

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: October 15, 2020

REGULAR X CONSENT _____ EFFECTIVE DATE November 1, 2020

DATE: September 24, 2020

TO: Public Utility Commission

FROM: Brian Fjeldheim

THROUGH: Bryan Conway and John Crider **SIGNED**

SUBJECT: CASCADE NATURAL GAS:
(Docket No. UG 397/Advice No. O20-07-01)
Reflects changes in the cost of purchased gas and the amortization rate for the Purchased Gas Adjustment (PGA) balancing account.

CASCADE NATURAL GAS:
(Docket No. UG 400/Advice No. O20-07-04)
Revises multiple schedules to reflect the changes resulting from the annual PGA filing.

STAFF RECOMMENDATION:

Staff recommends that Cascade Natural Gas Corporation (Cascade, CNGC, or Company) Advice No. O20-07-01, which is the Company's 2020 Purchased Gas Adjustment (PGA), and Advice No. O20-07-04, which updates Company tariff sheets to reflect changes resulting from the annual PGA filing, be approved for service rendered on and after November 1, 2020.

DISCUSSION:

Issue

Whether the Commission should approve Cascade's 2020 annual PGA as reflected in its Advice No. O20-07-01, and revisions to multiple schedules to reflect changes resulting from the annual PGA filing, as reflected in its Advice No. O20-07-04.

Applicable Rule or Law

ORS 757.205 requires public utilities to file all rates, rules, and charges with the Commission. ORS 757.210 provides that the Commission may approve tariff changes if

they are fair, just, and reasonable. ORS 757.220 provides that filings that make any change in rates, tolls, charges, rules, or regulations must be filed with the Commission at least 30 days before the effective date of the changes. The Commission may, for good cause shown, allow changes without requiring 30 days' notice.

ORS 757.259(5) states that unless subject to an automatic adjustment clause, amounts deferred under ORS 757.259 shall be allowed in rates only to the extent authorized by the Commission in a proceeding under ORS 757.210 to change rates and upon review of the utility's earnings at the time of application to amortize the deferral. The Commission may require that amortization of deferred amounts be subject to refund. The Commission's final determination on the amount of deferrals allowable in the rates of the utility is subject to a finding by the Commission that the amount was prudently incurred by the utility.

ORS 757.259(6) states that the overall average rate impact of the amortizations authorized under this section in any one year may not exceed three percent of the utility's gross revenues for the preceding calendar year. ORS 757.259(7) allows the Commission to consider an overall average rate impact greater than that specified in subsection (6) for natural gas commodity and pipeline transportation costs incurred by a natural gas utility, if the Commission finds that allowing a higher amortization rate is reasonable under the circumstances.

OAR 860-022-0025 requires that revised tariff filings include statements showing the change in rates, the number of customers affected and resulting change in annual revenue, and the reasons for the tariff revision.

OAR 860-022-0030 requires that tariff filings which result in increased rates include statements showing the number of customers affected, the annual revenue under existing schedules, the annual revenue under proposed schedules, the average monthly bills under existing and proposed schedules, and the reasons supporting the proposed tariff.

The PGA mechanism was originally established by Order No. 89-1046 to minimize the frequency of gas cost-related rate changes and the fluctuation of rate levels pursuant to ORS 757.259(2)(e). Since the mechanism's creation in 1989, the Commission has issued a series of orders concerning PGA filings through open-docket UM 1286.¹ Order No. 18-144 is the most recent of these orders, and revises the Commission's

¹ PGA Guidelines were acknowledged by the Commission in Docket No. UM 1286, Order No. 09-248, on June 23, 2009. The Guidelines in Docket No. UM 1286 have been modified four different times since they were first acknowledged by the Commission, in Order No. 10-197, in Order No. 11-196, in Order No. 14-238, and in Order No. 18-144.

procedures and requirements of the Natural Gas Portfolio Development Guidelines in Docket No. UM 1286 by adding language concerning review and approval of long term hedging instruments in a local distribution company's (LDC) natural gas portfolio. No changes were made to the PGA Filing Guidelines previously established in Order No. 14-238.

