



8113 W. GRANDRIDGE BLVD., KENNEWICK, WASHINGTON 99336-7166  
 TELEPHONE 509-734-4500 FACSIMILE 509-737-9803  
[www.cngc.com](http://www.cngc.com)

July 31, 2018

Oregon Public Utility Commission  
 201 High Street SE, Suite 100  
 Salem, OR 97301-3612

**Re: Advice No. CNG/O18-07-01, UG 356  
 UM 1558, Deferred Accounting for Purchased Gas Adjustment Schedule 177,  
 Purchased Gas Cost Adjustment and Schedule No. 191 Temporary Gas Cost Rate  
 Adjustment**

Attention: Filing Center

Pursuant to OAR 860-022-0070, Docket UM 1286 Order Nos. 11-196, 14-238, and 18-144, ORS 757.210 and ORS 757.259(5), Cascade hereby submits the following revisions to its Tariff P.U.C. OR No. 10, stated to become effective with service on and after November 1, 2018:

**Second Revision of Sheet No. 177.2  
 Second Revision of Sheet No. 191.1**

The purpose of this filing is to make the annual true up to Cascade's gas cost in accordance with the provisions established in Schedule No. 177, Purchase Gas Adjustment (PGA) Provision. The purchased gas cost proposed in this filing is due to a change in the cost of commodity gas supply, transportation capacity, and realignment of existing firm transportation capacity. In accordance with the PGA methodology, amortization of outstanding deferred gas cost balances is also included in this filing.

Tables 1 through 3 below summarize the changes in the following: 1) Forward looking commodity costs included in Schedule 177.2; 2) Demand costs included in Schedule 177.2; and 3) The combined changes to Schedule 177.2 (both commodity and demand)

**Table 1 - Schedule 177.2 Commodity**

<u>Rate Schedule</u>	<u>Present</u>	<u>Proposed</u>	<u>Change</u>
101, 104, 105, 111, 170	\$0.235890	\$0.209200	<b>(\$0.026690)</b>

**Table 2 - Schedule 177.2 Demand**

<u>Rate Schedule</u>	<u>Present</u>	<u>Proposed</u>	<u>Change</u>
101, 104, 105, 111, 170	\$0.170710	\$0.165290	<b>(\$0.005420)</b>

**Table 3 - Schedule 177.2 Commodity + Demand**

<u>Rate Schedule</u>	<u>Present</u>	<u>Proposed</u>	<u>Change</u>
101, 104, 105, 111, 170	\$0.406600	\$0.374490	<b>(\$0.032110)</b>

**Commodity Costs (Schedule 177.2)**

As shown in Table 1 above, the estimated commodity cost (WACOG) decreases \$0.026690 per therm. The proposed WACOG is \$0.209200 per therm compared to the present WACOG of \$0.235890 per therm included in rates.

Cascade has been hedging natural gas both on a periodic and discretionary basis throughout 2018 for the forthcoming PGA year (November 2018 through October 2019). Approximately 37% of estimated annual load requirements for the PGA year will be hedged at a fixed price, comprised of physical volumes for periods not to exceed three years. Cascade will continue to execute fixed priced physical transactions for hedging purposes throughout the remainder of calendar year 2018, consistent with our historical procurement practice.

The information contained in the Company’s responses to “Natural Gas Portfolio Development Guidelines” describes the Company’s Natural Gas Procurement Plan (Procurement Plan). The Company’s Procurement Plan uses a diversified approach to procure natural gas for the upcoming year. While the Procurement Plan generally incorporates a structured approach for the hedging portion of the portfolio, the Company exercises flexibility and discretion in all areas of the Plan based on changes in the wholesale market. As outlined in the Commission’s portfolio planning guidelines, the Company meets with the Commission Staff quarterly to discuss the state of the wholesale market and the status of the Company’s Procurement Plan, among other things. Should the Company deviate from the Procurement Plan due to a change in market dynamics etc., the Company documents and communicates any such changes with the Gas Supply Oversight Committee (GSOC) and provides updates to Commission Staff.

**Demand Costs (Schedule 177.2)**

Demand costs reflect the cost of pipeline transportation to the Company’s system, as well as fixed costs associated with natural gas storage. As shown in Table 2, demand costs are expected to be relatively stable, with the Company proposing only a slight decrease of 0.005420 cents per therm. Transport Demand and Tolls are down 4% in Oregon due to recent favorable rate settlement negotiations with TransCanada’s pipelines, Nova Gas Transmission (NGTL) and Gas Transmission Northwest (GTN).

**Amortization of Deferral Accounts (Schedule 191.1)**

Table 4 below summarizes the changes in both the commodity and demand amortization rates included in Schedule 191:

**Table 4**  
**Schedule 191 PGA Temporary Gas Cost Rate Adjustment Amortization**

<u>Rate Schedule</u>	<u>Present</u>	<u>Proposed</u>	<u>Change</u>
101, 104, 105, 111, 170	(\$0.019500)	(\$0.037040)	<b>(\$0.017540)</b>

As shown in the Table above, the current overall amortization amount approved in the Company’s 2017 PGA is a refund rate of approximately \$0.02 per therm. For reasons discussed earlier in this letter, actual wholesale natural gas prices were lower than the level identified in the Company’s 2017 PGA. As a result, commodity costs were overcollected from customers’ actual costs and a deferral balance of approximately (\$1.4 million) or (\$0.037) per therm was created.

**Three Percent Test**

Pursuant to ORS 757.259 and OAR 860-027-0300, the overall annual average rate impact of the amortizations authorized under the statutes may not exceed three percent of the natural gas utility’s gross revenues for the preceding calendar year, unless the Commission finds that allowing a higher amortization rate is reasonable under the circumstances. As shown on Attachment C of the Company’s PGA workpapers, total gross revenue for calendar year 2017 was \$64,274,782. The total amortization revenue requested for the “Prior Period Gas Cost Deferral” as shown in Attachment C is (\$3,000,049). The resulting annual average rate impact from PGA amortization is (4.67%) and falls within the requirements of the statute.

The combination of the “Prior Period Gas Cost Deferral” and the “Non-Gas Cost Amortization” related to the Company’s Conservation Alliance Plan filing also made on July 27, 2018, is a total amortization revenue request of (\$4,224,963). The net effect of combining the results of these two filings is an overall revenue change of (\$4,267,898), an average rate impact of (6.64%), which falls within the requirements of the statute.

**Other Information**

In this filing, the Company is requesting a decrease in the Company’s annual operating revenues of \$4,021,225 or 6.26%. Table 5 below shows current and proposed gross annual revenues per customer class.

**Table 5**

Rate Schedule	Description	Total Current Revenues	Total Proposed Revenues	Revenue Incr (Decr)	Percent Incr (Decr)
101	Residential	\$29,828,854	27,671,656	(2,157,198)	-7.23%
104	Commerical	\$17,115,580	15,660,413	(1,455,167)	-8.50%
105	Industrial Firm	\$1,780,411	1,633,074	(147,337)	-8.28%
111	Com-Ind Dual	\$1,446,401	1,318,235	(128,166)	-8.86%
170	Industrial Interr	\$1,389,944	1,256,587	(133,357)	-9.59%

Table 6 below provides an estimated average bill for each rate schedule as well as the average bill impact of the revisions proposed in this filing.

**Table 6**

Rate Schedule	Avg Therms per Month	Current Avg Bill	Proposed Avg Bill	Monthly Change	Proposed Rates % Change
101	60	\$45.22	\$41.95	(\$3.27)	-7.23%
104	253	\$151.88	\$138.97	(\$12.91)	-8.50%
105	1,722	\$1,034.72	\$949.09	(\$85.63)	-8.28%
111	3,637	\$2,015.86	\$1,837.23	(\$178.63)	-8.86%
170	53,728	\$27,478.33	\$24,841.94	(\$2,636.39)	-9.59%

Pursuant to OAR 860-022-0025 and OAR 860-022-0030, the total number of customers affected by this filing, the annual revenue before and after the impact of the rate change, and the average monthly use and resulting bills under existing and proposed rates are as follows:

**Table 7**

Rate Schedule	Number of Customers
101	63,133
104	9,973
105	142
111	18
170	4
163	32

In Advice Nos. O18-07-02 and O18-07-03, Cascade has also filed its Non-Gas Cost Tracking Filings. The net overall change in revenue is a decrease. Table 8 below shows the net impact to the Company's customers, by rate schedule, inclusive of all the Company's filings made on July 31, 2018:

<b><u>Rate Schedule</u></b>	<b><u>Proposed Rate Change</u></b>
Schedule 101	(0.20%)
Schedule 104	(0.22%)
Schedule 105	(8.37%)
Schedule 111	(9.08%)
Schedule 170	(9.84%)
Schedule 163	(0.66%)

The Company notified customers with a bill insert in August of a projected decrease in rate due to the PGA. The Company will issue a more detailed bill insert to customers beginning of October, coincident with the updated annual Purchased Gas Cost Adjustment filing in mid-September.

The rate adjustments proposed in this filing are consistent with the Public Utility Commission of Oregon Staff's recommendations with regard to rate spread requirements and amortization procedures.

Attached in support of this filing are Exhibits 1, 2, and 3. Exhibit 1 contains schedules supporting the per therm gas cost change consistent with the procedure described in PGA Rate Schedule No. 177. Exhibit 2 contains summary information on the proposed impacts the filings will have on the Company's rates and revenues, and the various rate schedules. A proposed notice to the public is also included. Exhibit 3 contains a summary of the proposed changes to the Company's revenues.

The Company agrees to rate adjustments and refunds should the Commission determine that these rates have been inappropriately calculated. Any rate adjustments and refunds will be retroactive to November 1, 2018 provided that the Commission advises the Company of the necessity for such rate adjustments or refunds within 30 days after the effective date of these rates.

Please direct any questions regarding this filing to me at (509) 734-4593.

