003		\$0.22007		
	Block 6 0	all additional			\$0.24900		\$0.18904		
<b>TOTAL</b>						<b>\$7,010.11</b>		<b>\$6,061.00</b>	<b>-13.5%</b>
421 Firm Sales	Block 1 1,138,365	10,000	13,507.0	\$1,300.00	\$0.35161		\$0.29165		
	Block 2 725,589	20,000			\$0.33889		\$0.27893		
	Block 3 81,079	20,000			\$0.31360		\$0.25364		
	Block 4 0	100,000			\$0.29696		\$0.23700		
	Block 5 0	600,000			\$0.27478		\$0.21482		
	Block 6 0	all additional			\$0.24703		\$0.18707		
<b>TOTAL</b>						<b>\$6,004.59</b>		<b>\$5,194.71</b>	<b>-13.5%</b>
42 Firm Trans	Block 1 1,313,594	10,000	41,245.0	\$1,550.00	\$0.11818		\$0.11818		
	Block 2 1,609,433	20,000			\$0.10579		\$0.10579		
	Block 3 1,138,813	20,000			\$0.08112		\$0.08112		
	Block 4 1,522,236	100,000			\$0.06490		\$0.06490		
	Block 5 355,242	600,000			\$0.04327		\$0.04327		
	Block 6 0	all additional			\$0.01622		\$0.01622		
<b>TOTAL</b>						<b>\$5,759.79</b>		<b>\$5,759.79</b>	<b>0.0%</b>
42C Interr Sales	Block 1 250,151	10,000	28,810.0	\$1,300.00	\$0.38133		\$0.31541		
	Block 2 486,821	20,000			\$0.36796		\$0.30204		
	Block 3 246,036	20,000			\$0.34134		\$0.27542		
	Block 4 54,140	100,000			\$0.32384		\$0.25792		
	Block 5 0	600,000			\$0.30050		\$0.23458		
	Block 6 0	all additional			\$0.27134		\$0.20542		
<b>TOTAL</b>						<b>\$12,034.63</b>		<b>\$10,135.47</b>	<b>-15.8%</b>
421 Interr Sales	Block 1 179,269	10,000	13,310.0	\$1,300.00	\$0.37670		\$0.31078		
	Block 2 140,180	20,000			\$0.36381		\$0.29789		
	Block 3 0	20,000			\$0.33817		\$0.27225		
	Block 4 0	100,000			\$0.32130		\$0.25538		
	Block 5 0	600,000			\$0.29879		\$0.23287		
	Block 6 0	all additional			\$0.27069		\$0.20477		
<b>TOTAL</b>						<b>\$6,271.21</b>		<b>\$5,393.82</b>	<b>-14.0%</b>
42 Inter Trans	Block 1 906,535	10,000	81,264.0	\$1,550.00	\$0.11818		\$0.11818		
	Block 2 1,644,618	20,000			\$0.10579		\$0.10579		
	Block 3 1,375,643	20,000			\$0.08112		\$0.08112		
	Block 4 4,240,259	100,000			\$0.06490		\$0.06490		
	Block 5 2,559,794	600,000			\$0.04327		\$0.04327		
	Block 6 0	all additional			\$0.01622		\$0.01622		
<b>TOTAL</b>						<b>\$8,499.03</b>		<b>\$8,499.03</b>	<b>0.0%</b>
43 Firm Trans	0	N/A	0.0	\$38,000.00	\$0.00499	\$38,000.00	\$0.00499	\$38,000.00	0.0%
43 Interr Trans	0	N/A	0.0	\$38,000.00	\$0.00499	\$38,000.00	\$0.00499	\$38,000.00	0.0%
Intentionally blank									

[1] Rate Schedule 41 and 42 customers may choose demand charges at a volumetric rate or based on MDDV. For convenience of presentation, demand charges are not included in the calculations for those schedules.

[2] Proposed rates include the effect of removing the current Schedule 215 adjustment and applying the proposed Schedule 215 adjustment. The rate shown is for illustrative purposes only and assumes no other changes to rates occur November 1.

Sources:

Direct Inputs	per Tariff	per Tariff
Rates in summary	Column A	

**NW Natural**  
**Rates & Regulatory Affairs**  
**2018-2019 PGA Filing - Washington: September Filing**  
**Summary of Deferred Accounts**

A	B	C	D	E	F	G	H	I
Account	Balance 8/31/2018	Sep-Oct Estimated Activity	Sep-Oct Interest	Estimated Balance 10/31/2018	Estimated Interest During Amortization	Total Estimated Amount for (Refund) or Collection	Amounts Excluded from PGA Filing	Amounts Included in PGA Filing
				E = sum B thru D	F = <input type="text" value="4.96%"/>	G = E + F Excl. Rev Sens		
<b>Gas Cost Deferrals and Amortizations</b>								
191420 WACOG - ACCRUAL WA	(1,975,720)	0	(15,920)	(1,991,640)				
191421 AMORT OF WACOG - WA	15,947	29,848	229	46,024				
Subtotal	(1,959,772)	29,848	(15,691)	(1,945,616)	(52,667)	(1,998,283)		(1,998,283)
191430 DEMAND ACCRUAL - WA	(518,423)	0	(4,177)	(522,600)				
191431 AMORT OF DEMAND WA	(669,461)	266,521	(4,504)	(407,444)				
254302 MARGIN SHARING - WA	(1,034,108)	0	0	(1,034,108)				
Subtotal	(2,221,992)	266,521	(8,681)	(1,964,152)	(53,169)	(2,017,321)		(2,017,321)
<b>GRAND TOTAL</b>	<b>(1,305,685)</b>	<b>60,355</b>	<b>(1,975)</b>	<b>(1,247,305)</b>	<b>(33,764)</b>	<b>(1,281,067)</b>		<b>(1,281,067)</b>

