EXHIBIT A

BEFORE THE WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

NW NATURAL SUPPORTING MATERIALS

Mist Recall

NWN WUTC Advice No. 24-13 / UG-_____ September 13, 2024

NW NATURAL

EXHIBIT A

Supporting Materials

Mist Recall

NWN WUTC ADVICE NO. 24-13 / UG-____

Description	Page
Calculation of Increments Allocated on the Equal Percentage of Margin Basis	1
Calculation of Effect on Customer Average Bill by Rate Schedule	2
Determination of Cost of Service	3
Effects on Revenue	4

NW Natural Rates & Regulatory Affairs 2024-2025 PGA Filing - Washington: September Filing Calculation of Increments Allocated on the EQUAL PERCENTAGE OF MARGIN BASIS

			PGA	Billing Rate from	WACOG & Demand from	Temps from Temporary						Proposed Amount:	\$ 52.427 Per	Mist Recall manent Increment	
				Rates page,		Increment page,	MARGIN	Volumetric	Customer		Total	Revenue Sensitive Multiplier:		sensitive factor is built in	
			Column D		Column B+C+D	Column A	Rate	Margin		Customers	Margin	Amount to Amortize:	52.427 to		
		-					E=B-C-D		8-				Multiplier	Allocation to RS	Increi
	Schedule	Block	Α	В	С	D	E	F = E * A	G	н	I = (G*H*12)+F		v	w	
	1R		329,987	\$2.04202	\$0.57282		\$0.83362	\$275,084	\$5.50	1,878	\$399,032		1.0	353	
	1C		15,693	\$2.04342	\$0.57282		\$0.86212	\$13,530	\$7.00	35	\$16,470		1.0	15	
	2R		60,818,465	\$1.70521	\$0.57282			\$33,911,160	\$8.00	88,378	\$42,395,448		1.0	37,532	
	3 CFS		20,700,936	\$1.65784	\$0.57282			\$11,032,564	\$22.00	6,785	\$12,823,804		1.0	11,353	
	3 IFS		219,194	\$1.59481	\$0.57282		\$0.54335	\$119,099	\$22.00	21	\$124,643		1.0	110	
	27	Block 1	60,524	\$1.44891	\$0.57282 \$0.47117		\$0.31164	\$18,862	\$9.00 \$250	390	\$60,982		1.0	54	\$0. \$0.
	41C Firm Sales	Block 2	1,451,662 2.356.915	\$1.41883 \$1.36076	\$0.47117		\$0.41564 \$0.36624	\$1,466,566	\$200	97	\$1,757,566		1.0	1,556	\$0.
	41I Firm Sales	Block 1	380,477	\$1.31637	\$0.47117		\$0.30024	\$418,576	\$250.00	21	\$481,576		1.0	426	
	41171111134165	Block 2	848,324	\$1.27060	\$0.47117		\$0.32698	\$410,370	\$230.00	21	φ461,370		1.0	420	\$0.
	41C Interr Sales	Block 1	0	\$1.38551	\$0.47117		\$0.38413	\$0	\$250.00	0	\$0		1.0	0	
		Block 2	0	\$1.33169	\$0.47117		\$0.33845	**	*	-	**		1.0	-	\$0.
	41I Interr Sales	Block 1	0	\$1.31084	\$0.47117		\$0.36340	\$0	\$250.00	0	\$0		1.0	0	
		Block 2	0	\$1.26598	\$0.47117	\$0.47464	\$0.32017						1.0		\$0.
	41C Firm Trans	Block 1	169,476	\$0.88754	\$0.00000	\$0.50969	\$0.37785	\$158,308	\$500.00	8	\$206,308		0.0	0	\$0.
		Block 2	283,174	\$0.84122	\$0.00000	\$0.50831	\$0.33291						0.0		\$0.
	41I Firm Trans	Block 1	0	\$0.87571	\$0.00000	*******	\$0.36781	\$0	\$500.00	0	\$0		0.0	0	+
		Block 2	0	\$0.83080	\$0.00000		\$0.32406						0.0		\$0.
	42C Firm Sales	Block 1	665,308	\$1.17942	\$0.47117		\$0.20585	\$361,878	\$1,300.00	8	\$486,678		1.0	431	
		Block 2	902,132	\$1.15330	\$0.47117		\$0.18426						1.0		\$0.
		Block 3	353,351	\$1.10137	\$0.47117		\$0.14133						1.0		\$0.
		Block 4	77,473	\$1.06716	\$0.47117		\$0.11305						1.0		\$0.
		Block 5	0	\$1.02158	\$0.47117		\$0.07536						1.0		\$0.
	42I Firm Sales	Block 6 Block 1	000070	\$0.96459	\$0.47117 \$0.47117		\$0.02825 \$0.16617	\$970 70°	\$1,300.00	11	\$450,382		1.0	399	\$0. \$0.
	421 Firm Sales		966,970	\$1.10516				\$2/8,782	\$1,300.00	11	\$450,382			399	