Sincerely,



Michael Parvinen  
Director, Regulatory Affairs

Enclosures

**SCHEDULE 177  
PURCHASED GAS COST ADJUSTMENT PROVISION**

**DEFINITIONS (continued)**

1. Capacity Release Benefits: This component includes revenues associated with pipeline capacity releases. The benefits to customers, through the monthly PGA deferrals, shall be 100% of the capacity release revenues up to the full pipeline rate, and 80% of the capacity release revenues in excess of full pipeline rates. Capacity release revenues shall be quantified on a transaction-by-transaction basis.
  
2. Estimated Weighted Average Cost of Gas (WACOG): The estimated WACOG for the period November 1<sup>st</sup> through October 31<sup>st</sup> is calculated by the following formula: (Forecasted Purchases at Adjusted Contract Prices) divided by (forecasted sales volumes). This WACOG does not include any revenue sensitive factors.
  - a. Forecasted Purchases means this year’s forecasted sales volumes plus a percentage for distribution system LUGF and pipeline fuel in kind.
  - b. Distribution system embedded LUGF means the 5-year average of actual distribution system LUGF, not to exceed 2%.
  - c. Adjusted contract prices means actual and projected contract prices that are adjusted by each associated Canadian pipeline’s published (closest to August 1) fuel use and line loss amount provided for by tariff, and by each associated U.S. pipeline’s tariffed rate.
  
3. Estimated Non-Commodity Cost: Estimated annual Non-Commodity gas costs shall be equal to estimated annual Demand Costs, less estimated annual Capacity Release Benefits, plus or minus estimated annual pipeline refunds or surcharges.
  
4. Estimated Non-Commodity Cost per Therm: The Estimated Non-Commodity cost per therm is calculated by the following formula: (Estimated annual Non-Commodity Cost divided by forecasted sales volumes). This estimate does not include any revenue-sensitive factors.

The Estimated Cost of Gas per therm is as follows:

	<b>Cost of Gas Per Therm</b>	<b>Revenue Sensitive Costs</b>	<b>Cost of Gas Per Therm</b>	
			<b>Rate</b>	
<b>WACOG</b>	\$0.203120	2.91%	\$0.209200	(R)
<b>Non-Commodity Cost</b>	\$0.160480	2.91%	\$0.165290	(R)
<b>TOTAL</b>	<b>\$0.363290</b>	<b>2.91%</b>	<b>\$0.374490</b>	<b>(R)</b>

10. Actual Monthly Calendar Sales Volumes: Actual billed sales therms, adjusted for estimated unbilled therms, for firm and interruptible sales schedules.

(continued)

**SCHEDULE NO. 191  
TEMPORARY GAS COST RATE ADJUSTMENT**

**APPLICABLE**

The temporary rate applies to Schedules 101, 104, 105, 111, and 170. (T)

**RATES**

Each of the charges specified in the schedules for gas service hereinafter listed shall be adjusted by the following per therm increase or (decrease) or appropriate multiple thereof in determining annual minimum bill, if any:

Rate Schedule	Amount
101	(\$0.037040)
104	(\$0.037040)
105	(\$0.037040)
111	(\$0.037040)
170	(\$0.037040)

(R)

(D)

(R)

**LIMITATION**

This temporary rate adjustment shall remain in effect until cancelled pursuant to a Commission order.

**TAX ADDITIONS**

The rates named herein are subject to increases as set forth in Schedule 100 for Municipal Exactions.

**GENERAL TERMS**

Service under this schedule is governed by the terms of this schedule, the Rules contained in this Tariff, any other schedules that by their terms or by the terms of this schedule apply to service under this schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

# Cascade Natural Gas Corporation

## CERTIFICATE OF SERVICE

I hereby certify that I have this day served by electronic mail the foregoing notice of Cascade's Purchase Gas Adjustment Filing upon all parties of record in UG-347, which is the Company's current general rate case.

Oregon Citizens' Utility Board <a href="mailto:dockets@oregoncub.org">dockets@oregoncub.org</a>	Michael Goetz Oregon Citizens' Utility Board <a href="mailto:mike@oregoncub.org">mike@oregoncub.org</a>
Tommy A Brooks Cable Huston Benedict Haagensen & Lloyd <a href="mailto:tbrooks@cablehuston.com">tbrooks@cablehuston.com</a>	Chad M Stokes Cable Huston Benedict Haagensen & Lloyd <a href="mailto:cstokes@cablehuston.com">cstokes@cablehuston.com</a>
Johanna Riemenschneider PUC Staff – Dept of Justice <a href="mailto:johanna.riemenschneider@doj.state.or.us">johanna.riemenschneider@doj.state.or.us</a>	Edward Finklea Alliance of Western Energy Consumers <a href="mailto:efinklea@awec.org">efinklea@awec.org</a>
Robert Jenks Oregon Citizens' Utility Board <a href="mailto:bob@oregoncub.org">bob@oregoncub.org</a>	Marianne Gardner Public Utility Commission of Oregon <a href="mailto:marianne.gardner@state.or.us">marianne.gardner@state.or.us</a>
Eric J. Callisto Michael Best & Friedrich LLP <a href="mailto:ejcallisto@michaelbest.com">ejcallisto@michaelbest.com</a>	Lisa F Rackner McDowell, Rackner & Gibson PC <a href="mailto:dockets@mrg-law.com">dockets@mrg-law.com</a>
John Jamieson Hermiston Generating Company LP <a href="mailto:jj.jamieson@perennialpower.net">jj.jamieson@perennialpower.net</a>	Isaac Young Sumitomo Corporation of Americas <a href="mailto:Isaac.young@sumitomocorp.com">Isaac.young@sumitomocorp.com</a>
PacifiCorp, dba Pacific Power <a href="mailto:oregondockets@pacificorp.com">oregondockets@pacificorp.com</a>	Matthew McVee <a href="mailto:Matthew.mcvee@pacificorp.com">Matthew.mcvee@pacificorp.com</a>

Dated this 31<sup>st</sup> day of July 2018.

/s/ Maryalice Peters

Maryalice Peters  
Regulatory Affairs  
Cascade Natural Gas Corporation  
8113 W Grandridge Blvd  
Kennewick, WA 99336  
[maryalice.peters@cngc.com](mailto:maryalice.peters@cngc.com)



**Before the**  
**PUBLIC UTILITY COMMISSION OF OREGON**

**EXHIBIT 1**

**Gas Supply Portfolio and Related Transportation**

Oregon Summary of Gas Cost Deferrals (Schedule 1 of 9)  
Prior Commodity & Demand Amortization (Schedule 2 of 9)  
Development of Gas Cost Related PGA Temporary Rate Increments (Schedule 3 of 9)  
Core Market Commodity Cost Amortization Supporting 47OR.2530.01272 (Schedule 4 of 9)  
Gas Cost Consolidated Accounts Amortization Supporting 47OR.2530.01287 (Schedule 5 of 9)  
Core Market Demand Amortization Supporting 47OR.2530.01273 (Schedule 6 of 9)  
New WACOG Commodity (Schedule 7 of 9)  
Derivation of Oregon per Therm Non-Commodity Charges (Schedule 8 of 9)  
Summary of Rate and Revenue Impact (Schedule 9 of 9)