**Notes**

Please refer to NWN workpapers or electronic file "NWN 2018-19 Washington PGA rate development file September filing.xls" for application of revenue sensitive effect and calculation of rate increments.

Company: Northwest Natural Gas Company  
 State: Washington  
 Description: Washington WACOG Deferral  
 Account Number: 191420  
 Program under Schedule P  
 Temp Increment under Schedule 203

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debit	(Credit)	Month/Year	Note	Accumulation	Transfers	Interest Rate	Interest	Activity	Balance										
		(a)	(b)	(c)	(d)	(e1)	(e2)	(f)	(g)										
		Beginning Balance																	
142		Nov-17	1	16,913.83	502,484.60	4.21%	(1,523.80)	517,874.63	(427,404.43)										
143		Dec-17		(17,087.42)		4.21%	(1,529.45)	(18,616.87)	(446,021.30)										
144		Jan-18		(60,473.59)		4.25%	(1,686.75)	(62,160.34)	(508,181.64)										
145		Feb-18		(162,473.62)		4.25%	(2,087.52)	(164,561.14)	(672,742.78)										
146		Mar-18		(280,210.48)		4.25%	(2,878.84)	(283,089.32)	(955,832.10)										
147		Apr-18		(407,923.54)		4.47%	(4,320.23)	(412,243.77)	(1,368,075.87)										
148		May-18		(197,888.22)		4.47%	(5,464.65)	(203,352.87)	(1,571,428.74)										
149		Jun-18		(181,874.12)		4.47%	(6,192.31)	(188,066.43)	(1,759,495.17)										
150		Jul-18		(138,692.91)		4.69%	(7,147.72)	(145,840.63)	(1,905,335.80)										
151		Aug-18		(62,814.38)		4.69%	(7,569.44)	(70,383.82)	(1,975,719.62)										
152		Sep-18				4.69%	(7,721.77)	(7,721.77)	(1,983,441.39)										
153		Oct-18				4.96%	(8,198.22)	(8,198.22)	(1,991,639.61)										

History truncated for ease of viewing

**Notes**

1 - Transferred authorized balance to account 191421 for amortization.

Company: Northwest Natural Gas Company  
 State: Washington  
 Description: Washington Amortization of WACOG  
 Account Number: 191421  
 Program under Schedule P  
 Temp Increment under Schedule 203

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debit	(Credit)	Month/Year	Note	Amortization	Transfers	Interest Rate	Interest	Activity	Balance										
		(a)	(b)	(c)	(d)	(e1)	(e2)	(f)	(g)										
		Beginning Balance																	
152		Nov-17	new (1)	10,226.26	(502,484.60)	4.21%	(1,744.94)	(494,003.28)	(225,200.11)										
153		Dec-17		39,613.34		4.21%	(720.59)	38,892.75	(186,307.36)										
154		Jan-18		51,299.63		4.25%	(569.00)	50,730.63	(135,576.73)										
155		Feb-18		36,894.66		4.25%	(414.83)	36,479.83	(99,096.90)										
156		Mar-18		40,763.21		4.25%	(278.78)	40,484.43	(58,612.47)										
157		Apr-18		29,832.39		4.47%	(162.77)	29,669.62	(28,942.85)										
158		May-18		16,357.30		4.47%	(77.35)	16,279.95	(12,662.90)										
159		Jun-18		11,254.50		4.47%	(26.21)	11,228.29	(1,434.61)										
160		Jul-18	2	9,387.34	(0.39)	4.69%	12.74	9,399.69	7,965.08										
161		Aug-18		7,935.63		4.69%	46.64	7,982.27	15,947.35										
162		Sep-18	Forecasted	9,512.63		4.69%	80.92	9,593.55	25,540.90										
163		Oct-18	Forecasted	20,335.18		4.96%	147.60	20,482.78	46,023.68										

**History truncated for ease of viewing**

**Notes**

- 1 - Transfer in amounts from account 191420 approved for amortization.
- 2 - Transfer amount is for true-up to GL.