		Block 2 Block 3	708,323 102,042	\$1.08691 \$1.05063	\$0.47117 \$0.47117		\$0.14874 \$0.11406						1.0 1.0		\$0. \$0.
		Block 4			\$0.47117		\$0.11406								
		Block 5	12,115 0	\$1.02675 \$0.99494	\$0.47117		\$0.09125						1.0 1.0		\$0. \$0.
		Block 6	0	\$0.95511	\$0.47117		\$0.00085						1.0		\$0.
	42C Firm Trans	Block 1	251.608	\$0.65683	\$0.00000		\$0.02280	\$224.401	\$1.550.00	1	\$243.001		0.0	0	
	42C FIIII II alis	Block 2	503,215	\$0.64019	\$0.00000		\$0.13442	\$224,401	\$1,550.00	1	φ243,001		0.0	U	\$0.
		Block 3	503,215	\$0.60706	\$0.00000		\$0.10600						0.0		\$0.
		Block 4	738,618	\$0.58527	\$0.00000		\$0.08481						0.0		\$0.
		Block 5	0	\$0.55621	\$0.00000		\$0.05654						0.0		\$0.
		Block 6	0	\$0.51988	\$0,00000		\$0.02120						0.0		\$0.0
	42I Firm Trans	Block 1	1,054,570	\$0.65408	\$0.00000		\$0.15161	\$842.181	\$1,550.00	8	\$990,981		0.0	0	
		Block 2	1,523,772	\$0.63772	\$0,00000		\$0.13571	**,	*-,	-	*,		0.0	•	\$0.0
		Block 3	1,376,179	\$0.60515	\$0.00000	\$0.50109	\$0.10406						0.0		\$0.
		Block 4	3,236,161	\$0.58376	\$0.00000		\$0.08326						0.0		\$0.0
		Block 5	1,132,591	\$0.55519	\$0.00000	\$0.49969	\$0.05550						0.0		\$0.
		Block 6	0	\$0.51950	\$0.00000	\$0.49868	\$0.02082						0.0		\$0.0
	42C Interr Sales	Block 1	256,616	\$1.13350	\$0.47117		\$0.16854	\$145,445	\$1,300.00	2	\$176,645		1.0	156	\$0.
		Block 2	488,108	\$1.11259	\$0.47117	\$0.49055	\$0.15087						1.0		\$0.
		Block 3	219,844	\$1.07092	\$0.47117		\$0.11568						1.0		\$0.
		Block 4	33,747	\$1.04351	\$0.47117	\$0.47980	\$0.09254						1.0		\$0.
		Block 5	0	\$1.00702	\$0.47117		\$0.06171						1.0		\$0.
		Block 6	0	\$0.96138	\$0.47117		\$0.02315						1.0		\$0.
	42I Interr Sales	Block 1	124,246	\$1.10585	\$0.47117		\$0.16331	\$31,848	\$1,300.00	1	\$47,448		1.0	42	\$0.
		Block 2	79,054	\$1.08791	\$0.47117		\$0.14619						1.0		\$0.0
		Block 3	0	\$1.05223	\$0.47117		\$0.11210						1.0		\$0.
		Block 4	0	\$1.02876	\$0.47117		\$0.08969						1.0		\$0.
		Block 5	0	\$0.99743	\$0.47117		\$0.05978						1.0		\$0.
	42C Inter Trans	Block 6 Block 1	0	\$0.95832 \$0.64356	\$0.47117 \$0.00000		\$0.02241 \$0.14169	\$0	\$1,550.00	0	\$0		0.0	0	\$0. \$0.
	420 IIILEI ITANS							\$0	\$1,000.00	U	\$0			0	
		Block 2 Block 3	0	\$0.62832 \$0.59796	\$0.00000 \$0.00000		\$0.12685 \$0.09727						0.0		\$0. \$0.
		Block 4	0	\$0.59798	\$0.00000		\$0.09727						0.0		\$0.
		Block 5	0	\$0.57798	\$0.00000		\$0.07782						0.0		\$0.
		Block 6	0	\$0.53136	\$0.00000		\$0.03189						0.0		\$0.
	42I Inter Trans	Block 1	978,826	\$0.64663	\$0.00000		\$ \$0.14430	\$899.467	\$1,550.00	10	\$1,085,467		0.0	0	
		Block 2	1.713.725	\$0.63106	\$0.00000		\$0.12917	,,.o/	,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0.0	v	\$0.
		Block 3	1,330,900	\$0.60005	\$0.00000		\$0.09905						0.0		\$0.
		Block 4	3,813,650	\$0.57968	\$0.00000		\$0.07925						0.0		\$0.
		Block 5	1,945,561	\$0.55248	\$0.00000		\$0.05284						0.0		\$0.
		Block 6	0	\$0.51848	\$0.00000		\$0.01981						0.0		\$0.
	43 Firm Trans		0	\$0.50313	\$0.00000		\$0.00491	\$0	\$38,000.00	0	\$0		0.0	0	\$0.
	43 Interr Trans		0	\$0.50313	\$0.00000		\$0.00491		\$38,000.00	0	\$0		0.0		\$0.
	Intentionally blank														
Totals			112,726,745					\$50,197,751			\$61,746,431		\$59,220,674	\$52,427	
	es for line 2 above:									Column G			Line 50		
Source Inputs															

