

EXHIBIT A

BEFORE THE
WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

CASCADE NATURAL GAS CORPORATION

Annual Purchased Gas Cost

CNGC WUTC Advice No. W18-11-01

November 30, 2018

Shaded means requires manual entry from Prior Year Washington PGA Gas Cost Workbook

	8/1/2016			CURRENT COST OF GAS		
	UNITS	RATE	AMOUNT	COMMODITY	DEMAND	
CANADIAN UPSTREAM RESV COSTS	216,495	\$10.614740	\$2,298,035		\$2,298,035	CANADIAN UPSTREAM RESV COSTS
DOMESTIC UPSTREAM NON-DIRECT RESV COSTS	183,931	\$1.350000	\$248,307		\$248,307	DOMESTIC UPSTREAM NON-DIRECT RESV COSTS
SUPPLY DEMAND CHARGES	277,182	\$0.050676	\$14,046	\$14,046		SUPPLY DEMAND CHARGES
COMPANY CONTRACT SUPPLY COMMODITY	217,816,913	\$0.267639	\$58,296,381	\$58,296,381		COMPANY CONTRACT SUPPLY COMMODITY
GTN T-1 Agmt 00179	113,670	\$7.918449	\$900,087		\$900,087	GTN T-1 Agmt 00179
GTN T-1 (Malin) Agmt 02812	0	\$5.483652	\$0		\$0	GTN T-1 (Malin) Agmt 02812
GTN T-3 (Expansion) Agmt 00152	0	\$4.216036	\$0		\$0	GTN T-3 (Expansion) Agmt 00152
GTN 2003 Expansion Agmt 08844	0	\$5.463652	\$0		\$0	GTN 2003 Expansion Agmt 08844
GTN South to North Agmt 12094	18,393	\$5.090367	\$93,628		\$93,628	GTN South to North Agmt 12094
GTN COMMODITY	23,738,282	\$0.034393	\$816,431	\$816,431		GTN COMMODITY
NWP TF-1 100002 (principle transport--All Rec/All Del contract)	1,799,706	\$14.432818	\$25,974,834		\$25,974,834	NWP TF-1 100002 (principle transport--All Rec/All Del contract)
NWP TF-1 Direct to Washington /1	364,650	\$14.432818	\$5,262,927		\$5,262,927	NWP TF-1 Direct to Washington /1
NWP TF-1 Split to specific OR and WA points	440,474	\$14.432818	\$6,357,285		\$6,357,285	NWP TF-1 Split to specific OR and WA points
NWP TF-1 Weyerhaeuser	50,000	\$14.432818	\$721,641		\$721,641	NWP TF-1 Weyerhaeuser
TF-1 COMMODITY	232,718,951	\$0.003130	\$728,410	\$728,410		TF-1 COMMODITY
LS-1 DEMAND	685,452	\$0.944255	\$647,242		\$647,242	LS-1 DEMAND
LS-1 CAPACITY	6,000,996	\$0.120815	\$725,010		\$725,010	LS-1 CAPACITY
LS-1 COMMODITY	6,000,996	\$0.290310	\$1,742,149	\$1,742,149		LS-1 COMMODITY
LS-INVENTORY	6,000,996	\$0.017448	\$104,703		\$104,703	LS-INVENTORY
LS-1 LIQUEFACTION	6,000,996	\$0.090855	\$545,220		\$545,220	LS-1 LIQUEFACTION
LS-1 VAPORIZATION	6,000,996	\$0.003386	\$20,319		\$20,319	LS-1 VAPORIZATION
TF-2 TRANSPORTATION CAPACITY	16,441	\$14.965000	\$246,041		\$246,041	TF-2 TRANSPORTATION CAPACITY
TF-2 TRANSPORTATION COMMODITY	6,000,996	\$0.003000	\$18,003	\$18,003		TF-2 TRANSPORTATION COMMODITY
SGS-1 DEMAND	147,303	\$0.570130	\$83,982		\$83,982	SGS-1 DEMAND
SGS-1 CAPACITY	5,476,756	\$0.020805	\$113,944		\$113,944	SGS-1 CAPACITY
SGS-1 COMMODITY	5,476,756	\$0.262767	\$1,439,109	\$1,439,109		SGS-1 COMMODITY