Company: Northwest Natural Gas Company  
 State: Washington  
 Description: Washington Demand Accrual  
 Account Number: 191430  
 Program under Schedule P  
 Temp Increment under Schedule 203

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debit	(Credit)	Month/Year	Note	Accumulation	Transfers	Interest Rate	Interest	Activity	Balance										
		(a)	(b)	(c)	(d)	(e1)	(e2)	(f)	(g)										
		Beginning Balance																	
142		Nov-17	<b>1</b>	(264,663.82)	1,064,137.94	4.21%	1,198.63	800,672.75	210,518.90										
143		Dec-17		(828,194.38)		4.21%	(714.22)	(828,908.60)	(618,389.70)										
144		Jan-18		(526,982.84)		4.25%	(3,123.33)	(530,106.17)	(1,148,495.87)										
145		Feb-18		(568,632.19)		4.25%	(5,074.54)	(573,706.73)	(1,722,202.60)										
146		Mar-18		(317,816.13)		4.25%	(6,662.27)	(324,478.40)	(2,046,681.01)										
147		Apr-18		(40,734.03)		4.47%	(7,699.75)	(48,433.78)	(2,095,114.78)										
148		May-18		403,353.94		4.47%	(7,053.06)	396,300.88	(1,698,813.90)										
149		Jun-18		324,736.40		4.47%	(5,723.26)	319,013.14	(1,379,800.76)										
150		Jul-18	<b>2</b>	416,261.51	(0.43)	4.69%	(4,579.28)	411,681.80	(968,118.96)										
151		Aug-18		452,595.47		4.69%	(2,899.28)	449,696.19	(518,422.76)										
152		Sep-18				4.69%	(2,026.17)	(2,026.17)	(520,448.93)										
153		Oct-18				4.96%	(2,151.19)	(2,151.19)	(522,600.12)										

**History truncated for ease of viewing**

**Notes**

- 1** - Transferred authorized balance to account 191431 for amortization.
- 2** - Transfer amount is for true-up to GL.

Company: Northwest Natural Gas Company  
 State: Washington  
 Description: Washington Amortization of Demand  
 Account Number: 191431  
 Program under Schedule P  
 Temp Increment under Schedule 203

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Debit	(Credit)	Month/Year	Note	Amortization	Transfers	Interest Rate	Interest	Activity	Balance				
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)						
Beginning Balance													
137		Oct-16		1,284.16		3.50%	(1,318.16)	(34.00)	(452,618.34)				
138		Nov-16 old		1,094.17		3.50%	(1,318.54)	(224.37)	(452,842.71)				
139		Nov-16 new (1)		25,673.45	508,349.64	3.50%	1,520.13	535,543.22	82,700.51				
140		Dec-16		127,351.22		3.50%	426.93	127,778.15	210,478.66				
141		Jan-17	2	218,988.17	(1,448,926.12)	3.50%	(3,292.78)	(1,233,230.73)	(1,022,752.07)				
142		Feb-17		164,790.45		3.50%	(2,742.71)	162,047.74	(860,704.33)				
143		Mar-17		128,463.11		3.50%	(2,323.05)	126,140.06	(734,564.27)				
144		Apr-17		92,234.73		3.71%	(2,128.45)	90,106.28	(644,457.99)				
145		May-17		66,290.36		3.71%	(1,889.98)	64,400.38	(580,057.61)				
146		Jun-17		40,968.46		3.71%	(1,730.01)	39,238.45	(540,819.16)				
147		Jul-17		30,703.47		3.96%	(1,734.04)	28,969.43	(511,849.73)				
148		Aug-17		25,793.69		3.96%	(1,646.54)	24,147.15	(487,702.58)				
149		Sep-17		27,439.40		3.96%	(1,564.14)	25,875.26	(461,827.32)				
150		Oct-17		44,472.50		4.21%	(1,542.23)	42,930.27	(418,897.05)				
151		Nov-17 old		47,523.23		4.21%	(1,386.27)	46,136.96	(372,760.09)				
152		Nov-17 new (1)		89,879.39	(1,064,137.94)	4.21%	(3,575.69)	(977,834.24)	(1,350,594.33)				
153		Dec-17		355,819.97		4.21%	(4,114.17)	351,705.80	(998,888.53)				
154		Jan-18	2	462,131.81	(1,461,710.98)	4.25%	(7,896.26)	(1,007,475.43)	(2,006,363.96)				
155		Feb-18		331,563.43		4.25%	(6,518.73)	325,044.70	(1,681,319.26)				
156		Mar-18		366,857.63		4.25%	(5,305.03)	361,552.60	(1,319,766.66)				
157		Apr-18		268,036.97		4.47%	(4,416.91)	263,620.06	(1,056,146.60)				
158		May-18		146,130.19		4.47%	(3,661.98)	142,468.21	(913,678.39)				
159		Jun-18		99,919.00		4.47%	(3,217.35)	96,701.65	(816,976.74)				
160		Jul-18		83,289.19		4.69%	(3,030.26)	80,258.93	(736,717.81)				
161		Aug-18		69,999.43		4.69%	(2,742.55)	67,256.88	(669,460.93)				
162		Sep-18 <i>Forecasted</i>		84,306.68		4.69%	(2,451.73)	81,854.95	(587,605.98)				
163		Oct-18 <i>Forecasted</i>		182,214.13		4.96%	(2,052.20)	180,161.93	(407,444.05)				
164													

History truncated for ease of viewing

Notes

- 1 - Transfer in amounts from account 191430 approved for amortization.
- 2 - Transfer in from account 254302 (storage and optimization revenue sharing).