Note: Allocation to rate schedules or blocks with zero volumes is calculated on an overall margin percentage change basis.

NW Natural Rates & Regulatory Affairs 2024-2025 PGA Filing - Washington: September Filing PGA Effects on Average Bill by Rate Schedule Calculation of Effect on Customer Average Bill by Rate Schedule [1]

		PGA Normalized Volumes page,	Therms in	Therms Monthly	Minimum Monthly	CCA Monthly	Minimum Monthly	11/1/2023 Billing	11/1/2023 Current	11/1/2024	11/1/2024 Mist Recall	11/1
	-	Column D	Block	Average use	Charge	Avg. Credit	Charge	Rates	Average Bill[2]	Rates	Average Bill	% Bill
Schedule	Block	Α	В	С			D	E	F=D+(C * E) F	s	T = D+(C*S) T	
1R		329,987	N/A	15.0	\$5.50	\$5.10	\$0.40	\$2.04202	\$31.03	\$2.04309	\$31.05	
1C		15,693	N/A	37.0	\$7.00	\$16.67	(\$9.67)	\$2.04342	\$65.94	\$2.04438	\$65.97	
2R		60,818,465	N/A	57.0	\$8.00	\$19.36	(\$11.36)	\$1.70521	\$85.84	\$1.70583	\$85.87	
3 CFS		20,700,936	N/A	254.0	\$22.00	\$81.50		\$1.65784	\$361.59	\$1.65839	\$361.73	
3 IFS		219,194	N/A	870.0	\$22.00	\$396.95	(\$374.95)		\$1,012.53	\$1.59531	\$1,012.97	
27 41C Firm Sales	Block 1	60,524 1,451,662	N/A 2,000	13.0 3,272.0	\$9.00 \$250.00	\$0.00 \$1,244.55	\$9.00 (\$994.55)	\$1.44891 \$1.41883	\$27.84	\$1.44980 \$1.41927	\$27.85	
410 Filli Sales	Block 2	2,356,915	all additional	3,272.0	\$230.00	φ1,244.JJ	(\$554.55)	\$1.36076		\$1.41527		
	TOTAL	2,000,010	uttuuutuonut					ψ1.00070	\$3,574.00	Ψ1.00110	\$3,575.37	
41I Firm Sales	Block 1	380,477	2,000	4,876.0	\$250.00	\$1,492.26	(\$1,242.26)	\$1.31637		\$1.31675		
	Block 2	848,324	all additional					\$1.27060		\$1.27093		
	TOTAL								\$5,044.73		\$5,046.43	
41C Interr Sales	Block 1	0	2,000	0.0	\$250.00	\$1,244.55	(\$994.55)	\$1.38551		\$1.38591		
	Block 2 TOTAL	0	all additional					\$1.33169	(\$994.55)	\$1.33204	(\$994.55)	
41I Interr Sales	Block 1	0	2,000	0.0	\$250.00	\$1,492.26	(\$1,242.26)	\$1.31084	(4994.00)	\$1.31122	(4554.55)	
421 mich Gales	Block 2	0	all additional	0.0	\$200.00	ψ1,40L.L0	(41,2-12,20)	\$1.26598		\$1.26631		
	TOTAL								(\$1,242.26)		(\$1,242.26)	
41C Firm Trans	Block 1	169,476	2,000	4,715.0	\$500.00	\$1,244.55	(\$744.55)	\$0.88754		\$0.88754		
	Block 2	283,174	all additional					\$0.84122		\$0.84122		
	TOTAL								\$3,314.44		\$3,314.44	
41I Firm Trans	Block 1 Block 2	0	2,000 all additional	0.0	\$500.00	\$1,492.26	(\$992.26)	\$0.87571 \$0.83080		\$0.87571 \$0.83080		
	TOTAL	U	att auditionat					φυ.οουου	(\$992.26)	φυ.οουου	(\$992.26)	
42C Firm Sales	Block 1	665,308	10,000	20,815.0	\$1,300.00	\$10,512.74	(\$9,212.74)	\$1.17942	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$1.17967	(+202.20)	
	Block 2	902,132	20,000	.,		, , ,	,,	\$1.15330		\$1.15352		l
	Block 3	353,351	20,000					\$1.10137		\$1.10154		l
	Block 4	77,473	100,000					\$1.06716		\$1.06729		
	Block 5	0	600,000					\$1.02158		\$1.02167		
	Block 6	0	all additional					\$0.96459	\$15,054.40	\$0.96462	645 050 00	
42I Firm Sales	TOTAL Block 1	966,970	10,000	13.556.0	\$1 300 00	\$13,852.77	(\$12,552.77)	\$1 10516	\$15,054.40	\$1.10540	\$15,059.28	
42111111130103	Block 2	708,323	20,000	10,000.0	Ψ1,500.00	ψ10,032.77	(ψ12,552.77)	\$1.08691		\$1.08712		