**Cascade Natural Gas Corporation**

**July 31, 2018**

**Cascade Natural Gas  
Oregon Summary of Gas Cost Deferrals**

Line No.															
		Jul_2017	Aug_2017	Sep_2017	Oct_2017	Nov_2017	Dec_2017	Jan_2018	Feb_2018	Mar_2018	Apr_2018	May_2018	Jun_2018	SUM (A-L)	
		A	B	C	D	F	F	G	H	I	J	K	L	M	
1	Current commodity (WACOG) without revenue sensitive, Order No.16-402/17-417	\$0.25604	\$0.25604	\$0.25604	\$0.25604	\$0.25604	\$0.22896	\$0.22896	\$0.22896	\$0.22896	\$0.22896	\$0.22896	\$0.22896	\$0.22896	
2	Current demand billing rate without revenue sensitive, Order No.16-402/17-417	\$0.16433	\$0.16433	\$0.16433	\$0.16433	\$0.16433	\$0.16570	\$0.16570	\$0.16570	\$0.16570	\$0.16570	\$0.16570	\$0.16570	\$0.16570	
5	Annual ROR (Interest rate), per Order No. 16-477			7.2840%	7.2840%	7.2840%									
6	Deferral percentage July - October			90%											
7	Deferral percentage November - June			90%											
12	Oregon Calendar Month Sales	1,951,551	1,946,347	2,709,505	7,007,301	9,295,581	15,058,621	11,942,815	10,823,382	9,725,498	6,277,497	3,227,889	2,793,818	82,759,805	
14	Sales volumes subject to WACOG	1,951,551	1,946,347	2,709,505	7,007,301	9,295,581	15,058,621	11,942,815	10,823,382	9,725,498	6,277,497	3,227,889	2,793,818	82,759,805	
15	Sales volumes subject to Winter/Seasonal WACOG													0	
16	Sales volumes subject to Monthly Incremental Costs													0	
17	Total Sales	1,951,551	1,946,347	2,709,505	7,007,301	9,295,581	15,058,621	11,942,815	10,823,382	9,725,498	6,277,497	3,227,889	2,793,818	82,759,805	
19	Commodity collections at WACOG	\$ 499,675.11	\$ 498,343	\$ 693,742	\$ 1,794,149	\$ 2,137,000	\$ 3,447,822	\$ 2,734,427	\$ 2,478,122	\$ 2,226,750	\$ 1,437,296	\$ 739,057	\$ 639,673	19,326,055	
20	Commodity collections at Winter/Seasonal WACOG													0	
21	Commodity collections at Monthly Incremental Costs													0	
22	<b>Total Commodity collections</b>	\$499,675	\$498,343	\$693,742	\$1,794,149	\$2,137,000	\$3,447,822	\$2,734,427	\$2,478,122	\$2,226,750	\$1,437,296	\$739,057	\$639,673	19,326,055	
24	Demand collections at \$0.16433	\$320,698	\$319,843	\$445,253	\$1,151,510	\$1,539,838	\$2,495,213	\$1,978,924	\$1,793,434	\$1,611,515	\$1,040,181	\$534,861	\$462,936	13,694,208	
25	Demand collections at other rates (interruptible rates & MDDV based)													0	
26	<b>Total Demand collections</b>	\$320,698	\$319,843	\$445,253	\$1,151,510	\$1,539,838	\$2,495,213	\$1,978,924	\$1,793,434	\$1,611,515	\$1,040,181	\$534,861	\$462,936	13,694,208	
28	<b>COMMODITY DEFERRAL CALCULATIONS</b>														
29	Actual Commodity Cost (w/true ups, net of storage injections, bookouts, etc.)	\$ 318,737	\$ 476,076	\$ 538,426	\$ 1,720,494	\$ 2,207,007	\$ 4,200,540	\$ 3,371,299	\$ 2,659,174	\$ 1,852,689	\$ 1,173,350	\$ 441,489	\$ 358,780	19,318,061	
30	Total Commodity billed (line 22)	\$499,675	\$498,343	\$693,742	\$1,794,149	\$2,137,000	\$3,447,822	\$2,734,427	\$2,478,122	\$2,226,750	\$1,437,296	\$739,057	\$639,673	19,326,055	
31	Cost versus collection	(\$180,938.55)	(\$22,267)	(\$155,315)	(\$73,655)	\$70,006.67	\$752,718	\$636,872	\$181,053	(\$374,061)	(\$263,946)	(\$297,568)	(\$280,893)	(\$7,994)	
32	Customer share (line 31 * applicable deferral percentage)	(\$162,845)	(\$20,040)	(\$139,784)	(\$66,289)	\$63,006	\$677,446	\$573,185	\$162,947	(\$336,654)	(\$237,551)	(\$267,811)	(\$252,804)	(\$7,195)	
33	Storage Adjustment													\$0	
34	Other Adjustment													\$0	
35	Total Commodity deferral	(\$162,845)	(\$20,040)	(\$139,784)	(\$66,289)	\$63,006	\$677,446	\$573,185	\$162,947	(\$336,654)	(\$237,551)	(\$267,811)	(\$252,804)	(\$7,195)	
37	Commodity deferral Beginning Balance	\$1,376,585	\$1,222,257	\$1,209,778	\$1,077,237	(\$393,076)	(\$335,502)	\$337,685	\$912,302	\$1,078,707	\$748,238	\$515,166	\$250,392	(\$1,106)	
38	Interest	\$8,516	\$7,561	\$7,243	\$6,664	(\$2,353)	(\$2,076)	\$2,089	\$5,098	\$6,673	\$4,480	\$3,187	\$1,499	\$48,581	
39	Account adjustment (balance transfers and other)				(\$1,410,687)	(\$3,079)	(\$2,183)	(\$656)	(\$1,641)	(\$487,82)		(\$150)	(\$192,73)	(\$1,419,077)	
40	<b>Commodity deferral Ending Balance (June balance to rate calc sheet)</b>	<b>1,376,585</b>	\$1,222,257	\$1,209,778	(\$393,076)	(\$335,502)	\$337,685	\$912,302	\$1,078,707	\$748,238	\$515,166	\$250,392	(\$1,106)	(\$1,106)	
42	<b>DEMAND DEFERRAL CALCULATIONS</b>														
44	Actual Demand Cost (w/true-ups) minus Storage Mitigation	\$ 659,791	\$ 658,982	\$ 640,424.57	\$ 658,771.23	\$ 1,209,333.21	1,068,306.00	1,094,664.81	1,099,063.38	1,167,852.27	1,112,515.46	687,656.43	679,216.73	\$10,736,577	
45	Total Demand billed (line 26)	\$320,698	\$319,843.20	\$445,253	\$1,151,510	\$1,539,838	\$2,495,213	\$1,978,924	\$1,793,434	\$1,611,515	\$1,040,181	\$534,861	\$462,936	\$13,694,208	
46	Cost versus collection	\$339,092	\$339,139	\$195,172	(\$492,739)	(\$330,505.23)	(\$1,426,907)	(\$884,260)	(\$694,371)	(\$443,663)	\$72,334	\$152,795	\$216,281	(\$2,957,631)	
47	Other Adjustment				\$98,281	(\$98,281)								\$0	
48	Total Demand deferral	\$339,092	\$339,139	\$195,172	(\$394,457)	(\$428,786)	(\$1,426,907)	(\$884,260)	(\$694,371)	(\$443,663)	\$72,334	\$152,795	\$216,281	(\$2,957,631)	
49	Demand deferral Beginning Balance	(\$3,750,399)	(\$3,434,508)	(\$3,116,616)	(\$2,940,103)	\$490,558	\$64,708	(\$1,361,799)	(\$2,254,483)	(\$2,961,452)	(\$3,423,435)	(\$3,371,597)	(\$3,239,660)	(\$3,042,774)	
51	Interest	(\$23,202)	(\$21,247)	(\$18,659)	(\$18,189)	\$2,937	\$400	(\$8,425)	(\$12,597)	(\$18,321)	(\$20,496)	(\$20,858)	(\$19,395)	(\$178,051)	
52	Account adjustment (balance transfers and other)				\$3,843,307									\$3,843,307	
53	<b>Demand deferral Ending Balance (June balance to rate calc sheet)</b>	<b>(3,750,399)</b>	(\$3,434,508)	(\$3,116,616)	(\$2,940,103)	\$490,558	\$64,708	(\$1,361,799)	(\$2,254,483)	(\$2,961,452)	(\$3,423,435)	(\$3,371,597)	(\$3,239,660)	(\$3,042,774)	

**Cascade Natural Gas  
Prior Commodity & Demand Amortization**

Line  
No.

Line No.	Account Description	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	SUM (A:L)
		A	B	C	D	E	F	G	H	I	J	K	L	M
1	Current prior amortization rate, \$/therm (source: deferral sheets)					BLENDED RATE	\$0.01893	\$0.01893	\$0.01893	\$0.01893	\$0.01893	\$0.01893	\$0.01893	\$0.01893
2														
3	Interest Rate, %, Re: authorizing order					2.380%	2.380%	2.380%	2.380%	2.380%	2.380%	2.380%	2.380%	2.380%
4														
5	Ending balance, 6/30/2017, \$ NA													
9	Commodity therms	-	-	-	-	-	11,024,865	14,716,057	10,014,331	12,228,577	8,300,832	5,260,348	3,022,475	64,567,485
11	Amortization amount, (In. 9 * In. 1), \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 208,701	\$ 278,575	\$ 189,571	\$ 231,487	\$ 157,135	\$ 99,578	\$ 57,215	\$ 1,222,262
13	Interest amount, \$, (In.11 * In.3)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,471)	\$ (2,054)	\$ (1,351)	\$ (1,115)	\$ (628)	\$ (333)	\$ (128)	\$ (8,080)
15	Other adjustments (switchers' amortization, balance transfers, etc.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	<b>Commodity amortization balance, \$</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (1,222,506)</b>	<b>\$ (1,016,276)</b>	<b>\$ (739,756)</b>	<b>\$ (551,535)</b>	<b>\$ (321,163)</b>	<b>\$ (164,656)</b>	<b>\$ (65,411)</b>	<b>\$ (8,323)</b>	<b>\$ (8,323)</b>
19	Demand therms (for nwn, Firm)	-	-	-	-	-	-	-	-	-	-	-	-	-
21	Demand therms - Interruptible (for nwn)													
23	Amortization amount, (In. 19 * In. 1, col. D)+(line 21 * line 1, col E), \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	Interest amount, \$, (In. 21 * In. 3)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	Other adjustments (switchers' amortization, balance transfers, etc.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	<b>Demand amortization balance, \$</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Cascade Natural Gas  
Development of Gas Cost Related PGA Temporary Rate Increments  
State of Oregon

Ln No.	Account Description	Order	Class	New or Residual	Account Balance 6/30/2018	Estimated Thru 10/31/18		Interest Accruals Thru Amortization	Balance for Amortization	Forecasted Therms	Increment	TEMPORARY INCREMENT	
						Interest Accruals	Amortizations & Deferrals					Firm	Interruptible
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	Current Commodity and Demand Deferrals	17-400	Core	New	(\$1,106)	(\$27)		(\$13)	\$ (1,146)				
2	Commodity Cost Deferrals (47OR.2530.01272) (See Commodity Cost Deferral)	17-400	Core	Residual	(\$8,323)	\$473	\$248,394	\$2,842	\$ 243,385				
3	Prior gas cost amortization to be included in increment (47OR.2530.01283) (See GC Consolidated Deferral)												
3	Subtotal				(\$9,429)	\$445	\$248,394	\$2,828	\$242,239	80,991,419	0.002991	0.002991	0.002991
4	Demand Cost Deferrals (47OR.2530.01273) (See Demand Cost Deferral)	17-400	Core	New	(\$3,042,773)	(\$75,378)		(\$36,835)	\$ (3,154,986)	80,991,419	(0.038955)	(0.038955)	(0.038955)
5	SUBTOTAL AMORTIZATION RATES BEFORE REVENUE SENSITIVE COSTS											(\$0.035964)	(\$0.035964)
6	REVENUE REQUIREMENT BEFORE REVENUE SENSITIVE COSTS				\$ (3,052,202)	\$ (74,933)	\$ 248,394	\$ (34,006)	\$ (2,912,748)				
7	REVENUE SENSITIVE COST PERCENTAGES:								2.910%			2.910%	2.910%
8	REVENUE REQUIREMENT AFTER REVENUE SENSITIVE COSTS								\$ (3,000,049)				
9	PROPOSED AMORTIZATION RATE INCLUDING REVENUE SENSITIVE COSTS											\$ (0.037040)	\$ (0.037040)
10	NEW WACOG - Commodity (from sch. 4)											\$ 0.209200	\$ 0.209200
11	NEW Demand Rates (from sch. 5)											\$ 0.165290	\$ 0.165290
12	NEW Delivered WACOG (gas only) rate											\$ 0.374490	\$ 0.374490
13	Total Gas Cost Rate											\$ 0.327632	\$ 0.337450

State:	Oregon
Description:	Core Market Commodity Costs
Account number:	47OR.2530.01272
Class of Customers:	Core
Deferral Period:	7/1/2017 to 6/30/2018
Deferral Account Order:	N/A
Amortization Period:	
Narrative:	Deferral of 90% of the difference between core commodity gas costs actually incurred and the average monthly base commodity gas cost as defined in rate schedule 177-A.