Company: Northwest Natural Gas Company  
 State: Washington  
 Description: Washington Storage Sharing  
 Account Number: 254302  
 Temp Increment under Schedule 220

1	2	3	4	5	6	7	8	9	10	11	12	
Debit	(Credit)	Month/Year	Note	Accumulation	Transfers	Activity	Balance					
(a)	(b)	(c)	(d)	(e)	(f)							
Beginning Balance												
Nov-17		(95,615.84)				(95,615.84)	(1,360,340.43)					
Dec-17		(101,370.55)				(101,370.55)	(1,461,710.98)					
Jan-18	1	(14,681.84)			1,461,710.98	1,447,029.14	(14,681.84)					
Feb-18		(53,128.97)				(53,128.97)	(67,810.81)					
Mar-18		(126,286.12)				(126,286.12)	(194,096.93)					
Apr-18		(127,937.31)				(127,937.31)	(322,034.24)					
May-18		(162,656.77)				(162,656.77)	(484,691.01)					
Jun-18		(173,423.23)				(173,423.23)	(658,114.24)					
Jul-18		(190,293.18)				(190,293.18)	(848,407.42)					
Aug-18		(185,700.67)				(185,700.67)	(1,034,108.09)					
Sep-18						0.00	(1,034,108.09)					
Oct-18						0.00	(1,034,108.09)					

**History truncated for ease of viewing**

**Notes**

1 - Transfer December balance to account 191431 for amortization.

NW Natural  
 2018-2019 PGA - SYSTEM: September Filing  
 Summary of Total Commodity Cost  
 ALL VOLUMES IN THERMS

SYSTEM COSTS		(a)	(b)												(c)
		November	December	January	February	March	April	May	June	July	August	September	October	TOTAL	
		1	2	3	4	5	6	7	8	9	10	11	12		
1															
2															
3															
4	<b>COSTS</b>														
5	<b>Commodity Cost from Supply</b>	\$18,074,413	\$20,729,135	\$18,322,352	\$11,293,568	\$15,935,802	\$7,765,394	\$5,635,958	\$3,980,461	\$3,412,369	\$2,735,276	\$3,511,252	\$7,149,681	\$118,545,659	
6	tab commodity cost from supply, column cd, lines 93-104 plus gen input line 80; and														
7	tab commodity cost from gas reserve, column q, lines 59-70														
8	<b>Volumetric Pipeline Chgs</b>	\$93,967	\$113,388	\$106,082	\$60,649	\$84,912	\$73,700	\$50,113	\$31,752	\$26,077	\$21,950	\$27,165	\$59,474	\$749,229	
9	tab commodity cost from vol pipe, column e, line 78-89														
10	<b>Commodity Cost from Storage</b>	\$82,129	\$7,727,230	\$10,667,680	\$13,831,806	\$2,599,582	\$1,391,614	\$84,617	\$289,248	\$298,889	\$1,331,769	\$289,248	\$298,889	\$38,892,701	
11	tab Commodity Cost from Storage, column k, line 61-72														
12															
13															
14	<b>Commodity Cost from Gas Reserves</b>	\$2,427,231	\$2,462,148	\$2,396,282	\$2,191,863	\$2,324,806	\$2,249,506	\$2,303,111	\$2,195,351	\$2,191,124	\$2,159,342	\$2,082,356	\$2,098,767	\$27,081,888	
15	tab Commodity Cost from Gas Reserve, column p, line 69-70														
16	<b>Total Commodity Cost</b>	\$20,677,740	\$31,031,901	\$31,492,396	\$27,377,886	\$20,945,102	\$11,480,214	\$8,073,799	\$6,496,813	\$5,928,458	\$6,248,336	\$5,910,021	\$9,606,811	\$185,269,477	
17	<b>VOLUMES</b>														
18	<b>Commodity Volumes at Receipt Points</b>	90,604,627	97,531,763	85,675,952	52,009,498	81,490,487	62,936,137	45,000,948	30,315,736	24,117,349	19,697,650	25,404,727	52,723,168	667,508,043	
19	Pipeline Fuel Use	2,361,408	2,751,446	2,388,943	1,307,184	2,112,501	1,947,640	1,335,613	801,584	617,731	488,631	658,133	1,600,110	18,370,924	
20	Gas Arriving at City Gate	88,243,220	94,780,317	83,287,009	50,702,314	79,377,985	60,988,497	43,665,335	29,514,153	23,499,618	19,209,019	24,746,595	51,123,058	649,137,119	
21	Storage Gas Withdrawals	309,060	26,801,096	38,708,498	48,523,512	9,041,119	5,401,006	318,372	884,102	913,572	5,016,535	884,102	913,572	137,714,546	
22	Pipeline Fuel Use for Off-site Storage	0	0	64,977	26,184	371	25,427	0	0	0	0	0	0	116,958	
23	Storage Gas Deliveries at City Gate	309,060	26,801,096	38,643,521	48,497,328	9,040,748	5,375,579	318,372	884,102	913,572	5,016,535	884,102	913,572	137,597,588	
24															
25	<b>Total Gas At City Gate (Storage and Commodity)</b>	88,552,279	121,581,413	121,930,530	99,199,642	88,418,734	66,364,076	43,983,707	30,398,255	24,413,191	24,225,554	25,630,697	52,036,630	786,734,707	
26															
27	Unaccounted for Gas	648,106	696,118	611,705	372,385	582,995	447,932	320,702	216,768	172,594	141,081	181,752	375,475	4,767,612	
28															
29	Load Served	87,904,173	120,885,295	121,318,826	98,827,257	87,835,739	65,916,144	43,663,006	30,181,487	24,240,597	24,084,472	25,448,945	51,661,155	781,967,095	