SGS-1 INVENTORY	5,476,756	\$0.015792	\$86,490		\$86,490	SGS-1 INVENTORY
TF-2 TRANSPORTATION CAPACITY	15,005	\$14.965000	\$224,547		\$224,547	TF-2 TRANSPORTATION CAPACITY
TF-2 TRANSPORTATION COMMODITY	5,476,756	\$0.003000	\$16,430	\$16,430		TF-2 TRANSPORTATION COMMODITY
SGS-JPEXP DEMAND	263,214	\$1.480440	\$389,672		\$389,672	SGS-JPEXP DEMAND
SGS-JPEXP CAPACITY	3,171,774	\$0.127020	\$402,879		\$402,879	SGS-JPEXP CAPACITY
SGS-JPEXP STORAGE COMMODITY	3,171,774	\$0.166341	\$527,597	\$527,597		SGS-JPEXP STORAGE COMMODITY
SGS-JPEXP INVENTORY	3,171,774	\$0.009997	\$31,709		\$31,709	SGS-JPEXP INVENTORY
TF-2 TRANSPORTATION CAPACITY	8,690	\$0.000000	\$0		\$0	TF-1 TRANSPORTATION CAPACITY
TF-2 TRANSPORTATION COMMODITY	3,171,774	\$0.003000	\$9,515	\$9,515		TF-1 TRANSPORTATION COMMODITY
SGS-JP3 DEMAND	84,027	\$0.570130	\$47,906		\$47,906	SGS-JP3 DEMAND
SGS-JP3 CAPACITY	2,812,420	\$0.020805	\$58,512		\$58,512	SGS-JP3 CAPACITY
SGS-JP3 STORAGE COMMODITY	2,812,420	\$0.248244	\$698,168	\$698,168		SGS-JP3 STORAGE COMMODITY
SGS-JP3 STORAGE INVENTORY	2,812,420	\$0.014919	\$41,960		\$41,960	SGS-JP3 STORAGE INVENTORY
TF-2 TRANSPORTATION CAPACITY	7,705	\$14.965000	\$115,309		\$115,309	TF-2 TRANSPORTATION CAPACITY
TF-2 TRANSPORTATION COMMODITY	2,812,420	\$0.003000	\$8,437	\$8,437		TF-2 TRANSPORTATION COMMODITY
SGS-TBD1 DEMAND	0	\$0.000000	\$0		\$0	SGS-TBD1 DEMAND
SGS-TBD1 CAPACITY	0	\$0.000000	\$0		\$0	SGS-TBD1 CAPACITY
SGS-TBD1 STORAGE COMMODITY	0	\$0.000000	\$0	\$0		SGS-TBD1 STORAGE COMMODITY
SGS-TBD1 STORAGE INVENTORY	0	\$0.000000	\$0		\$0	SGS-TBD1 STORAGE INVENTORY
TF-2 TRANSPORTATION CAPACITY	0	\$0.000000	\$0		\$0	TF-2 TRANSPORTATION CAPACITY
TF-2 TRANSPORTATION COMMODITY	0	\$0.000000	\$0	\$0		TF-2 TRANSPORTATION COMMODITY
SGS-TBD2 DEMAND	0	\$0.000000	\$0		\$0	SGS-TBD2 DEMAND
SGS-TBD2 CAPACITY	0	\$0.000000	\$0		\$0	SGS-TBD2 CAPACITY
SGS-TBD2 STORAGE COMMODITY	0	\$0.000000	\$0	\$0		SGS-TBD2 STORAGE COMMODITY
SGS-TBD2 INVENTORY	0	\$0.000000	\$0		\$0	SGS-TBD2 INVENTORY
TF-2 TRANSPORTATION CAPACITY	0	\$0.000000	\$0		\$0	TF-2 TRANSPORTATION CAPACITY
TF-2 TRANSPORTATION COMMODITY	0	\$0.000000	\$0	\$0		TF-2 TRANSPORTATION COMMODITY
Core Mitigation (Net Capacity Release and Storage Revenues)			(\$6,585,561)		(\$6,557,501)	Core Mitigation (Net Capacity Release and Storage Revenues)
			\$0		\$0	
DAILY BALANCING NON-CORE CREDIT	650,332,175	(\$0.00020)	(\$130,066)		(\$130,066)	DAILY BALANCING NON-CORE CREDIT
WA COMMODITY VOLUMES FOR CORE RESOURCES	235,278,859		\$103,341,238	\$64,314,815	\$39,064,138	WA COMMODITY VOLUMES FOR CORE RESOURCES
LAST SALES/TRANSPORT VOLUMES Demand				235,278,859	235,278,859	
LAST PROPOSED AVERAGE RATE				\$0.27336	\$0.16603	