<i>Debit (Credit)</i>								
Month/Year	Rate	Therms	Deferral	Amortization	Interest Rate	Interest	Adjustments	Deferred Balance
Balance Forward								1,376,585.39
Jul-17			(162,844.70)		0.07284	8,516.12		1,222,256.81
Aug-17			(20,040.33)		0.07284	7,561.38		1,209,777.85
Sep-17			(139,783.84)		0.07284	7,242.76		1,077,236.77
Oct-17			(66,289.37)		0.07284	6,664.23	(1,410,687.45)	(393,075.82)
Nov-17			63,006.00		0.07284	(2,353.29)	(3,078.79)	(335,501.90)
Dec-17			677,446.04		0.07284	(2,075.55)	(2,183.49)	337,685.11
Jan-18			573,184.70		0.07284	2,089.06	(656.47)	912,302.41
Feb-18			162,947.36		0.07284	5,097.70	(1,640.87)	1,078,706.59
Mar-18			(336,654.50)		0.07284	6,673.32	(487.82)	748,237.59
Apr-18			(237,551.13)		0.07284	4,479.59		515,166.04
May-18			(267,811.34)		0.07284	3,187.03	(149.86)	250,391.87
Jun-18			(252,803.73)		0.07284	1,499.06	(192.73)	(1,105.53)
Jul-18 est.			0.00		0.07284	(6.84)		(1,112.37)
Aug-18 est.			0.00		0.07284	(6.88)		(1,119.25)
Sep-18 est.			0.00		0.07284	(6.70)		(1,125.95)
Oct-18 est.					0.07284	(6.97)		(1,132.92)
Nov-18 est.		9,536,842		135	0.02920	(2.72)		(1,000.66)
Dec-18 est.		13,194,324		187	0.02920	(2.48)		(816.40)
Jan-19 est.		12,719,981		180	0.02920	(2.02)		(638.39)
Feb-19 est.		10,319,769		146	0.02920	(1.43)		(493.76)
Mar-19 est.		8,725,904		124	0.02920	(1.22)		(371.49)
Apr-19 est.		6,087,244		86	0.02920	(0.89)		(286.23)
May-19 est.		4,182,862		59	0.02920	(0.71)		(227.74)
Jun-19 est.		2,804,806		40	0.02920	(0.55)		(188.59)
Jul-19 est.		2,290,311		32	0.02920	(0.47)		(156.64)
Aug-19 est.		2,357,783		33	0.02920	(0.39)		(123.66)
Sep-19 est.		2,989,110		42	0.02920	(0.30)		(81.64)
Oct-19 est.		5,782,483		82	0.02920	(0.20)		(0.00)

Therms Nov-Oct 2019	80,991,419	Balance at end of Amort Period:	(0.00)
Development of Amortization Rate		Amort Rate to Achieve This:	0.00001

June 30, 2018 Balance	(1,105.53)
Interest through Oct 31, 2018	(27.39)
Interest During Amortization Period (Nov 1, 2018 through Oct 31, 2019)	(13.38)
Balance to Amortize	<u>(1,146.30)</u>
	0.00001

State:	Oregon
Description:	Core Market Demand & Gas Storage Mitigation Costs
Account number:	47OR.2530.01273
Class of Customers:	Core
Deferral Period:	7/1/2017 to 6/30/2018
Deferral Account Order:	N/A
Amortization Period:	N/A
Narrative:	This records the deferral of the differences between core demand costs actually incurred and the embedded demand costs collected in the tariffs as well as the Tenaska capacity reservation and gas storage mitigation costs based on therms.

Month/Year	Rate	Therms	Deferral	Amortization	Interest Rate	Interest	Adjustments	Deferred Balance
								<i>Debit (Credit)</i>
Balance Forward								(3,750,399.11)
Jul-17			339,092.36		0.07284	(23,201.51)		(3,434,508.26)
Aug-17			339,139.23		0.07284	(21,247.28)		(3,116,616.31)
Sep-17			195,171.63		0.07284	(18,658.71)		(2,940,103.39)
Oct-17			(394,457.30)		0.07284	(18,188.69)	3,843,307.50	490,558.12
Nov-17			(428,786.48)		0.07284	2,936.90		64,708.54
Dec-17			(1,426,907.51)		0.07284	400.31		(1,361,798.66)
Jan-18			(884,259.63)		0.07284	(8,424.65)		(2,254,482.94)
Feb-18			(694,371.01)		0.07284	(12,597.43)		(2,961,451.38)
Mar-18			(443,662.74)		0.07284	(18,320.76)		(3,423,434.88)
Apr-18			72,334.21		0.07284	(20,495.59)		(3,371,596.26)
May-18			152,795.23		0.07284	(20,858.08)		(3,239,659.11)
Jun-18			216,281.09		0.07284	(19,395.35)		(3,042,773.38)
Jul-18 est.					0.07284	(18,823.85)		(3,061,597.22)
Aug-18 est.					0.07284	(18,940.30)		(3,080,537.52)
Sep-18 est.					0.07284	(18,442.71)		(3,098,980.23)
Oct-18 est.					0.07284	(19,171.57)		(3,118,151.80)
Nov-18 est.		9,536,842		371,503.63	0.02920	(7,483.56)		(2,754,131.73)
Dec-18 est.		13,194,324		513,979.29	0.02920	(6,830.25)		(2,246,982.69)
Jan-19 est.		12,719,981		495,501.46	0.02920	(5,572.52)		(1,757,053.75)
Feb-19 est.		10,319,769		402,002.22	0.02920	(3,935.80)		(1,358,987.32)
Mar-19 est.		8,725,904		339,913.89	0.02920	(3,370.29)		(1,022,443.72)
Apr-19 est.		6,087,244		237,126.01	0.02920	(2,453.86)		(787,771.57)
May-19 est.		4,182,862		162,941.62	0.02920	(1,953.67)		(626,783.61)
Jun-19 est.		2,804,806		109,260.03	0.02920	(1,504.28)		(519,027.87)
Jul-19 est.		2,290,311		89,218.09	0.02920	(1,287.19)		(431,096.98)
Aug-19 est.		2,357,783		91,846.44	0.02920	(1,069.12)		(340,319.67)
Sep-19 est.		2,989,110		116,439.51	0.02920	(816.77)		(224,696.92)
Oct-19 est.		5,782,483		225,254.17	0.02920	(557.25)		(0.00)
2018/19 PGA Year Therms		80,991,419						(0.00)
								Amort Rate to Achieve This: 0.03895
Development of Amortization Rate								
June 30, 2018 Balance							(3,042,773.38)	
Interest through Oct 31, 2018							(75,378.42)	
Interest During Amortization Period (Nov 1, 2018 through Oct 31, 2019)							(36,834.56)	
Balance to Amortize							<u>(3,154,986.36)</u>	
								0.03895

State:	Oregon
Description:	OR 11/01/16 Consolidated Accounts: Gas Cost Related PGA Temporary Rate Increments
Account number:	47OR.2530.01287
Class of Customers:	Core
Deferral Period:	
Deferral Account Order:	
Amortization Period:	11/1/2017 through 10/31/2018
Narrative:	This records the consolidated deferral accounts corresponding to the temporary technical adjustments included in the PGA tracker effective 11/1/2016 that are incorporated into the customers' per therm gas rates through schedule 191.

Month/Year	Rate	Therms	Deferral	Amortization	Interest Rate	Interest	Adjustments	Deferred Balance
							1,410,687.45	
							(3,843,307.50)	
							Bal. Fwd	785,574.08
Oct-17								(1,647,045.97)
Nov-17	Prorated	7,001,509		427,762.00	0.02380	(3,221.89)		(1,222,505.86)
Dec-17	0.01893	11,024,865		208,700.70	0.02380	(2,471.14)		(1,016,276.30)
Jan-18	0.01893	14,716,057		278,574.96	0.02380	(2,054.27)		(739,755.60)
Feb-18	0.01893	10,014,331		189,571.29	0.02380	(1,350.61)		(551,534.93)
Mar-18	0.01893	12,228,577		231,486.95	0.02380	(1,114.86)		(321,162.83)
Apr-18	0.01893	8,300,832		157,134.75	0.02380	(628.25)		(164,656.34)
May-18	0.01893	5,260,348		99,578.39	0.02380	(332.83)		(65,410.78)
Jun-18	0.01893	3,022,475		57,215.45	0.02380	(127.95)		(8,323.29)
Jul-18 est.	0.01893	2,231,385		42,240.12	0.02380	(16.82)		33,900.00
Aug-18 est.	0.01893	2,310,754		43,742.57	0.02380	68.52		77,711.10
Sep-18 est.	0.01893	2,916,241		55,204.44	0.02380	152.02		133,067.56
Oct-18 est.	0.01893	5,663,328		107,206.80	0.02380	268.98		240,543.34
Nov-18 est.	(0.00301)	9,536,842		(28,658.88)	0.02920	577.30		212,461.77
Dec-18 est.	(0.00301)	13,194,324		(39,649.86)	0.02920	526.91		173,338.81
Jan-19 est.	(0.00301)	12,719,981		(38,224.43)	0.02920	429.88		135,544.26
Feb-19 est.	(0.00301)	10,319,769		(31,011.63)	0.02920	303.62		104,836.25
Mar-19 est.	(0.00301)	8,725,904		(26,221.95)	0.02920	259.99		78,874.30
Apr-19 est.	(0.00301)	6,087,244		(18,292.59)	0.02920	189.30		60,771.00
May-19 est.	(0.00301)	4,182,862		(12,569.79)	0.02920	150.71		48,351.92
Jun-19 est.	(0.00301)	2,804,806		(8,428.64)	0.02920	116.04		40,039.33
Jul-19 est.	(0.00301)	2,290,311		(6,882.54)	0.02920	99.30		33,256.08
Aug-19 est.	(0.00301)	2,357,783		(7,085.30)	0.02920	82.48		26,253.25
Sep-19 est.	(0.00301)	2,989,110		(8,982.48)	0.02920	63.01		17,333.78
Oct-19 est.	(0.00301)	5,782,483		(17,376.76)	0.02920	42.99		0.00
2018/19 PGA Year Therms		80,991,419					Balance at end of Amort Period:	0.00
							Amort Rate to Achieve This:	(0.00301)