Analysis

On July 31, 2020, Cascade submitted Advice O20-07-01, which constitutes its annual PGA filing (Initial 2020 PGA Filing). On September 15, 2020, Cascade filed a supplement to its initial filing with updated gas costs, and also submitted revised tariff sheets with Advice No. O20-07-04 (Supplemental 2020 PGA Filing). In aggregate, these filings are commonly referred to as the 2020 PGA filing. The 2020 PGA Filing is comprised of two parts: a forward-looking part for the 2020-2021 Gas Year (Projected Purchased Gas Cost) and a backward-looking part for the 2019-2020 Gas Year (True-Up).

The Projected Purchased Gas Cost projects the costs of natural gas for the upcoming gas year (i.e., November 1, 2020 to October 31, 2021) and results in the new rates set forth in Schedule 177.² The True-Up of the Previous Gas Year trues up the costs of natural gas from the previous gas year (November 1, 2019 to October 31, 2020) by comparing the amount collected from customers in that year with the actual costs incurred by the Company in the same year.³ Any over- or under-collection from customers in the 2019-2020 Gas Year, together with any over- or under-collection from previous years,⁴ is either given back (in the case of over-collection) or surcharged (in the case of under-collection) to customers in the upcoming gas year. The True-Up results in the new rates set forth in Schedule 191.⁵

Projected Purchased Gas Cost for the 2019-2020 Gas Year (Rate Schedule 177)

The Projected Purchased Gas Cost comprises two rate components: 1) the commodity component rate and 2) the capacity or demand component rate. The rates for these components are represented in Table 1 on the following page in dollar per therm.

² Schedule 177 is titled "Purchased Gas Adjustment."

³ The 2019-2020 Gas Year covers the period beginning on November 1, 2019, and ending on October 31, 2020. However, per page 10 of Appendix A to Order No. 14-238 in Docket No. UM 1286 (See: <http://apps.puc.state.or.us/orders/2014ords/14-238.pdf>), all deferrals to be amortized into rates will be based on June deferral balances plus interest for July-October, and the deferrals that occur after June will be carried forward to the next PGA period.

⁴ Any over-collection or under-collection from previous years is due to the fact that actual volumetric sales of natural gas will always be different from forecasted volumetric sales. Since amortizations are intended to be recovered in volumetric forecasted sales, a remaining balance will always be present.

⁵ Schedule 191 is titled "Temporary Gas Cost Rate Addition."

Table 1: Projected Purchased Gas Cost for 2020-2021
(in \$/Therm or as noted otherwise)

Item		Current Rate 2019-2020 Gas Year ⁶	Proposed Rate 2020-2021 Gas Year ⁷	Change
Commodity	(A)	0.18115	0.21207	0.03092
Demand	(B)	0.15884	0.14361	-0.01523
Total Gas Cost	(C = A+B)	0.33999	0.35568	0.01569

The commodity component of the weighted average cost of gas (WACOG) proposed for the 2020-2021 Gas Year is increasing by \$0.03092 per therm, an increase of 17.1 percent from the previous PGA gas year. The change in price results from reduced domestic natural gas production in 2020 and forecasted into 2021 due to the economic impacts of COVID-19, increased natural gas consumption during the summer of 2020 by the electric power generation sector, and forecasted increases in demand for international liquefied natural gas (LNG) exports heading into winter, as shown in Table 1.⁸ The proposed demand component reflects a decrease of approximately \$0.01523 per therm,^{9,10} a decline of 9.6 percent from the previous PGA gas year.

Filing and Portfolio Guidelines

Cascade’s 2020 PGA Filing meets the PGA Filing Guidelines and the Natural Gas Portfolio Guidelines. Cascade has demonstrated its adherence to these Guidelines with regard to natural gas supplies and financial hedges.¹¹ Staff’s conclusions are supported

⁶ See the Supplemental Third Revision Sheet of 177.2 issued on August 1, 2019, “The Estimated Cost of Gas per therm” section approved by the Public Utility Commission of Oregon in Order No. 19-377 of Docket No. UG 370 and Docket No. UG 373.

⁷ See the proposed Supplemental Fourth Revision Sheet of 177.2 in the Company’s 2020 PGA September Gas Update filed September 15, 2020, for Docket No. UG 397/Advice No. O20-07-01 and Docket No. UG 400/Advice No. O20-07-04.

⁸ Per the EIA “Short-Term Energy Outlook” released September 9, 2020, accessed here: <https://www.eia.gov/outlooks/steo/marketreview/natgas.php>.