UNITS	CURRENT RATE	AMOUNT	CURRENT COST OF GAS		EMBEDDED DIFFERENCE	COMMODITY UNITS
			COMMODITY	DEMAND		
216,350	\$12.16307	\$2,631,478		\$2,631,478	\$333,443	
182,315	\$1.35000	\$246,125		\$246,125	(\$2,182)	
277,326	\$0.00000	\$0	\$0			
220,641,742	\$0.41684	\$ 91,972,725	\$91,972,725		\$ 33,676,345	220,641,742
113,686	\$7.91845	\$900,220		\$900,220	\$133	
0	\$5.46365	\$0		\$0		
0	\$4.21604	\$0		\$0		
0	\$5.46365	\$0		\$0		
18,231	\$5.09037	\$92,805		\$92,805		
2,676,898	\$0.03439	\$92,067	\$92,067		(\$724,364)	
1,801,917	\$14.24705	\$25,671,988		\$25,671,988	(\$302,846)	
364,650	\$14.24705	\$5,195,185		\$5,195,185	(\$67,742)	
440,609	\$14.24705	\$6,277,374		\$6,277,374	(\$79,911)	
50,000	\$14.24705	\$712,352		\$712,352	(\$9,289)	
235,225,417	\$0.00096	\$226,287	\$226,287		(\$502,123)	
686,294	\$0.94426	\$648,037		\$648,037	\$795	
5,995,046	\$0.12082	\$724,291		\$724,291	(\$719)	
5,995,046	\$0.35295	\$2,115,935	\$2,115,935		\$373,786	5,995,046
5,995,046	\$0.021212	\$127,168		\$127,168	\$22,465	
5,995,046	\$0.09086	\$544,680		\$544,680	(\$541)	
5,995,046	\$0.00339	\$20,299		\$20,299	(\$20)	
16,425	\$14.24705	\$234,005		\$234,005	(\$12,036)	
5,995,046	\$0.00083	\$4,988	\$4,988		(\$13,015)	
147,484	\$0.57013	\$84,085		\$84,085	\$103	
5,471,326	\$0.02081	\$113,831		\$113,831	(\$113)	
5,471,326	\$0.19733	\$1,079,677	\$1,079,677		(\$359,432)	5,471,326
5,471,326	\$0.011860	\$64,889		\$64,889	(\$21,602)	
14,990	\$14.24705	\$213,562		\$213,562	(\$10,985)	
5,471,326	\$0.00083	\$4,552	\$4,552		(\$11,878)	
263,537	\$1.48044	\$390,151		\$390,151	\$479	
3,168,629	\$0.12702	\$402,479		\$402,479	(\$399)	
3,168,629	\$0.20798	\$659,006	\$659,006		\$131,410	3,168,629
3,168,629	\$0.012499	\$39,606		\$39,606	\$7,898	
8,681	\$0.00000	\$0		\$0	\$0	
3,168,629	\$0.00083	\$2,636	\$2,636		(\$6,879)	
84,130	\$0.57013	\$47,965		\$47,965	\$59	
2,812,420	\$0.02081	\$58,512		\$58,512	\$0	
2,812,420	\$0.21849	\$614,485	\$614,485		(\$83,683)	2,812,420
2,812,420	\$0.013131	\$36,931		\$36,931	(\$5,029)	
7,705	\$14.24705	\$109,777		\$109,777	(\$5,532)	
2,812,420	\$0.00083	\$2,340	\$2,340		(\$6,097)	
0	\$0.00000	\$0		\$0	\$0	
0	\$0.00000	\$0		\$0	\$0	
0	\$0.00000	\$0	\$0		\$0	
0	\$0.00000	\$0		\$0	\$0	
0	\$0.00000	\$0	\$0		\$0	
0	\$0.00000	\$0		\$0	\$0	
0	\$0.00000	\$0	\$0		\$0	
0	\$0.00000	\$0		\$0	\$0	
0	\$0.00000	\$0	\$0		\$0	
0	\$0.00000	\$0		\$0	\$0	
0	\$0.00000	\$0	\$0		\$0	
		(\$4,228,208)		(\$4,228,208)	\$2,357,353	
738,352,650	(\$0.00040)	(\$295,341)		(\$295,341)	(\$165,275)	
238,089,163		\$137,838,943	\$96,774,697	\$41,064,245	\$34,512,574	238,089,163
SALES/TRANSPORT VOLUMES			238,089,163	238,089,163		
PROPOSED AVERAGE RATE			\$0.40646	\$0.17247	\$0.57893	
CURRENT AVERAGE RATE IN RATES			\$0.24240	\$0.17285	\$0.41525	
GROSS RATE CHANGE			\$0.16406	(\$0.00038)	\$0.16368	
REVENUE ADJUSTMENT FACTOR			1.04431	1.04431	1.04431	38,970,434
TOTAL PROPOSED ADJUSTMENT			\$0.17133	(\$0.00040)	\$0.17093	
ANNUAL GAS COST CHANGE DETERMINATION		\$	34,909,765			
			40.363%	-0.220%	28.273%	