**Development of Amortization Rate**

June 30, 2018 Balance	(8,323.29)
Interest through Oct 31, 2018	472.69
Amortizations through Oct 31, 2017	248,393.93
Interest During Amortization Period (Nov 1, 2018 through Oct 31, 2019)	2,841.53
Balance to Amortize	<u>243,384.86</u>
	(0.00301)

Cascade Natural Gas Corporation  
2018-2019 PGA  
**New WACOG Commodity**

**SYSTEM COSTS**

1	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
2			November	December	January	February	March	April	May	June	July	August	September	October	TOTAL
3			1	2	3	4	5	6	7	8	9	10	11	12	
4	<b>COSTS</b>														
5	Supply Commodity Cost		\$1,577,745	\$2,582,190	\$2,483,279	\$2,091,446	\$1,760,680	\$1,109,358	\$802,708	\$568,449	\$473,453	\$480,884	\$616,151	\$1,109,403	\$15,655,747
6	tab IV-4 Phys resources, row 915, columns G to S														
7	Volumetric Pipeline Chgs		\$ 69,213.28	\$ 72,409.97	\$ 72,241.38	\$ 69,916.65	\$ 68,751.32	\$ 66,095.73	\$ 3,301.94	\$ 2,227.37	\$ 1,830.25	\$ 1,889.55	\$ 2,378.78	\$ 4,621.35	\$434,878
8	tab OR Pipeline Comm Costs by Month, row 30 D to O														
9	Commodity Cost from Storage		\$30,584	\$84,477	\$186,554	\$44,480	\$13,894	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$359,989
10	tab V4-7-g Stor Flow & Avg Cost, row 88, column e through p														
11	Other Costs & Miscellaneous Changes														
12															
13	Total Commodity Cost		\$1,677,543	\$2,739,077	\$2,742,074	\$2,205,843	\$1,843,325	\$1,175,454	\$806,010	\$570,676	\$475,283	\$482,773	\$618,530	\$1,114,024	\$16,450,613
14															
15	<b>VOLUMES</b>														
16	Pipeline Commodity at Receipt Points		9,535,946	13,035,441	12,553,971	10,302,293	8,911,503	6,213,036	4,308,514	2,887,549	2,345,427	2,378,768	3,110,140	5,777,034	81,359,622
17	Pipeline Fuel Use		896	158,883	166,010	17,476	(185,599)	(125,792)	(125,652)	(82,743)	(55,116)	(20,985)	(121,030)	5,449	(368,203)
18	Total Pipeline Gas Arriving at City Gate		9,536,842	13,194,324	12,719,981	10,319,769	8,725,904	6,087,244	4,182,862	2,804,806	2,290,311	2,357,783	2,989,110	5,782,483	80,991,419
19	Storage Gas Deliveries														0
20	Total Gas At Citygate (Storage and Pipeline)		9,536,842	13,194,324	12,719,981	10,319,769	8,725,904	6,087,244	4,182,862	2,804,806	2,290,311	2,357,783	2,989,110	5,782,483	80,991,419
21															
22	Unaccounted for Gas														0
23															
24	Load Served		9,536,842	13,194,324	12,719,981	10,319,769	8,725,904	6,087,244	4,182,862	2,804,806	2,290,311	2,357,783	2,989,110	5,782,483	80,991,419
25															
26	Annual Sales WACOG														\$0.203116
27															
28	OREGON Sales WACOG with Revenue Sensitive														\$0.209200



Cascade Natural Gas Corporation  
 2018-2019 PGA - OREGON  
 Derivation of Oregon per Therm Non-Commodity Charges

**Oregon Derivation of Demand Increments**

	(a)	(b)	Without Revenue Sensitive (c)	With Revenue Sensitive (d)
1				
2				
3				
4	System Demand for Allocation		\$ 52,616,630.69	
5	Oregon Allocation Factor (Based on Peak Day)		20.69%	
6	Oregon Allocated Demand Costs		\$10,884,063	
7	Ruby Demand for Allocation		\$2,025,000	
8	Oregon Allocation Factor (Based Non-NWP Allocation)		87.85%	
9	Oregon Ruby Allocated System Demand		\$1,778,875	
10	Plus Demand Costs -Central Oregon		\$1,606,262	
11	Less Oregon Capacity Release Credits		(\$1,271,792)	
12	<b>OREGON DEMAND COSTS</b>		<b>\$12,997,409</b>	<b>\$ 13,386,970</b>
13				
14	Oregon Sales Forecasted Normal Volumes		80,991,419	80,991,419
15				
16	<b>Proposed Demand Increment Per Therm (line 12/line 14)</b>		<b>\$0.160480</b>	<b>\$0.165290</b>
17				
18	Current Firm Demand Per Therm		\$0.16570	\$0.170710
19				
20	Percent Change in Firm Demand		-3.15%	-3.18%
21				
22				
23	1/Allocation Factor: Forecasted Peak Volumes (excl. Central Oregon):			
24		<u>Washington</u>	<u>Oregon</u>	<u>System</u>
25				
26	Total Peak	2,091,500	911,558	3,003,058
27	Less Central Oregon		622,178	
28	Peak Day Capacity	2,091,500	289,380.10	2,380,880
29	Allocation Factor	87.85%	12.15%	100.00%

Cascade Natural Gas Corporation  
2018-2019 PGA - OREGON  
Summary of Rate and Revenue Impact

(a)	(b)	Without Revenue Sensitive (c)	With Revenue Sensitive (d)
<b><u>PROPOSED PER THERM RATE CHANGES</u></b>			
1 Proposed Commodity WACOG		0.203120	0.209200
2 Current Commodity WACOG		0.228960	0.235890
3 <b>Proposed Rate Change-Commodity WACOG</b>		<b><u>(0.025840)</u></b>	<b><u>(0.026690)</u></b>
4			
5 Proposed Firm Demand Per Therm		0.160480	0.165290
6 Current Firm Demand Per Therm		0.165700	0.170710
7 <b>Proposed Rate Change-Firm Demand WACOG</b>		<b><u>(0.005220)</u></b>	<b><u>(0.005420)</u></b>
8			
9 <b>Proposed Temporary Rate Increment</b>		<b>(0.035960)</b>	<b>(0.037040)</b>
<b>Current Temporary Rate Increment</b>		<b>(0.018930)</b>	<b>(0.019500)</b>
<b>Proposed Rate Change-Temporary Rate Increment</b>		<b>(0.017030)</b>	<b>(0.017540)</b>
10			
11 <b>TOTAL PROPOSED PGA RATE CHANGE</b>			<b><u>(0.049650)</u></b>
12			
13 Oregon Forecasted Therm Sales		80,991,419	
14			
15 <b><u>REVENUE IMPACT</u></b>			
16			
17 Commodity Cost Change			(2,161,661)
18 Demand Cost Change			(438,973)
19			
20 Amortization of Commodity and Demand Cost Differences			<u>(1,420,589.49)</u>
21			
22 <b>Total Revenue Impact Due to PGA Filing</b>			<b><u>(4,021,224)</u></b>
23			
24 Operating Revenues for 12 Month Period Ending 12/31/17			64,274,782
25			
26 PERCENTAGE CHANGE IN REVENUES DUE TO PGA FILING			-6.26%

**Before the**  
**PUBLIC UTILITY COMMISSION OF OREGON**

**EXHIBIT 2**

**Summary of Proposed Changes**

Summary of Total Proposed Rates (Schedule 1 of 4)  
Total Proposed Rates Impact on Average Bill by Rate Schedule (Schedule 2 of 4)  
Notice to the Public (Schedule 3 of 4)  
What is a PGA (Schedule 4 of 4)

**Cascade Natural Gas Corporation**

**July 31, 2018**

**Cascade Natural Gas Corporation**  
**SUMMARY OF TOTAL PROPOSED RATES**  
**STATE OF OREGON**

Ln No.	Customer Class	Schedule	Block	Current 11/1/2017 Rate	Total Proposed Changes				Total Change (i) = e thru h	Proposed 11/1/2018 Rate (j) = d + i
					PGA Base Gas Cost	CAP Baseline Adj	Non Gas Cost Temporary Rate Adj			
							Remove 17 (g)	Add New (h)		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
<b>CORE MARKET SERVICE</b>										
1	Residential	101		\$0.687054	(\$0.04965)		\$0.06463	(\$0.01652)	(\$0.00154)	\$0.685514
2	Commercial	104		\$0.584494	(\$0.04965)		\$0.06575	(\$0.01743)	(\$0.00133)	\$0.583164
3	Com-Ind Dual	111		\$0.554264	(\$0.04965)		(\$0.00073)	\$0.00008	(\$0.05030)	\$0.503964
4	Industrial Firm	105		\$0.593914	(\$0.04965)		(\$0.00073)	\$0.00008	(\$0.05030)	\$0.543614
5	Industrial Interruptible	170		\$0.511434	(\$0.04965)		(\$0.00073)	\$0.00008	(\$0.05030)	\$0.461134
<b>NONCORE MARKET SERVICE</b>										
6	Distribution Transportation	163	First 10,000	\$0.125264	\$0.00000	\$0.00000	(\$0.00073)	\$0.00008	(\$0.00065)	\$0.124614
7	Distribution Transportation	163	Next 10,000	\$0.113124	\$0.00000	\$0.00000	(\$0.00073)	\$0.00008	(\$0.00065)	\$0.112474
8	Distribution Transportation	163	Next 30,000	\$0.106364	\$0.00000	\$0.00000	(\$0.00073)	\$0.00008	(\$0.00065)	\$0.105714
9	Distribution Transportation	163	Next 50,000	\$0.065804	\$0.00000	\$0.00000	(\$0.00073)	\$0.00008	(\$0.00065)	\$0.065154
10	Distribution Transportation	163	Next 400,000	\$0.033994	\$0.00000	\$0.00000	(\$0.00073)	\$0.00008	(\$0.00065)	\$0.033344
11	Distribution Transportation	163	Over 500,000	\$0.018794	\$0.00000	\$0.00000	(\$0.00073)	\$0.00008	(\$0.00065)	\$0.018144