⁹ Demand costs reflect the cost of pipeline transportation to the Company’s system, as well as fixed costs associated with natural gas storage.

¹⁰ This is the Firm Demand rate and does not apply to Interruptible Customers. Certain commercial and industrial customers who elect interruptible service are subject to interruptions in capacity and supply. For interruptible customers, the delivery charge remains unchanged at \$0.12376 per therm.

¹¹ Accepted “best practices” for the purchase of natural gas supply by local distribution companies (LDCs) is portfolio construction that balances the objectives of reliability, cost, and price volatility using the tools of diversity, flexibility, and balance. The “Natural Gas Portfolio Development Guidelines” (Portfolio Guidelines) implement these “best practices” for Oregon LDCs. The Portfolio Guidelines require gas utilities to include certain information related to their gas supply portfolio with their annual PGA filing. This information allows the Commission to determine the prudence of the utility’s costs. Staff’s analysis of and conclusions regarding the Company’s natural gas supply portfolio and related purchasing strategies and actions are based on the Portfolio Guidelines in Docket No. UM 1286.

by the Company's comprehensive work papers and by review and discussion as part of the quarterly PGA meetings.

Staff reviewed Cascade's 2020 PGA Filing for compliance with the PGA Filing Guidelines and the Natural Gas Portfolio Guidelines (Portfolio Guidelines). Cascade has demonstrated its adherence to these Guidelines with regard to natural gas supplies and financial hedges.¹² Staff's conclusions are supported by the Company's comprehensive work papers and by review and discussion as part of the quarterly PGA update meetings.

Accepted "best practices" for the purchase of natural gas supply by a local distribution company (LDC) result in a portfolio that balances the objectives of reliability, cost control, and managing price volatility using diversity, flexibility, and balance in a LDC's gas portfolio. The Portfolio Guidelines implement these "best practices" for Oregon LDCs. The Portfolio Guidelines also require each gas utility to include certain information related to its gas supply portfolio with its annual PGA filing. This information assists the Commission in determining the prudence of the LDC's costs.

Cascade's portfolio preparation and planning process meets the standards in Section III of the Portfolio Guidelines related to portfolio planning, as do Cascade's physical gas contracts and financial transactions related to natural gas pricing. Cascade has also demonstrated its adherence to the Portfolio Guidelines with regard to natural gas supplies and financial hedges. In addition, the Company has provided all the information called for in Section IV (Information and Workpapers), and Section V (Supporting Data and Analysis) of the Portfolio Guidelines.

¹² Accepted "best practices" for the purchase of natural gas supply by local distribution companies (LDCs) is portfolio construction that balances the objectives of reliability, cost, and price volatility using the tools of diversity, flexibility, and balance. The Portfolio Guidelines implement these "best practices" for Oregon LDCs. The Portfolio Guidelines require gas utilities to include certain information related to their gas supply portfolio with their annual PGA filing. This information allows the Commission to determine the prudence of the utility's costs. Staff's analysis of and conclusions regarding a gas utility's natural gas supply portfolio and related purchasing strategies and actions are based on the Portfolio Guidelines in Docket No. UM 1286.

True-Up of the 2019-2020 Gas Year (Schedule 191)

Table 2: True-Up of the 2018-2019 Gas Year ^{13,14}
(in \$/Therm or as noted otherwise)

Item		Current Rate ¹⁵	Proposed Rate ¹⁶	Change
Commodity Amortization ¹⁷	(D)	0.11397	0.06456	-0.04941
Demand Amortization ¹⁸	(E)	-0.04796	-0.03260	0.01536
Total Amortization	(F=D+E)	0.06601	0.03196	-0.03405

Amortization of residual gas costs from the current and previous PGA periods results in a ratepayer surcharge of approximately \$5.47 million,¹⁹ due to \$5.26 million²⁰ of under-collections in the period from November 2019 to June 2020 and approximately \$211 thousand of under-collections from prior years. This surcharge increases the gas commodity price by \$0.06456 per therm, after accounting for the commodity cost variance sharing between the Company and customers, as required by Order No. 08-504 in Docket No. UM 1286.²¹ Despite the reduced wholesale gas prices associated with reduced economic activity and curtailed oil and gas production associated with the effects of the COVID-19 pandemic previously mentioned in this memo, the Company's monthly commodity gas costs exceeded its monthly collections from July 2019 to March 2020.²²

As for the Demand Amortization portion, the Company is currently rebating \$0.04796 per therm to customers (except Non-Residential Interruptible Customers).²³ The Company proposes to provide a rebate in the amount of \$0.03259 per therm. This new

¹³ Positive numbers represent surcharges; negative numbers represent refunds.

