

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO**

**IN THE MATTER OF THE TARIFF SHEETS)
FILED BY COLORADO NATURAL GAS, INC.)
WITH ADVICE LETTER 89)**

Proceeding No. 18AL-___G

**DIRECT TESTIMONY OF
TYSON D. PORTER
REGULATORY ANALYST**

May 11, 2018

**SUBMITTED ON BEHALF OF
COLORADO NATURAL GAS, INC.**

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1 I. INTRODUCTION

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A. Tyson D. Porter, 7810 Shaffer Parkway, Suite 120, Littleton, Colorado 80127.

4 Q. ON WHOSE BEHALF IS YOUR TESTIMONY PRESENTED?

5 A. I am testifying on behalf of Colorado Natural Gas, Inc. ("CNG").

6 Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

7 A. I am the Regulatory Analyst for Summit Utilities, Inc. ("Summit"), the parent
8 company of CNG. My duties as a Regulatory Analyst include preparing cost of
9 service studies and developing accounting exhibits and testimony for use in
10 applications for rate changes for Summit's subsidiaries. I prepare or assist in
11 preparing regularly filed exhibits and reports to various regulatory commissions. I
12 also provide data, answer inquiries and assist representatives of the regulatory
13 commissions in connection with their audits and reviews.

14 Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND RELEVANT
15 BUSINESS EXPERIENCE.

16 A. After earning dual Bachelor of Science degrees in Business Administration and
17 Accounting from the University of Kansas in 2006, I started my career as an auditor
18 for EKS&H, a large Colorado-based accounting and business consulting firm. I
19 was accountable for planning and conducting audits on public and private
20 organizations, primarily in the energy sector, including gas utilities. In 2010, I left
21 EKS&H to become a consultant to Southern Missouri Gas L.P., a gas utility serving

1 customers in central and southern Missouri. In 2012, a subsidiary of Summit,
2 Summit Natural Gas of Missouri, Inc. (then known as Missouri Gas Utility, Inc.),
3 purchased all the assets of Southern Missouri Gas L.P. Following completion of
4 the integration, I accepted a position with Summit.

5 **Q. HAVE YOU FILED TESTIMONY BEFORE THIS COMMISSION?**

6 A. Yes, I filed testimony before the Colorado Public Utilities Commission
7 (“Commission”) in CNG’s general rate case proceeding in 2013.

8 **Q. HAVE YOU FILED TESTIMONY BEFORE OTHER REGULATORY**
9 **COMMISSIONS?**

10 A. Yes, I have filed testimony before the Missouri Public Service Commission and the
11 Maine Public Utilities Commission as a cost of service witness and as an expert in
12 cost of gas proceedings.

13 **II. PURPOSE OF TESTIMONY**

14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

15 A. I present CNG’s cost of service study and explain the analysis and conclusions
16 that led CNG to request a change in its base rates. I also support CNG’s rate base
17 calculation, CNG’s depreciation expense calculation, and testify about CNG’s
18 operation & maintenance (“O&M”) expenses and other taxes.

19 **III. LIST OF EXHIBITS SPONSORED IN TESTIMONY**

20 **Q. ARE YOU SPONSORING EXHIBITS?**

- 1 A. Yes, I sponsor the following exhibits:
- 2 • **Exhibit No. TDP-1**, Revenue Sufficiency Study
- 3 • **Exhibit No. TDP-2**, Weather Normalized Annual Sales Volumes and Annual
- 4 Customer Bills
- 5 • **Exhibit No. TDP-3**, Weather Normalized Annual Transportation Volumes and
- 6 Revenues
- 7 • **Exhibit No. TDP-4**, Modified Class Cost of Service

8 **Q. WERE YOUR EXHIBITS PREPARED BY YOU OR UNDER YOUR DIRECTION?**

9 A. Yes.

10 **IV. SUMMARY OF CONCLUSION**

11 **Q. PLEASE EXPLAIN YOUR CONCLUSIONS.**

12 A. CNG's base rates, which consist of monthly service and facility charges and

13 volumetric distribution charges, are inadequate to recover CNG's cost of service,

14 leaving it with an annual revenue deficiency of approximately \$3.8 million.

15 **V. RATEMAKING PRINCIPLES**

16 **Q. DOES CNG INTEND TO ACCOMPLISH PHASE I AND PHASE II GOALS IN**

17 **THIS FILING?**

18 A. Yes. CNG will not ask for a General Rate Schedule Adjustment (GRSA) followed

19 by a separate cost allocation rate design filing. Revenue requirements and cost

20 allocation rate design are addressed in this filing.