**Cascade Natural Gas Corporation**  
**TOTAL PROPOSED RATES IMPACT ON AVERAGE BILL BY RATE SCHEDULE**  
**STATE OF OREGON**

Ln No.	Customer Class	Schedule	Therms in Block	Normalized Volumes	Average Customers	Therms Per Month	Monthly Charge	Current 11/1/2017 Rate	Current Avg Bill	Total Proposed 11/1/2018 Rate	Total Proposed Avg Bill	Monthly Change in Avg Bill	Proposed Rates % Change
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	
					= d / e			= g + (f * h)		= g + (f * j)		= l / i	
CORE MARKET SERVICE													
1	Residential	101		45,501,518	63,133	60	\$4.00	\$0.687054	\$45.22	\$0.685514	\$45.13	(\$0.09)	-0.20%
2	Commercial	104		30,309,264	9,973	253	\$4.00	\$0.584494	\$151.88	\$0.583164	\$151.54	(\$0.34)	-0.22%
3	Com-Ind Dual	111		785,661	18	3,637	\$0.00	\$0.554264	\$2,015.86	\$0.503964	\$1,832.92	(\$182.94)	-9.08%
4	Industrial Firm	105		2,934,489	142	1,722	\$12.00	\$0.593914	\$1,034.72	\$0.543614	\$948.10	(\$86.62)	-8.37%
5	Industrial Interruptible	170		2,578,951	4	53,728	\$0.00	\$0.511434	\$27,478.33	\$0.461134	\$24,775.81	(\$2,702.52)	-9.84%
NONCORE MARKET SERVICE													
6	Distribution Transportation	163	10,000	3,331,376	32		\$500.00	\$0.125264	\$1,752.64	\$0.124614	\$1,746.14		
7	Distribution Transportation	163	10,000	2,694,842				\$0.113124	\$1,131.24	\$0.112474	\$1,124.74		
8	Distribution Transportation	163	30,000	5,027,139				\$0.106364	\$3,190.92	\$0.105714	\$3,171.42		
9	Distribution Transportation	163	50,000	4,930,217				\$0.065804	\$2,392.17	\$0.065154	\$2,368.54		
	Distribution Transportation	163	400,000	15,930,761				\$0.033994		\$0.033344			
	Distribution Transportation	163	Over 500,000	1,245,027				\$0.018794		\$0.018144			
11	Total			33,159,362		86,353			\$8,466.97		\$8,410.84	(\$56.13)	-0.66%

**DRAFT**

**Advice No. CNG\O18-07-01**

**Cascade Natural Gas Corporation**

**NOTICE TO THE PUBLIC**

**Oregon Service Area**

Cascade Natural Gas Corporation is on this date filing with the Oregon Public Utility Commission (OPUC) at Salem, Oregon, revisions to Rate Schedule Nos. 177, 191, 192, and 193, which upon approval by the Commission will become effective November 1, 2018.

The rate adjustments proposed in this filing are designed to pass on 1.) changes in the cost of gas and transportation services paid by Cascade to gas suppliers and interstate natural gas pipelines, temporary differences in purchased gas costs, that occur over time, as a result of differences between the actual cost of gas paid by the Company and the amount allowed for in Core customer rates, and removal of certain technical deferral refunds that have expired; and 2.) changes resulting from the Company's Conservation Alliance Plan.

The overall effect of the proposed rate adjustments on the monthly bill of a residential customer with consumption of 60 therms will be a net decrease of (\$.09) or (.20%). For small commercial customers, the decrease in the monthly bill for consumption of 253 therms will be (\$.34) or (.22%). Large volume core customers will experience an average decrease of (8.37%) depending on monthly volumes consumed. Large volume interruptible customers will experience an average decrease of (9.84%). Large volume non-core customers will experience an average decrease of (.66%) for distribution service from Cascade depending on the monthly volumes consumed.

By: Michael Parvinen  
Director, Regulatory Affairs

Date: October 1, 2018

# What is a PGA?

In the natural gas industry, PGA means Purchased Gas Adjustment. Simply stated, a PGA is designed to reflect the actual costs of gas supplies in customers' bills. A PGA filing does not affect the company's profits.

Each year, Cascade Natural Gas Corporation makes the best possible projection of the cost of gas supplies for the coming year. Any differences between the gas costs included in the company's overall rates and the actual cost of supplies are calculated and passed back to customers in the next PGA filing.

If actual gas costs are lower than originally projected, customers will see lower rates. If gas costs are higher, rates will go up.

Based on projected gas costs, Cascade Natural Gas is anticipating a decrease to rates for Washington customers and anticipating a slight increase or decrease for Oregon customers in its PGA filing. Cascade Natural Gas encourages you to use energy wisely and continue your conservation efforts.



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**Before the  
PUBLIC UTILITY COMMISSION OF OREGON**

**EXHIBIT 3**

**Attachments to Staff's Public Meeting Memos**

Attachment A - Incremental Change to Revenue by Rate Schedule

Attachment B - Incremental Change to Revenue by Adjustment

Attachment C - Three Percent Test

Attachment D - Bill Impacts

**Cascade Natural Gas Corporation**

**July 31, 2018**



**Cascade Natural Gas  
2018 PGA  
Incremental Revenue Change by Customer Rate Schedule  
Attachment A**

Customer Rate Schedule	Description	Gas Cost & Adjustment Schedule Total Revenue at Current <sup>1</sup>	Gas Cost & Adjustment Schedule Total Revenue at Proposed	Total Incremental Change in Revenue	Incremental Percentage Change by Rate Schedule	Percent Contribution to Total Incremental Change
101	Residential	29,828,854	29,761,944	(66,910)	-0.22%	8.22%
104	Commercial	17,115,580	17,076,600	(38,980)	-0.23%	4.79%
105	Industrial	1,780,411	1,611,649	(168,762)	-9.48%	20.74%
111	Large Volume	1,446,401	1,299,598	(146,803)	-10.15%	18.04%
170	Interruptible	1,389,944	1,237,195	(152,749)	-10.99%	18.77%
163	Transportation	2,347,050	2,107,639	(239,411)	-10.20%	29.43%
		53,908,240	53,094,625	(813,615)	-1.51%	100.00%

**Notes:**

<sup>1</sup> Revenue at "Current" does not reflect current revenues, but rather what the revenues would be if existing rates continued to be in effect during the upcoming year (i.e. current rates times forecasted therms). There will be small differences with the Advice filings.

Customer Schedule No.	Rate Class Type	Block	Adjustment Tariff No. 177-A PGA Gas Costs WACOG		Margin (Base Rate) 101/104/105/111/112/126 /170/163		Adjustment Tariff No. 191 Temporary Gas		Adjustment Tariff No. 192 Intervenor		Adjustment Tariff No. 193 Conservation		2018-2019		Forecast Therms	Revenue at Current	Revenue at Proposed	Change in Revenue	% Change
			Current Rate	Proposed Rate	Current Rate	Proposed Rate	Current Rate	Proposed Rate	Current Rate	Proposed Rate	Current Rate	Proposed Rate							
101	Residential		\$ 0.40660	0.37449	\$ 0.36407	0.36407	\$ (0.01950)	(0.03704)	\$0.00112	0.00091	\$ (0.06575)	(0.01743)	43,448,093	\$29,828,854	\$29,761,944	(\$66,910)	-0.22%		
104	Commercial		\$ 0.40660	0.37449	\$ 0.26263	0.26263	\$ (0.01950)	(0.03704)	\$ -	0.00000	\$ (0.06575)	(0.01743)	29,308,504	\$17,115,580	\$17,076,600	(\$38,980)	-0.23%		
105	Industrial		\$ 0.40660	0.37449	\$ 0.20557	0.20557	\$ (0.01950)	(0.03704)	\$0.00730	0.00008	\$ -	0.00000	2,967,500	\$1,780,411	\$1,611,649	(\$168,762)	-9.48%		
111	Large Volume		\$ 0.40660	0.37449	\$ 0.16592	0.16592	\$ (0.01950)	(0.03704)	\$0.00730	0.00008	\$ -	0.00000	2,581,384	\$1,446,401	\$1,299,598	(\$146,803)	-10.15%		
170	Interruptible		\$ 0.40660	0.37449	\$ 0.12309	0.12309	\$ (0.01950)	(0.03704)	\$0.00730	0.00008	\$ -	0.00000	2,685,934	\$1,389,944	\$1,237,195	(\$152,749)	-10.99%		
163	Transportation	Block 1	\$ -	0.00000	\$ 0.12402	0.12402	\$ -	0.00000	\$0.00730	0.00008	\$ -	0.00000	3,331,376	\$437,476	\$413,424	(\$24,053)	-5.50%		
		Block 2	\$ -	0.00000	\$ 0.11188	0.11188	\$ -	0.00000	\$0.00730	0.00008	\$ -	0.00000	2,694,842	\$321,171	\$301,715	(\$19,457)	-6.06%		
		Block 3	\$ -	0.00000	\$ 0.10512	0.10512	\$ -	0.00000	\$0.00730	0.00008	\$ -	0.00000	5,027,139	\$565,151	\$528,855	(\$36,296)	-6.42%		
		Block 4	\$ -	0.00000	\$ 0.06456	0.06456	\$ -	0.00000	\$0.00730	0.00008	\$ -	0.00000	4,930,217	\$354,285	\$318,689	(\$35,596)	-10.05%		
		Block 5	\$ -	0.00000	\$ 0.03275	0.03275	\$ -	0.00000	\$0.00730	0.00008	\$ -	0.00000	15,930,761	\$638,027	\$523,007	(\$115,020)	-18.03%		
		Block 6	\$ -	0.00000	\$ 0.01755	0.01755	\$ -	0.00000	\$0.00730	0.00008	\$ -	0.00000	1,245,027	\$30,939	\$21,950	(\$8,989)	-29.05%		