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
	November	December	January	February	March	April	May	June	July	August	September	October	TOTAL		
<b>WACOG Calculations</b>															
1															
2															
3	<b>Gas Reserves Supply:</b>														
4	\$2,427,231	\$2,462,148	\$2,396,282	\$2,191,863	\$2,324,806	\$2,249,506	\$2,303,111	\$2,195,351	\$2,191,124	\$2,159,342	\$2,082,356	\$2,098,767	\$27,081,888		
5	3,205,453	3,253,991	3,158,060	2,802,586	3,057,810	2,925,208	2,980,556	2,838,750	2,902,190	2,856,640	2,728,169	2,773,965	35,483,378		
6															
7	<b>Total Load Served</b>														
8	79,005,879	108,331,537	108,678,490	88,565,771	78,779,355	59,336,873	39,500,340	27,338,319	21,821,366	21,697,200	22,910,530	46,507,683	702,473,342		
9	8,898,295	12,553,758	12,640,336	10,261,486	9,056,384	6,579,271	4,162,666	2,843,169	2,419,230	2,387,272	2,538,415	5,153,472	79,493,753		
10	87,904,173	120,885,295	121,318,826	98,827,257	87,835,739	65,916,144	43,663,006	30,181,487	24,240,597	24,084,472	25,448,945	51,661,155	781,967,095		
11															
12	<b>Washington WACOG Calculation</b>														
13															
14	<b>Hedged Rockies supply excluding Gas Reserves</b>														
15	Hedged Rockies supply volumes														
16	\$4,786,485	\$4,946,546	\$4,946,546	\$4,289,978	\$3,819,929	\$668,838	\$291,230	\$281,835	\$291,230	\$291,230	\$281,835	\$706,374	\$26,592,053		
17	\$0.29349	\$0.29352	\$0.29352	\$0.28184	\$0.27704	\$0.17775	\$0.19010	\$0.19010	\$0.19010	\$0.19010	\$0.19010	\$0.19010	\$0.21791		
18	Hedged Rockies supply price per therm														
19	3,205,453	3,253,991	3,158,060	2,802,586	3,057,810	2,925,208	2,980,556	2,838,750	2,902,190	2,856,640	2,728,169	2,773,965	35,483,378		
20	\$2,427,231	\$2,462,148	\$2,396,282	\$2,191,863	\$2,324,806	\$2,249,506	\$2,303,111	\$2,195,351	\$2,191,124	\$2,159,342	\$2,082,356	\$2,098,767	\$27,081,888		
21	\$0.75722	\$0.75665	\$0.75878	\$0.78209	\$0.76028	\$0.76901	\$0.77271	\$0.77335	\$0.75499	\$0.75590	\$0.76328	\$0.75659	\$0.76323		
22	Gas Reserves price per therm														
23	Washington percentage of total load (line 36 + line 37)														
24	10.11%	10.4%	10.4%	10.4%	10.3%	10.0%	9.5%	9.4%	10.0%	9.9%	10.0%	10.0%	10.2%		
25	Total System Commodity Cost (line 14 above)														
26	\$20,677,740	\$31,031,901	\$31,492,396	\$27,377,886	\$20,945,102	\$11,480,214	\$8,073,799	\$6,496,813	\$5,928,458	\$6,248,336	\$5,910,021	\$9,606,811	\$185,269,477		
27	\$4,786,485	\$4,946,546	\$4,946,546	\$4,289,978	\$3,819,929	\$668,838	\$291,230	\$281,835	\$291,230	\$291,230	\$281,835	\$706,374	\$26,592,053		
28	\$2,427,231	\$2,462,148	\$2,396,282	\$2,191,863	\$2,324,806	\$2,249,506	\$2,303,111	\$2,195,351	\$2,191,124	\$2,159,342	\$2,082,356	\$2,098,767	\$27,081,888		
29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
30	\$13,464,024	\$23,623,207	\$24,149,568	\$20,896,045	\$14,800,368	\$8,571,870	\$5,479,458	\$4,019,626	\$3,446,105	\$3,797,765	\$3,545,830	\$6,801,670	\$132,595,536		
31	87,904,173	120,885,295	121,318,826	98,827,257	87,835,739	65,916,144	43,663,006	30,181,487	24,240,597	24,084,472	25,448,945	51,661,155	781,967,095		
32	16,308,600	16,852,220	16,852,220	15,221,360	13,786,180	3,706,500	1,532,020	1,482,600	1,532,020	1,532,020	1,482,600	3,830,050	94,120,390		