	Block 3	102,042	20,000					\$1.05063		\$1.05079		
	Block 4	12,115	100,000					\$1.02675		\$1.02688		
	Block 5	0	600,000					\$0.99494		\$0.99503		
	Block 6	0	all additional					\$0.95511		\$0.95514		
400 F	TOTAL	054.000	40.000	400 000 0	A4 550 00	A40 540 74	(40,000,74)	A0 05000	\$2,363.88	** ****	\$2,367.03	
42C Firm Trans	Block 1 Block 2	251,608 503.215	10,000 20,000	166,388.0	\$1,550.00	\$10,512.74	(\$8,962.74)	\$0.65683 \$0.64019		\$0.65683 \$0.64019		
	Block 3	503,215	20,000					\$0.60706		\$0.60706		
	Block 4	738,618	100,000					\$0.58527		\$0.58527		
	Block 5	0	600,000					\$0.55621		\$0.55621		
	Block 6	0	all additional					\$0.51988		\$0.51988		
	TOTAL								\$90,192.73		\$90,192.73	
42I Firm Trans	Block 1 Block 2	1,054,570 1,523,772	10,000 20,000	86,701.0	\$1,550.00	\$13,852.77	(\$12,302.77)	\$0.65408 \$0.63772		\$0.65408 \$0.63772		
	Block 3	1,376,179	20,000					\$0.60515		\$0.60515		
	Block 4	3,236,161	100,000					\$0.58376		\$0.58376		
	Block 5	1,132,591	600,000					\$0.55519		\$0.55519		
	Block 6	0	all additional					\$0.51950		\$0.51950		
	TOTAL								\$40,520.01		\$40,520.01	
42C Interr Sales	Block 1	256,616	10,000	41,596.0	\$1,300.00	\$10,512.74	(\$9,212.74)			\$1.13368		
	Block 2 Block 3	488,108	20,000					\$1.11259		\$1.11275		l
	Block 4	219,844 33,747	20,000 100,000					\$1.07092 \$1.04351		\$1.07104 \$1.04361		l
	Block 5	33,747	600,000					\$1.04351		\$1.04361		l
	Block 6	0	all additional					\$0.96138		\$0.96140		l
	TOTAL								\$36,792.45		\$36,798.84	
42I Interr Sales	Block 1	124,246	10,000	16,942.0	\$1,300.00	\$13,852.77	(\$12,552.77)			\$1.10607		
	Block 2	79,054	20,000					\$1.08791		\$1.08810		l
	Block 3	0	20,000					\$1.05223		\$1.05238		l
	Block 4 Block 5	0	100,000 600.000					\$1.02876 \$0.99743		\$1.02888 \$0.99751		l
	Block 6	0	all additional					\$0.95832		\$0.95835		l
	TOTAL	Ü						,	\$6,058.00		\$6,061.52	l
42C Inter Trans	Block 1	0	10,000	0.0	\$1,550.00	\$10,512.74	(\$8,962.74)	\$0.64356		\$0.64356		
	Block 2	0	20,000					\$0.62832		\$0.62832		l
	Block 3	0	20,000					\$0.59796		\$0.59796		l
	Block 4 Block 5	0	100,000					\$0.57798 \$0.55136		\$0.57798		l
	Block 6	0	600,000 all additional					\$0.55136 \$0.51805		\$0.55136 \$0.51805		l
	TOTAL	Ü						,1000	(\$8,962.74)		(\$8,962.74)	l
42I Inter Trans	Block 1	978,826	10,000	81,522.0	\$1,550.00	\$13,852.77	(\$12,302.77)	\$0.64663	, ,	\$0.64663		
	Block 2	1,713,725	20,000					\$0.63106		\$0.63106		l
	Block 3	1,330,900	20,000					\$0.60005		\$0.60005		l
	Block 4	3,813,650	100,000					\$0.57968		\$0.57968		l
	Block 5	1,945,561	600,000					\$0.55248		\$0.55248		l
	Block 6 TOTAL	0	all additional					\$0.51848	\$37,058.40	\$0.51848	\$37,058.40	l
43 Firm Trans	IOIAL	0	N/A	0.0	\$38,000.00		\$38,000.00	\$0.50313	\$37,058.40	\$0.50313	\$37,058.40	
43 Interr Trans		0	N/A	0.0	\$38,000.00		\$38,000.00	\$0.50313	\$38,000.00	\$0.50313	\$38,000.00	
ntentionally blank										I		
	1 and 42 c	ustomers may cho	ose demand cl	narges at a volu schedules.	umetric rate o	or based on M	IDDV. For conv	enience of p	oresentation,			