**Cascade Natural Gas  
2018 PGA  
Incremental Revenue Change by Adjustment Schedule  
Attachment B**

Adjustment Schedule No. & Description	Gas Cost & Adjustment Schedule Revenue at Current <sup>1</sup>	Gas Cost & Adjustment Revenue at Proposed	Total Incremental Change in Revenue	% Contribution to Total Incremental Change
177-A                      PGA	\$32,931,111	\$30,330,474	(\$2,600,637)	319.64%
191              Temporary Gas Cost Adj	(\$1,579,333)	(\$2,999,921)	(\$1,420,588)	174.60%
192                      Intervenor Funding	\$350,840	\$42,850	(\$307,990)	37.85%
193                      CAP	(\$4,783,746)	(\$1,268,147)	\$3,515,599	-432.10%
194-B                      Other Residual	\$0	\$0	\$0	0.00%
Margin	\$26,989,369	\$26,989,369	\$0	0.00%
			\$0	0.00%
			\$0	0.00%
Total	\$53,908,241	\$53,094,625	(\$813,616)	100.00%

**Note:**

<sup>1</sup> Revenue at "Current" does not reflect current revenues, but rather what the revenues would be if existing rates continued to be in effect during the upcoming year (i.e. current rates times forecasted therms). There will be small differences with the Advice filings.

Adjustment Schedule No.		2018-2019								
Advice No.	Description	Schedule No.	Rate Class Type	Block	Current Rate	Proposed Rate	Proposed Therms	Revenue at Current	Revenue at Proposed	Change in Revenue
		101	Residential		\$ 0.40660	0.37449	43,448,093	\$17,665,995	\$16,270,876	(\$1,395,119)
		104	Commercial		\$ 0.40660	0.37449	29,308,504	\$11,916,838	\$10,975,742	(\$941,096)
		105	Industrial		\$ 0.40660	0.37449	2,967,500	\$1,206,586	\$1,111,299	(\$95,287)
		111	Large Volume		\$ 0.40660	0.37449	2,581,384	\$1,049,591	\$966,702	(\$82,889)
		170	Interruptible		\$ 0.40660	0.37449	2,685,934	\$1,092,101	\$1,005,855	(\$86,246)
<b>Advice O17-07-01</b>	<b>177-A PGA</b>						<b>Total</b>	<b>\$32,931,111</b>	<b>\$30,330,474</b>	<b>(\$2,600,637)</b>
		101	Residential		\$ (0.01950)	(0.03704)	43,448,093	(\$847,238)	(\$1,609,317)	(\$762,079)
		104	Commercial		\$ (0.01950)	(0.03704)	29,308,504	(\$571,516)	(\$1,085,587)	(\$514,071)
		105	Industrial		\$ (0.01950)	(0.03704)	2,967,500	(\$57,866)	(\$109,916)	(\$52,050)
		111	Large Volume		\$ (0.01950)	(0.03704)	2,581,384	(\$50,337)	(\$95,614)	(\$45,277)
		170	Interruptible		\$ (0.01950)	(0.03704)	2,685,934	(\$52,376)	(\$99,487)	(\$47,111)
<b>Advice O17-07-01</b>	<b>191 Temp Gas Cost</b>						<b>Total</b>	<b>(\$1,579,333)</b>	<b>(\$2,999,921)</b>	<b>(\$1,420,588)</b>
		101	Residential		\$ 0.00112	0.00091	43,448,093	\$48,662	\$39,538	(\$9,124)
		104	Commercial		\$ -	0.00000	29,308,504	\$0	\$0	\$0
		105	Industrial		\$ 0.00730	0.00008	2,967,500	\$21,663	\$237	(\$21,426)
		111	Large Volume		\$ 0.00730	0.00008	2,581,384	\$18,844	\$207	(\$18,637)
		170	Interruptible		\$ 0.00730	0.00008	2,685,934	\$19,607	\$215	(\$19,392)
		163	Distribution	Block 1	\$ 0.00730	0.00008	3,331,376	\$24,319	\$267	(\$24,052)
				Block 2	\$ 0.00730	0.00008	2,694,842	\$19,672	\$216	(\$19,456)
				Block 3	\$ 0.00730	0.00008	5,027,139	\$36,698	\$402	(\$36,296)
				Block 4	\$ 0.00730	0.00008	4,930,217	\$35,991	\$394	(\$35,597)
				Block 5	\$ 0.00730	0.00008	15,930,761	\$116,295	\$1,274	(\$115,021)
				Block 6	\$ 0.00730	0.00008	1,245,027	\$9,089	\$100	(\$8,989)
<b>Advice No. O17-07-02</b>	<b>192 Intervenor</b>						<b>Total</b>	<b>\$350,840</b>	<b>\$42,850</b>	<b>(\$307,990)</b>
		101	Residential		\$ (0.06575)	(0.01743)	43,448,093	(\$2,856,712)	(\$757,300)	\$2,099,412
		104	Commercial		\$ (0.06575)	(0.01743)	29,308,504	(\$1,927,034)	(\$510,847)	\$1,416,187
<b>Advice No. O17-07-03</b>	<b>193 CAP</b>						<b>Total</b>	<b>(\$4,783,746)</b>	<b>(\$1,268,147)</b>	<b>\$3,515,599</b>
		101	Residential		\$ 0.36407	0.36407	43,448,093	\$15,818,147	\$15,818,147	\$0
		104	Commercial		\$ 0.26263	0.26263	29,308,504	\$7,697,292	\$7,697,292	\$0
		105	Industrial		\$ 0.20557	0.20557	2,967,500	\$610,029	\$610,029	\$0
		111	Large Volume		\$ 0.16592	0.16592	2,581,384	\$428,303	\$428,303	\$0
		170	Interruptible		\$ 0.12309	0.12309	2,685,934	\$330,612	\$330,612	\$0

Adjustment Schedule No.		2018-2019								
Advice No.	Description	Schedule No.	Rate Class Type	Block	Current Rate	Proposed Rate	Proposed Therms	Revenue at Current	Revenue at Proposed	Change in Revenue
		163	Distribution	Block 1	\$ 0.12402	0.12402	3,331,376	\$413,157	\$413,157	\$0
				Block 2	\$ 0.11188	0.11188	2,694,842	\$301,499	\$301,499	\$0
				Block 3	\$ 0.10512	0.10512	5,027,139	\$528,453	\$528,453	\$0
				Block 4	\$ 0.06456	0.06456	4,930,217	\$318,295	\$318,295	\$0
				Block 5	\$ 0.03275	0.03275	15,930,761	\$521,732	\$521,732	\$0
				Block 6	\$ 0.01755	0.01755	1,245,027	\$21,850	\$21,850	\$0
<b>Advice No.</b>							<b>Total</b>	<b>\$26,989,369</b>	<b>\$26,989,369</b>	<b>\$0</b>
	<b>Margin</b>									

**Cascade Natural Gas  
2018-2019 PGA  
Three Percent Test  
Attachment C**

	Surcharge	Credit	
<b>Prior Period Gas Cost Deferral True-Up</b>	(3,000,049)		
 <b><u>Non-Gas Cost Amortizations</u></b>			
Intervenor Funding	\$42,935		
Other Residuals			
Decoupling		(1,267,849)	
		\$0	
		\$0	
		0	
Subtotal	42,935	(1,267,849)	
Total	(2,957,114)	(1,267,849)	
<b>Total Proposed Amortization</b>			(\$4,224,963)
Less: Intervenor Funding <sup>1</sup>			\$42,935
<b>Net Proposed Amortizations (subject to the 3% test)</b>			(\$4,267,898)
<b>Utility Gross Revenues (2017)</b>			\$64,274,782
<b>3% of Utility Gross Revenues<sup>2</sup></b>			\$1,928,243
<b>Allowed Amortization</b>			(\$4,267,898)
<b>Allowed Amortization as % of Gross Revenues</b>			-6.64%

<sup>1</sup> Intervenor Funding is excluded from the result of the 3% test pursuant to ORS 757.259(4)

<sup>2</sup> Unadjusted general revenues as shown in the most recent Results of Operation.

**Proposed Rate & Bill Increases for ALL Oregon Local Distribution Companies by Class of Service  
2017-2018 PGA  
Attachment D**

Class of Service	Rate Schedule	RATE IMPACTS*			
		Current Rate per Therm	Proposed Rate per Therm	Change Rate per Therm	%-Change Rate per Therm
<b>Residential</b>					
Avista	410	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Cascade	101	\$0.687054	\$0.685514	-\$0.001540	-0.22%
NW Natural	2	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
<b>Commercial</b>					
Avista	420	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Cascade	104	\$0.584494	\$0.583164	-\$0.001330	-0.23%
NW Natural	3	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
<b>Industrial</b>					
Avista	424	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Cascade	105	\$0.593914	\$0.543614	-\$0.050300	-8.5%
NW Natural	31ISF	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
<b>Interruptible</b>					
Avista	440	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Cascade	170	\$0.511434	\$0.461134	-\$0.050300	-9.8%
NW Natural	32ISI	\$0.000000	\$0.000000	\$0.000000	#DIV/0!

RESIDENTIAL BILL IMPACTS													
	Rate Schedule	Average January Therms	Customer Charge	Current January Bill	Proposed January Bill	Change January Bill	%-Change January Bill	Annual Therms/Month	Customer Charge	Current Monthly Bill	Proposed Monthly Bill	Change Monthly Bill	%-Change Monthly Bill
Avista	410	0	\$0.00	\$0.00	\$0.00	\$0.00	#DIV/0!	0	\$0.00	\$0.00	\$0.00	\$0.00	#DIV/0!
Cascade	101	108	\$4.00	\$78.20	\$78.04	-\$0.17	-0.21%	60	\$4.00	\$45.22	\$45.13	-\$0.09	-0.20%
NW Natural	2	0	\$4.00	\$0.00	\$4.00	\$4.00	#DIV/0!	0	\$0.00	\$0.00	\$0.00	\$0.00	#DIV/0!