33	3,205,453	3,253,991	3,158,060	2,802,586	3,057,810	2,925,208	2,980,556	2,838,750	2,902,190	2,856,640	2,728,169	2,773,965	35,483,378		
34	68,390,120	100,779,085	101,308,546	80,803,310	70,989,749	59,284,436	39,150,430	25,860,137	19,806,387	19,695,812	21,238,176	45,057,140	652,363,327		
35	Total System load excluding Rockies hedged & Gas Reserves														
36	\$0.19687	\$0.23441	\$0.23638	\$0.25860	\$0.20849	\$0.14459	\$0.13996	\$0.15544	\$0.17399	\$0.19282	\$0.16696	\$0.15096	\$0.20325		
37	System price excluding Rockies hedged & Gas Reserves (line 56 + line 61)														
38	1,970,919	2,091,046	2,081,069	1,874,490	1,735,137	663,171	428,695	406,207	443,421	434,477	421,077	660,402	13,210,111		
39	\$578,445	\$613,764	\$610,835	\$528,306	\$480,702	\$117,879	\$81,495	\$77,220	\$84,294	\$82,594	\$80,047	\$121,798	\$3,457,379		
40	Washington allocation of Rockies hedged supply														
41	Rockies hedged supply needed for Washington (line 50 * (line 42 + line 46))														
42	Cost of Rockies hedged supply allocated to Washington (line 66 * line 44)														
43	<b>Washington portfolio</b>														
44	Volumes														
45	8,898,295	12,553,758	12,640,336	10,261,486	9,056,384	6,579,271	4,162,666	2,843,169	2,419,230	2,387,272	2,538,415	5,153,472	79,493,753		
46	1,970,919	2,091,046	2,081,069	1,874,490	1,735,137	663,171	428,695	406,207	443,421	434,477	421,077	660,402	13,210,111		
47	6,927,376	10,462,712	10,559,267	8,386,996	7,321,247	5,916,100	3,733,971	2,436,962	1,975,809	1,952,795	2,117,338	4,493,070	66,283,642		
48	Remaining Washington load														
49	Cost														
50	\$578,445	\$613,764	\$610,835	\$528,306	\$480,702	\$117,879	\$81,495	\$77,220	\$84,294	\$82,594	\$80,047	\$121,798	\$3,457,379		
51	\$1,363,792	\$2,452,564	\$2,517,118	\$2,168,877	\$1,526,407	\$855,409	\$522,607	\$378,801	\$343,771	\$376,538	\$353,511	\$678,274	\$18,537,669		
52	\$1,942,237	\$3,066,328	\$3,127,953	\$2,697,183	\$2,007,109	\$973,288	\$604,101	\$456,021	\$428,065	\$459,132	\$433,557	\$800,072	\$16,995,048		
53	Total cost of Washington portfolio														
54	\$0.21827	\$0.24426	\$0.24746	\$0.26285	\$0.22162	\$0.14793	\$0.14512	\$0.16039	\$0.17694	\$0.19232	\$0.17080	\$0.15525	\$0.21379		
55	\$0.22825	\$0.25543	\$0.25877	\$0.27487	\$0.23175	\$0.15469	\$0.15175	\$0.16772	\$0.18503	\$0.20111	\$0.17861	\$0.16235	\$0.22356		
56	<b>WASHINGTON BILLING WACOG</b>														
57	<b>Oregon WACOG Calculation</b>														
58	Total system commodity cost														
59	\$20,677,740	\$31,031,901	\$31,492,396	\$27,377,886	\$20,945,102	\$11,480,214	\$8,073,799	\$6,496,813	\$5,928,458	\$6,248,336	\$5,910,021	\$9,606,811	\$185,269,477		
60	\$1,942,237	\$3,066,328	\$3,127,953	\$2,697,183	\$2,007,109	\$973,288	\$604,101	\$456,021	\$428,065	\$459,132	\$433,557	\$800,072	\$16,995,048		
61	\$18,735,503	\$27,965,573	\$28,364,443	\$24,680,702	\$18,937,993	\$10,506,926	\$7,469,697	\$6,040,791	\$5,500,393	\$5,789,204	\$5,476,464	\$8,806,739	\$168,274,428		
62	Total commodity cost for Oregon														
63	\$0.23714	\$0.25815	\$0.26099	\$0.27867	\$0.24039	\$0.17707	\$0.18910	\$0.22096	\$0.25206	\$0.26682	\$0.23904	\$0.18936	\$0.23955		
64	\$0.24401	\$0.26563	\$0.26855	\$0.28674	\$0.18220	\$0.19458	\$0.22736	\$0.25936	\$0.27455	\$0.24596	\$0.19484	\$0.24649	\$0.24649		
65	<b>OREGON BILLING WACOG</b>														