CASCADE NATURAL GAS CORPORATION

EXHIBIT A

TABLE OF CONTENTS

<u>Description</u>	<u>Page</u>
WA Gas Cost Tracking	1-2
2018 PGA Gas Demand Cost Allocation	3
PGA Amount of Change by Rate Schedule	4
PGA Proposed Typical Monthly Bill by Class	5
PGA Derivation of Proposed Rate Adjustment	6

CASCADE NATURAL GAS CORPORATION
2018 PGA Gas Demand Cost Allocation

	Current	Proposed
Demand Costs	\$41,154,091	\$ 41,064,245
Commodity Costs	57,713,318	96,774,697

Rate Schedule	503	504	505/511	570	Total
Current Demand Rates	0.17499	0.17236	0.15930	0.14628	
% change (same for each sch)	-0.21245%	-0.21245%	-0.21245%	-0.21245%	
Proposed Demand Increment	\$ 0.17462	\$ 0.17199	\$ 0.15896	\$ 0.14597	
Proposed Demand Costs Collected	\$22,126,005	\$ 16,656,564	\$1,958,732	\$ 322,945	\$41,064,245
Proposed Change in Demand	(0.00037)	(0.00037)	(0.00034)	(0.00031)	
Revenue Adjustment Factor	1.04431	1.04431	1.04431	1.04431	
Proposed Rate Adjustment	\$ (0.00039)	\$ (0.00038)	\$ (0.00035)	\$ (0.00032)	
Proposed Volumes	126,710,735	96,843,965	12,322,045	2,212,418	238,089,163

Cascade Natural Gas Corporation
PGA AMOUNT OF CHANGE BY RATE SCHEDULE
Based Upon the Twelve Months Ended 10/31/18
State of Washington

Line No.	Description (a)	Rate Schedule (b)	Average # of Bills (c)	Forecasted Therms Sold (d)	Actual Revenue (e)	Per Therm Gas Cost Change (g)	Amount of Change (h)
CORE MARKET RATE SCHEDULES							
1	Residential	503	187,503	120,708,051	116,056,076	0.17094	20,633,773.66
2	Commercial	504	26,129	85,987,075	74,749,328	0.17095	14,699,447.00
3	Industrial Firm	505	469	12,170,369	8,684,282	0.17098	2,080,883.54
4	Large Volume	511	87	14,185,301	9,308,397	0.17098	2,425,395.61
5	Industrial Interruptible	570	9	2,174,622	1,265,692	0.17101	371,880.96
6	Subtotal Core		214,197	235,225,417	210,063,775		40,211,381
NONCORE MARKET RATE SCHEDULES							
7	Distribution	663	189	464,677,003	17,938,459	\$ -	
8	Special Contracts	9xx	11	256,575,918	5,620,239	\$ -	
9	Subtotal Non-core		200	721,252,921	23,558,698	\$ -	
10	CORE & NON-CORE		214,397	956,478,338	233,622,473	\$ -	40,211,381

Cascade Natural Gas Corporation
PGA PROPOSED TYPICAL MONTHLY BILL BY CLASS
State of Washington

Line No.	Description (a)	Typical Monthly Therm Use (b)	Avg Bill @ 11/1/18 Rates (c)	Present Filing Changes (d)	Proposed Typical Bill (e)	Percent Change (f)
1	Residential (503)	54	\$51.58	\$9.23	\$60.81	17.90%
2	Commercial (504)	274	\$238.40	\$46.84	\$285.24	19.65%
3	Industrial (505)	N/A*	\$0.71356	\$0.17098	\$0.88454	23.96%
4	Industrial Lg Vol (511)	N/A*	\$0.65620	\$0.17098	\$0.82718	26.06%
5	Interruptible (570)	N/A*	\$0.58203	\$0.17101	\$0.75304	29.38%

* The large variation among customers in the Industrial and Interruptible customer classes renders average consumption numbers meaningless, therefore only per therm figures have been listed.

Cascade Natural Gas Corporation
PGA DERIVATION OF PROPOSED RATE ADJUSTMENT
State of Washington

Line No.	Revised Description	503 Residential Customers	504 Commercial Customers	505/511 Firm Indust Customers	570 Interruptible Customers
1	WACOG Effective November 1, 2016	\$0.49569	\$0.49304	\$0.47993	\$0.46687
	WACOG Adjustment Effective November 1, 2018	(\$0.05980)	(\$0.05990)	(\$0.06043)	(\$0.06097)
	<u>Proposed Incremental Change</u>				
2	Residential	\$0.17094			
3	Commercial		\$0.17095		
4	Industrial Firm			\$0.17098	
5	Interruptible - CORE				\$0.17101
6	NON-CORE Customers				
7	Total Proposed Rate	\$0.60683	\$0.60409	\$0.59048	\$0.57691
	Schedule 595 - WACOG	0.11114	0.11105	0.11055	0.11004