Sources:			
Direct Inputs	per Tariff	per Tariff	
Rates in summary		Column A	

NW Natural Mist Recall to Core from Interstate - June 2024 Determination of Cost of Service (\$000)

Input Capital Costs and Rates			
Cost of Capital			Weighted
	% of Capital	Cost	Cost
Debt	50.50%	4.45%	2.25%
Short Term Debt	1.00%	75.60%	0.01%
Preferred Equity	0.00%	0.00%	0.00%
Common Equity	48.50%	9.40%	4.56%
	100.00%		6.81%
State Tax Rate			0.00%
Federal Tax Rate			21.00%
Revenue Sensitive Rate			4%
Depreciation Rate			2%
Property Tax Rate			2%
Investment			\$458,129

Washington Recall Investement

			WA share
1	Depreciation		6,873
2	Property Taxes		6,872
	Taxes on Equity Return		
3		State	0
4		Federal	5,510
5		Total Taxes	5,510
	Return on Rate Base		
6		Debt	10,217
7		Short Term Debt	36
8		Preferred Equity	0
9		Common Equity	20,729
10		Total Return	30,983
11	Subtotal Cost of Service		50,238
12	Revenue Sensitive Items		2,189
13	Total Cost of Service		\$52,427

NW Natural Rates & Regulatory Affairs

2024-25 Washington: September Filing

Tariff Advice 24-13: Mist Recall

1		<u>Amount</u>
2		
3	<u>Temporary Increments</u>	
4		
5	Removal of Current Temporary Increments	
6	Amortization of Mist Recall	0
7		
8	Addition of Proposed Temporary Increments	
9	Amortization of Mist Recall	52,427
10		
11		
12	TOTAL OF ALL COMPONENTS OF RATE CHANGES	\$52,427
13	•	
14		
15		
16	2023 Washington CBR Normalized Total Revenues	\$121,797,100
17		
18	Effect of this filing, as a percentage change	0.04%