NW Natural  
 2018-2019 PGA - SYSTEM: September Filing  
 Summary of Total Demand Charges

**SYSTEM COSTS**

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
	November	December	January	February	March	April	May	June	July	August	September	October	TOTAL		
	30	31	31	28	31	30	31	30	31	31	30	31	30	31	365
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
	\$4,190,973	\$4,330,672	\$4,330,672	\$3,911,576	\$4,330,672	\$4,095,947	\$4,232,479	\$4,095,947	\$4,232,479	\$4,232,479	\$4,095,947	\$4,232,479	\$4,095,947	\$4,232,479	\$50,312,323
	623,609	623,609	623,609	623,609	623,609	623,609	623,609	623,609	623,609	623,609	623,609	623,609	623,609	623,609	7,483,305
	300,101	300,101	300,101	300,101	300,101	267,865	267,865	267,865	267,865	267,865	267,865	300,101	267,865	300,101	3,407,800
	484,979	501,145	501,145	452,647	501,145	408,140	421,745	408,140	421,745	421,745	408,140	501,145	408,140	501,145	5,431,862
	612,390	631,603	631,603	573,964	631,603	612,390	631,603	612,390	631,603	631,603	612,390	631,603	612,390	631,603	7,444,745
	313,700	323,390	323,390	294,320	323,390	313,700	323,390	313,700	323,390	323,390	313,700	323,390	313,700	323,390	3,812,850
	18,688	18,688	18,688	18,688	18,688	18,688	18,688	18,688	18,688	18,688	18,688	18,688	18,688	18,688	224,258
	\$6,544,441	\$6,729,209	\$6,729,209	\$6,174,906	\$6,729,209	\$6,340,339	\$6,519,379	\$6,340,339	\$6,519,379	\$6,519,379	\$6,340,339	\$6,519,379	\$6,340,339	\$6,519,379	\$78,117,143

**NW Natural**  
**2018-2019 PGA - SYSTEM: September Filing**  
**Derivation of Washington per therm Non-Commodity Charges**  
**ALL VOLUMES IN THERMS**

**Washington Derivation of Demand Increments**

	(a)	(b)	(c)	Without Revenue Sensitive	WITH Revenue Sensitive (d)
1					
2					
3					
4	System Demand		\$78,117,143		
5	Washington Allocation Factor 1/		10.71%		
6	Washington Demand		\$8,366,346		
7					
8	Washington Firm Sales Forecasted Normal Volumes		78,137,156		
9	Washington Interruptible Sales Forecasted Normal Volumes		1,356,597		
10					
11					
12	Proposed Firm Demand Per Therm 2/		\$0.10643	\$0.11130	
13	Proposed Interruptible Demand 2/		\$0.03718	\$0.03888	
14	Proposed MDDV Demand Charge		\$1.59	\$1.66	
15					
16	Current Firm Demand Per Therm		\$0.11626	\$0.12158	
17	Current Interruptible Demand		\$0.04062	\$0.04248	
18	Current MDDV Demand Charge		\$1.74	\$1.82	
19					
20	Percent Change in Firm Demand		-8.46%		
21					
22					
23	1/Allocation Factor: 2018-19 PGA forecast firm sales volumes:				
24		<u>Washington</u>	<u>Oregon</u>	<u>System</u>	
25	Firm Sales	78,137,156	651,323,185	729,460,341	
26		10.71%	89.29%	100.00%	
27					
28	2/Calculation of Proposed Demand Rates:				
29					
30	Demand change factor		0.915		
31					
32	Firm Demand (line 16 * line 30)		\$0.10643	\$8,315,902	
33	Interruptible Demand (line 17 * line 30)		\$0.03718	\$50,444	
34				\$8,366,346	
35				\$0	

**NW Natural**  
**2018-2019 PGA - SYSTEM: September Filing**  
**Calculation of Winter WACOG**  
 Prices are per therm

1	Forecast price for AECO gas:		
2			
3		<u>AECO/NIT</u>	
4			
5	November	\$0.14200	
6	December	\$0.15711	
7	January	\$0.16636	
8	February	\$0.16553	
9	March	\$0.14740	
10	April	\$0.11098	
11	May	\$0.10573	
12	June	\$0.10868	
13	July	\$0.11728	
14	August	\$0.11723	
15	September	\$0.11611	
16	October	\$0.12085	
17			
18			
19	Average price, November-March	\$0.15568	average lines 5-9
20			
21	Annual average price, November-October	\$0.13127	average lines 5-16
22			
23	Ratio of winter to annual	1.18595	line 19 ÷ line 21
24			
25			
26			
OR	Oregon Annual WACOG	Without Rev Sensitive	WITH Rev Sensitive
OR	Oregon Winter WACOG	\$0.23955	\$0.24649
		\$0.28409	\$0.29708
		line 23 * \$0.23955	
WA	Washington Annual WACOG	\$0.21379	\$0.22356
WA	Washington Winter WACOG	\$0.25354	\$0.26513
		line 23 * \$0.21379	



**NW Natural  
 Rates & Regulatory Affairs  
 2018-19 Washington: September Filing Updating Energy Efficiency Schedules 201 & 203  
 Tariff Advice 18-05: Schedules 201 & 203 Effects on Revenue**