¹⁴ The Company's revenue sensitive calculation used an aggregate total of the commodity and demand deferral balances. Staff calculated the commodity and demand amortization dollar amounts separately.

¹⁵ Supplemental Second Revision Sheet 191.1 issued July 31, 2018, "Rates" section, approved by the Public Utility Commission of Oregon in Order No. 18-384 of Docket No. UG 356.

¹⁶ Supplemental Third Revision of Sheet 191.1 attached to the Company's 2019 PGA Filing.

¹⁷ These figures are for Weighted Average Cost of Gas (WACOG) Deferral only.

¹⁸ These figures are for Firm Demand Deferral only.

¹⁹ See Docket No. UG 397, page 3 of 9 in Cascade's work papers, Exhibit 1 – Gas Supply Portfolio and Related Transportation (i.e. Excel file, tab "Gas Cost Rate Increments (Tempo", row 19, column K).

²⁰ *Id.*

²¹ For the 2018-2019 Gas Year, the Company elected a 90/10 variance sharing on July 31, 2018.

²² Cascade Exhibit 1, page 1, rows 28 -40 illustrate the disparity between monthly actual gas costs and the billed commodity amounts using the 2019 PGA WACOG.

²³ Interruptible Service is provided on Schedule 170 and Interruptible Transportation Service is provided on Schedule 163. If a customer chooses to be interruptible, the Company does not secure firm interstate pipeline capacity for these customers. As a result, interruptible customers may be subject to curtailment orders but also generally pay significantly lower transportation and/or delivery charges.

rate would return approximately \$2.76 million²⁴ in over-collections from the November 2019 to June 2020 period.²⁵

Three Percent Test

Pursuant to ORS 757.259(6), ORS 757.259(7), and OAR 860-027-0300, the 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 in Attachment C of this public meeting memo, the resulting annual average rate impact from the PGA amortization and two other filings²⁶ is a 3.24 percent increase in rates when compared to the Company's 2019 total gross revenues and falls above the requirements of the statute.

The primary drivers of the Company's requested rate increase results from residual deferred balances related to prior period commodity costs, a reduction to the Conservation Appliance Plan (CAP) rebate from the 2019 PGA period, and future period gas cost volatility due to economic uncertainty resulting from the effects of the COVID-19 pandemic. Despite the Company's proposed increase in the 2020 PGA WACOG, there is a significant reduction in the temporary rate increment associated with gas commodity and demand deferral costs from the prior period. The decline in the temporary rate more than offsets the increase in the proposed WACOG.

Because the economic effects of COVID-19 are ongoing and outside the Company's control, and because the proposed reduction in the temporary rate will reduce customers per therm billing rate, Staff recommends the Commission approve a revenue increase of 3.24 percent, pursuant to ORS 757.259(7), due to an increase in gas commodity and transportation costs. Under the circumstances present in this case, Staff finds that such an increase in rates is fair and reasonable for the 2020 PGA gas year.

The percentage changes in Table 3 reflect the change in revenues related to the gas commodity and temporary rates portion of the Company's gross revenues for the 2020-21 gas year, based on projected customer usage, and differs from the three percent calculation.

²⁴ See page 3 of 9 in Cascade's work papers, Exhibit 1 – Gas Supply Portfolio and Related Transportation (i.e. Excel file, tab "Gas Cost Rate Increments (Tempo)", row 21, column K).

²⁵ *Id.*, row 7. These dollar amounts are not adjusted for revenue sensitive costs.

²⁶ Intervenor Funding, Docket No. UG 398/Advice No. O20-07-02; and Conservation Alliance Plan - Decoupling, Docket No. UG 399/Advice No. O20-07-03.