\* The residential rates illustrated above do not include pass-through charges included on customer bills that utilities are required to collect and distribute to the appropriate third parties, such as for franchise fees or the Public Purposes Charge.

**Cascade Natural Gas Corporation**  
**2018 PGA**  
**PGA Summary Sheet**  
**Attachment E**

		Location in Company Filing (cite)
<b>1) Change in Annual Revenues</b>		
(Per OAR 860-022-0017(3)(a))		
A) Dollars (To .1 million)	(\$541,605)	Proposed Rates, Total Revenue Impact
B) Percent (To .1 percent)	-0.84%	1 A) /Utility Gross Revenues (2016)
<b>2) Annual Revenues Calculation (Whole Dollars)</b>		
A) PGA Cost Change (Commodity & Transportation)	(\$2,600,634)	Proposed Rates, Total Revenue Impact, 143
B) Remove Last Year's Temporary Increment Total	(\$1,579,333)	Gas Cost Worksheets, Summary Rate-Rev Impact
C) Add New Temporary Increment	(\$2,999,922)	Gas Cost Worksheets, Summary Rate-Rev Impact
D) Other Additions or Subtractions (Break out & List each below -- Attach additional sheet if necessary)		
E) Total Proposed Change due to PGA change only	(\$7,179,889)	Total of items A, B, C, & D
<b>3) Residential Bill Effects Summary (incl. Non-Gas Cost Impacts)</b>		
A) Residential Schedule 2 Rate Impacts		
1) Current Billing Rate per Therm	\$0.687054	Proposed Rates, Total Summary Proposed Rates, Line 1, Col. (d)
2) Proposed Billing Rate per Therm	\$0.685514	Proposed Rates, Total Summary Proposed Rates, Line 1, Col. (j)
3) Rate Change Per Therm	(\$0.001540)	Proposed Rates, Total Summary Proposed Rates, Line 1, Col. (i)
4) Percent Change per Therm (to .1%)	-0.2%	Item 3 divided by Item 1
B) Average Residential Bill Impact (forecasted weather-normalized annual)		
1) Average Residential Monthly Therm Use	60	Proposed Rates, Total Proposed Avg Bill, Line 1, Col. (f)
2) Customer Charge	\$4.00	Proposed Rates, Total Proposed Avg Bill, Line 1, Col. (g)
3) Current Average Monthly Bill	\$45.22	Proposed Rates, Total Proposed Avg Bill, Line 1, Col. (i)
4) Proposed Average Monthly Bill	\$45.13	Proposed Rates, Total Proposed Avg Bill, Line 1, Col. (k)
5) Change in Average Monthly Bill	(\$0.09)	Proposed Rates, Total Proposed Avg Bill, Line 1, Col. (l)
6) Percent change in Average Monthly Bill (to .1%)	-0.20%	Proposed Rates, Total Proposed Avg Bill, Line 1, Col. (m)
C) Average January Residential Bill Impact		
1) Average January Residential Use (forecasted weather-normalized)	108	(Jan Normalized therms divided by Jan Customers)
2) Customer Charge	\$4.00	Proposed Rates, Total Proposed Avg Bill, Line 1, Col. (g)
3) Current Average January Bill	\$78.20	Sum \$4.00 + (108 * \$.687054)
4) Proposed Average January Bill	\$78.04	Sum \$4.00 + (108 * \$.685514)
5) Change in Average January Bill	(\$0.17)	Item 4 minus Item 3
6) Percent change in Average January Bill (to .1%)	-0.21%	Item 5 divided by Item 3
<b>4) Breakdown of Costs</b>		
A) Embedded in Rates		
1) Total Commodity Cost	\$ 17,778,892	Total of items a through f listed below
a) Total Demand Cost (assoc. w/ supply)	\$ -	
b) Total Peaking Cost (assoc. w/ supply)	\$ -	
c) Total Reservation Cost (assoc. w/ supply)	\$ 1,454	2017 PGA WP OR Gas Cost Tracking App
d) Total Volumetric Cost (assoc. w/ supply)	\$ 17,420,393	2017 PGA WP OR Gas Cost Tracking App
e) Total Storage Cost (assoc. w/ supply)	\$ 357,045	2017 PGA WP OR Gas Cost Tracking App
f) Other (A&G Benchmark Savings)		
2) Total Transportation Cost (Pipeline related)	\$ 12,425,223	Total of items a & b below
a) Total Upstream Canadian Toll	\$ 3,666,911	Total of items i. & ii. Below
i. Total Demand, Capacity, or Reservation Cost	\$ 3,666,911	2017 PGA WP OR Gas Cost Tracking App
ii. Total Volumetric Cost	\$ -	
b) Total Domestic Cost	\$ 8,758,311	Total of items i. & ii. Below
i. Total Demand, Capacity, or Reservation Cost	\$ 8,637,682	2017 PGA WP OR Gas Cost Tracking App
ii. Total Volumetric Cost	\$ 120,629	2017 PGA WP OR Gas Cost Tracking App
3) Total Storage Costs	\$ 722,191	2017 PGA WP OR Gas Cost Tracking App
4) Capacity Release Credits	\$ (1,393,851)	2017 PGA WP OR Gas Cost Tracking App
5) Total Gas Costs	\$ 31,244,966	2017 PGA WP OR Gas Cost Tracking App
B) Projected For New Rates		
1) Total Commodity Cost	\$ 16,015,736	Totals of items a through g listed below
a) Total Demand Cost (assoc. w/ supply)	\$ -	
b) Total Peaking Cost (assoc. w/ supply)	\$ -	
c) Total Reservation Cost (assoc. w/ supply)	\$ -	2018 PGA WP OR Gas Cost Tracking App
d) Total Vaporization Cost (assoc. w/ supply)		
e) Total Volumetric Cost (assoc. w/supply)	\$ 15,655,747	2018 PGA WP OR Gas Cost Tracking App
f) Total Storage Cost (assoc. w/supply)	\$ 359,989	2018 PGA WP OR Gas Cost Tracking App
g) Other (A&G Benchmark Savings)	\$ -	
2) Total Transportation Cost (Pipeline related)	\$ 12,356,607	Total of items a & b below
a) Total Upstream Canadian Toll	\$ 3,482,051	Total of items i. & ii. Below
i. Total Demand, Capacity, or Reservation Cost	\$ 3,482,051	2018 PGA WP OR Gas Cost Tracking App
ii. Total Volumetric Cost	\$ -	
b) Total Domestic Cost	\$ 8,874,556	Total of items i. & ii. Below
i. Total Demand, Capacity, or Reservation Cost	\$ 8,439,679	2018 PGA WP OR Gas Cost Tracking App
ii. Total Volumetric Cost	\$ 434,878	2018 PGA WP OR Gas Cost Tracking App
3) Total Storage Costs	\$ 725,727	2018 PGA WP OR Gas Cost Tracking App
4) Capacity Release Credits	\$ (1,271,792)	2018 PGA WP OR Gas Cost Tracking App
5) Total Gas Costs	\$ 29,448,022	2018 PGA WP OR Gas Cost Tracking App



**Cascade Natural Gas Corporation**  
**2018 PGA**  
**PGA Summary Sheet**  
**Attachment E**

**PGA Summary Sheet**

		Location in Company Filing (cite)
<b>5) WACOG (Weighted Average Cost of Gas)</b>		
<b>A) Embedded in Rates</b>		
1) WACOG (Commodity Only)		
a. With revenue sensitive	\$ 0.235890	Current rate on Tariff Sheet No. 177.2
b. Without revenue sensitive	\$ 0.228960	Current rate on Tariff Sheet No. 177.2
2) WACOG (Non-Commodity)		
a. With revenue sensitive	\$ 0.170710	Current rate on Tariff Sheet No. 177.2
b. Without revenue sensitive	\$ 0.165700	Current rate on Tariff Sheet No. 177.2
<b>B) Proposed for New Rates</b>		
1) WACOG (Commodity Only)		
a. With revenue sensitive	\$ 0.209200	Gas Cost Worksheets, Summary Rate-Rev Impact, line 1, col (d)
b. Without revenue sensitive	\$ 0.203120	Gas Cost Worksheets, Summary Rate-Rev Impact, line 1, col (c)
2) WACOG (Non-Commodity)		
a. With revenue sensitive	\$ 0.165290	Gas Cost Worksheets, Summary Rate-Rev Impact, line 5, col (d)
b. Without revenue sensitive	\$ 0.160480	Gas Cost Worksheets, Summary Rate-Rev Impact, line 5, col (c)
<b>6) Therms Sold</b>		
	80,991,419	Gas Cost Worksheets, Summary Rate-Rev Impact, line 13

<b>7) Purchasing/ Hedging Strategies</b> Prepare 1-2 page summary of gas cost situation to include resources, purchasing strategy, hedging, and pipeline issues. Within the summary include:		
<b>A) Resources embedded in current rates and an explanation of proposed resources.</b>		
1) Firm Pipeline Capacity		
a) Year-round supply contracts	9,050,000	See Exhibit 1 work papers, Supply Summary-Price and Types tab
b) Winter-only contracts	82,398,671	See Exhibit 1 work papers, Supply Summary-Price and Types tab
c) Reliance on Spot Gas/Other Short Term Contracts	200,772,183	See Exhibit 1 work papers, Supply Summary-Price and Types tab
d) Other - e.g. Supply area storage		
2) Market Area Storage		
a) Underground-owned	-	
b) Underground- contracted	12,355,930	See Exhibit 1 work papers, WP#6a - Summary of Pipeline Transportation Contracts
c) LNG-owned	-	
d) LNG-contracted	6,622,000	See Exhibit 1 work papers, WP#6a - Summary of Pipeline Transportation Contracts
3) Other Resources		
a) Recallable Supply		
b) City gate Deliveries		
c) Owned-Production		
d) Propane/Air	-	