	<u>Amount</u>	<u>Reference</u>
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

  

<b><u>Temporary Increments</u></b>		
Removal of Current Temporary Increments		
Amortization of Annual PGA and Deferred Gas Costs	2,868,992	NWN 2016-17 Washington PGA rate development file September.xlsx
<b><u>Addition of Proposed Temporary Increments</u></b>		
Amortization of Annual PGA and Deferred Gas Costs	<u>(4,199,193)</u>	NWN 2017-18 Washington PGA rate development file September.xlsx
<b><u>Permanent Rate Adjustments</u></b>		
N/A	<u>0</u>	
<b>TOTAL OF ALL COMPONENTS OF RATE CHANGES</b>	<b><u>(\$1,330,201)</u></b>	
<b>2017 Washington CBR Normalized Total Revenues</b>	<b>\$69,186,477</b>	
<b>Effect of this filing, as a percentage change</b>	<b>-1.92%</b>	

## **COMFORT ZONE FOR WASHINGTON**

### **Lower Rates for Four Years Running**

On September 13, 2018, NW Natural filed a rate reduction request with the Washington Utilities and Transportation Commission (WUTC).

If approved, customers will see lower rates on monthly bills starting on November 1, 2018:

- Rates for residential customers will be about 7.2 percent less, which equals a monthly savings of about \$3.81 for the average home using around 57 therms a month.
- Rates for commercial customers will be about 7.7 percent less, which equals a monthly savings of about \$16.24 for the average business using around 244 therms a month.

The annual Purchased Gas Adjustment trues up differences between estimated and actual natural gas costs from the previous year. The rate changes also include other year-to-year adjustments and costs approved by regulators.

This year's filing marks the fourth year in a row for lower gas prices for NW Natural's Washington customers.

Continued on [back page]...

#### *Call-out box for front page*

"The cost of gas continues to drop nationally, and we're pleased to provide our customers with a product that is such a good value," said David H. Anderson, NW Natural president and CEO. "In fact, our Washington customers are paying less for gas than they did 15 years ago."

Continued from [front page]...

#### Reason for Lower Rates

The combined effects of the following three filings contribute to a drop in rates for Washington customers:

1. **Purchased Gas Adjustment**  
 A 7.6 percent or \$4.01 reduction on the average monthly residential bill, and a 8.1 percent or \$17.14 reduction on the average commercial bill. The filing trues up the differences between the estimated and actual cost of natural gas, and it establishes the customer costs for natural gas from Nov. 1, 2018 – Oct. 31, 2019.
2. **Energy Efficiency Programs**  
 A 0.4 percent or \$0.22 increase on the average monthly residential bill, and a 0.5 percent or \$0.98 increase on the average monthly commercial bill for energy efficiency programs that support cost-effective natural gas conservation.
3. **Low-Income Assistance**  
 A 0.01 percent or \$0.01 increase on the average monthly residential bill, and a 0.01 percent or \$0.08 increase on the average monthly commercial bill for programs that help low-income residential customers install energy efficiency improvements and stay warm during the winter.

Combined, the proposed changes for natural gas rates are:

<b>Type of Service</b>	<b>Schedule Number</b>	<b>Percent Change</b>
General Residential Sales Service	1	-5.1%
General Commercial Sales Service	1	-5.8%
Residential Sales Service	2	-7.2%
Commercial Sales Service	3	-7.7%
Industrial Sales Service	3	-9.0%
Residential Heating Dry-Out Service	27	-9.3%
Commercial Firm Sales	41	-9.5%
Non-Residential Firm Transportation	41	-0.1%
Industrial Firm Sales	41	-10.3%

Large Volume Commercial Firm Sales	42	-13.9%
Large Volume Commercial Interruptible Sales	42	-15.0%
Large Volume Industrial Firm Sales	42	-13.5%
Large Volume Industrial Interruptible Sales	42	-14.4%
Large Volume Firm Transportation	42	-0.1%
Large Volume Interruptible Transportation	42	-0.1%

*The percentages for Rate Schedule 41 and Rate Schedule 42 do not include the effect of demand costs.*

NW Natural's filings are requests, subject to public review and a decision by the WUTC. Customers may comment on the proposed rate changes by clicking "Submit a Comment" at [www.utc.wa.gov](http://www.utc.wa.gov), emailing [comments@utc.wa.gov](mailto:comments@utc.wa.gov), calling 1-888-333-9882 (WUTC), or mailing Washington Utilities and Transportation Commission, PO Box 47250, Olympia, WA 98504-7250. Customers can also request more information, review the filing, and find out about open meetings.

For more information, visit the Rates and Regulations section of [nwnatural.com](http://nwnatural.com), send a letter to NW Natural Rates and Regulatory, 220 NW 2<sup>nd</sup> Avenue, Portland, OR 97209; call 503-226-4211 and ask for the Rates and Regulatory Department, or email from [nwnatural.com/ContactUs/Email](mailto:nwnatural.com/ContactUs/Email).