Table 3: Overall Revenue and Rate Impact
(in \$ or as noted otherwise)

Schedule	Description	Total PGA and Temporary Revenues at Current Rates ²⁷	Revenue Increase / (Decrease) ²⁸	Change (%) ²⁹
101	Residential	18,337,575	(125,409)	-0.7%
104	Commercial	11,706,676	(65,982)	-0.6%
105	Industrial	1,269,033	(58,485)	-4.6%
111	Large Volume General Service	1,293,536	(59,614)	-4.6%
170	Interruptible - Service	1,073,643	(49,480)	-4.6%
163	Interruptible - Transport	39,003	(14,055)	-36.0%
Overall		33,719,467 ³⁰	(373,025)	-1.1%

Conclusion

Cascade's 2020 PGA Filing reflects a revenue decrease of \$1.6 million,³¹ or approximately negative 4.5 percent,³² effective November 1, 2019, due to gas costs (Purchased Gas Adjustment; Schedule 177) and amortization of previous deferrals (Temporary Rate addition; Schedule 199). Combining the impact of this filing with the two other regulatory filings filed on and after July 31, 2020, results in a revenue decrease of \$373 thousand,³³ a 1.1 percent decrease from the previous PGA,³⁴ as represented in Table 3.³⁵ Effective November 1, 2020, the monthly bill of a residential

²⁷ See Attachment A of this public meeting memo, column "Gas Cost & Adjustment Schedule Total Revenue at Current". The Company included base rates in their Attachment A.

²⁸ *I.d.* See column "Total Incremental Change in Revenue" of Attachment A of this public meeting memo. Note: Staff included the revenue impact for the Tax Cut and Jobs Act rebate (UG 386).

²⁹ Here, the percentage change denotes the percentage change in revenues by Rate Schedule.

³⁰ Base rates are excluded from this total. Company Attachment A includes approximately \$29.3 million in base rate/margin in the total revenue figure.

³¹ \$373 thousand is the difference *between* the revenues at proposed rates *and* the revenues at current rates only for gas revenues (Purchased Gas Adjustment; Schedule 177) and amortizations (Temporary Rate Addition; Schedule 191). See Company work papers UG 370, Exhibit 1, Schedule 9 of 9, line 22 (i.e. Excel file "UG 397 Supplemental CNGC Gas Cost Worksheets", tab "Summary Rate-Rev Impact", row 35).

³² This is the percentage change for gas costs and gas cost deferrals only. See Company work papers Excel file "UG 397 Supplemental CNGC Attachments A - E Workpapers 2019", tab "B - Adjustment Schedule Summary", columns C and E for the dollar amounts used to calculate the percentage increase. PGA only data found in rows 3 and 4.

³³ See Attachment A of the Company's Supplemental 2020 PGA Filing, column "Total Incremental Change in Revenue" row 16.

³⁴ *I.d.*, column "Incremental Percentage Change by Rate Schedule."

³⁵ The amounts shown in Table 3 exclude base rates, and the amounts shown in Attachments A and B to this memo show incremental changes with a line item addition for base rates.

customer using an average of 60 therms per month will decrease by \$0.15, or negative 0.3 percent, from \$48.69 to \$48.54.³⁶

During the 2018 PGA gas year,³⁷ the Company under-collected approximately \$5.5 million³⁸ in gas commodity and demand charges. These under-collections were amortized into rates and surcharged to customers by temporarily increasing the price of gas charged to ratepayers during the 2019 PGA Gas Year. The primary drivers of the 2020 PGA customer billing decrease results from higher than forecast gas prices during the 2019-2020 Gas Year period and an increase in the 2020-2021 Gas Year WACOG, which are offset by a significant reduction in the under-collection surcharge in the 2020 PGA.

PROPOSED COMMISSION MOTION:

Approve Cascade's Advice No. O20-07-01, which is the Company's 2020 annual PGA filing, and Advice No. O20-07-04, which updates Company tariff sheets to reflect changes resulting from the annual PGA filing, for services rendered on and after November 1, 2020.

Cascade Docket No. UG 397/Advice No. O20-07-01 2020 PGA
Cascade Docket No. UG 400/Advice No. O20-07-04 Annual Updates

³⁶ See Attachment D of this public meeting memo.

³⁷ November 1, 2018 to October 31, 2019.

³⁸ Docket No. UG 370, Cascade workpapers, Excel file "UG 370 CNGC Supplemental Gas Cost Worksheets", tab "Gas Cost Rate Increments Tempo", column K.

Incremental Revenue Change by Customer Rate Schedule
Attachment A

REVISED - SEPTEMBER FILING

Customer Rate Schedule	Description	Gas Cost & Adjustment Schedule Total Revenue at Current ^{1,2}	Gas Cost & Adjustment Schedule Total Revenue at Proposed ²	Total Incremental Change in Revenue	Incremental Percentage Change by Rate Schedule	Percent Contribution to Total Incremental Change
101	Residential	18,337,575	18,212,166	(125,409)	-0.68%	33.62%
104	Commercial	11,706,676	11,640,694	(65,982)	-0.56%	17.69%
105	Industrial	1,269,033	1,210,548	(58,485)	-4.61%	15.68%
111	Large Volume	1,293,536	1,233,922	(59,614)	-4.61%	15.98%
170	Interruptible	1,073,643	1,024,163	(49,480)	-4.61%	13.26%
163	Transportation	39,003	24,948	(14,055)	-36.04%	3.77%
		33,719,467	33,346,442	(373,025)	-1.11%	100.00%

Notes:

¹ 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.

² Staff adjusted - excludes base rates/margin revenues

Cascade Natural Gas

2020 PGA

Incremental Revenue Change by Adjustment Schedule

Attachment B

REVISED - SEPTEMBER FILING

Adjustment Schedule No. & Description	Gas Cost & Adjustment Schedule Revenue at Current ^{1,2}	Gas Cost & Adjustment Revenue at Proposed ²	Total Incremental Change in Revenue	% Contribution to Total Incremental Change
177-A PGA	\$29,718,065	\$31,089,530	\$1,371,465	-367.66%
191 Temporary Gas Cost Adj	\$5,770,264	\$2,793,771	(\$2,976,493)	797.94%
192 Intervenor Funding	\$123,998	\$83,894	(\$40,104)	10.75%
193 CAP	(\$1,892,859)	(\$620,751)	\$1,272,108	-341.03%
194-B Other Residual	\$0	\$0	\$0	0.00%
Margin ²	\$29,265,375	\$29,265,375	\$0	0.00%
			\$0	0.00%
			\$0	0.00%
Total	\$33,719,468	\$33,346,444	(\$373,024)	100.00%

Note:

¹ 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.

² Staff adjusted - excludes base rates/margin revenues

**Cascade Natural Gas
2020-2021 PGA
Three Percent Test
Attachment C**

	<u>Surcharge</u>	<u>Credit</u>	
Prior Period Gas Cost Deferral True-Up	2,793,857		
 <u>Non-Gas Cost Amortizations</u>			
Intervenor Funding	\$83,450		
Other Residuals			
Decoupling		(621,012)	
		\$0	
		\$0	
		0	
Subtotal	<u>83,450</u>	<u>(621,012)</u>	
Total	2,877,307	(621,012)	
Total Proposed Amortization			\$2,256,295
Less: Intervenor Funding ¹			\$83,450
Net Proposed Amortizations (subject to the 3% test)			\$2,172,845
Utility Gross Revenues (2019)			\$67,070,587
3% of Utility Gross Revenues²			\$2,012,118
Allowed Amortization			\$2,172,845
Allowed Amortization as % of Gross Revenues			3.24%

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

² 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
2020-2021 PGA
Attachment D**

REVISED - SEPTEMBER FILING

Class of Service	Rate Schedule	RATE IMPACTS*			
		Current Rate per Therm	Proposed Rate per Therm	Change Rate per Therm	%-Change Rate per Therm
Residential					
Avista	410	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Cascade	101	\$0.728236	\$0.725614	-\$0.002622	-0.36%
NW Natural	2	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Commercial					
Avista	420	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Cascade	104	\$0.619497	\$0.617345	-\$0.002152	-0.35%
NW Natural	3	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Industrial					
Avista	424	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Cascade	105	\$0.619790	\$0.601028	-\$0.018762	-3.0%
NW Natural	31ISF	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Interruptible					
Avista	440	\$0.000000	\$0.000000	\$0.000000	#DIV/0!
Cascade	170	\$0.523887	\$0.505125	-\$0.018762	-3.6%
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	126	\$5.00	\$96.76	\$96.43	-\$0.33	-0.34%	60	\$5.00	\$48.69	\$48.54	-\$0.15	-0.31%
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.