21 **Q. DOES CNG HAVE MORE THAN ONE AREA FOR BASE RATES?**

22 A. Yes. CNG has a Mountain Division and an Eastern Colorado Division, each of

1 which has its own base rates. The Mountain Division was formed in CNG's last
2 rate case, Docket No. 13AL-0153G, by combining the Cripple Creek, Pueblo West,
3 and Bailey/South Park service areas. The Eastern Colorado Division was added
4 by acquisition in 2011.

5 **Q. WHAT TEST PERIOD DID YOU USE TO DETERMINE CNG'S REVENUE**
6 **REQUIREMENT?**

7 A. To determine CNG's revenue requirement in this proceeding, I relied on CNG's
8 books and records for the twelve months ended December 31, 2017 and adjusted
9 the test period data for normal weather and non-recoverable expenses.

10 **Q. PLEASE DESCRIBE THE REGULATORY MATCHING PRINCIPLE AND HOW**
11 **YOU USED IT IN YOUR ANALYSIS.**

12 A. The regulatory matching principle requires that all cost of service components (e.g.
13 revenue, investment, expenses, and cost of capital) be considered and evaluated
14 at a similar point in time. Using the twelve months ended December 31, 2017 test
15 period, I calculated a thirteen-month average rate base, weather-adjusted actual
16 sales volumes, average customer counts, and actual operating expenses modified
17 for non-recoverable expenses.

18 **Q. IS IT APPROPRIATE TO USE A TWELVE-MONTH TEST PERIOD AND AN**
19 **AVERAGE RATE BASE?**

20 A. Yes, so long as the utility is not engaged in or contemplating significant expansions
21 or nonrevenue producing facility upgrades. Currently, CNG is not engaged in or
22 contemplating significant expansions or nonrevenue producing facility upgrades.

1 **Q. HOW DOES YOUR ANALYSIS ADDRESS TEMPERATURE VARIATIONS**
2 **DURING THE TEST PERIOD?**

3 A. For the test period, I used CNG's billing system to derive total usage by customer
4 class and temperature zone. See Exhibit No. TDP-2, Weather Normalized Annual
5 Sales Volumes and Annual Customer Bills. In support of Exhibit TDP-2, CNG
6 conducted a retail demand study to develop the weather normalized monthly sales
7 volume by temperature zone and customer class. The analysis compares actual
8 monthly sales volumes and customer counts from the test year to determine a non-
9 weather sensitive base load usage per customer, by class. The study then
10 calculates an annual excess usage per heating degree day ("HDD") for each
11 customer and class. The annual excess usage per HDD is then multiplied by the
12 30-year annual average HDDs as supported in Ronald J. Amen's testimony and
13 Exhibit RJA-1. Weather-related usage is then added to non-weather-related usage
14 to derive weather-adjusted usage for the test year.

15 **VI. REVENUE SUFFICIENCY**

16 **Q. PLEASE EXPLAIN EXHIBIT NO. TDP-1.**

17 A. Exhibit No. TDP-1 is a Revenue Sufficiency Study that solves for the revenue
18 deficiency or excess based on test period determinants.

19 **Q. PLEASE EXPLAIN EACH OF THE SCHEDULES SUPPORTING YOUR**
20 **CALCULATION OF COST OF SERVICE AND REVENUE SUFFICIENCY IN**
21 **EXHIBIT TDP-1.**

22 A. **Schedule 1** Revenue Sufficiency – Mountain Division

1 This schedule accumulates the results of Schedule 3 through Schedule 8 to
2 calculate for the test period a Mountain Division jurisdictional cost of service of
3 \$21.0 million and a Mountain Division jurisdictional annual revenue deficiency of
4 \$3.3 million.

5 **Schedule 2** Revenue Sufficiency – Eastern Colorado Division

6 This schedule accumulates the results of Schedule 3 through Schedule 8 to
7 calculate for the test period an Eastern Colorado Division jurisdictional cost of
8 service of \$2.3 million and an Eastern Colorado Division jurisdictional annual
9 revenue deficiency of \$0.5 million.

10 **Schedule 3** Pro Forma Revenue

11 This schedule uses the results from Exhibit TDP-2, Weather Normalized Annual
12 Sales Volumes and Annual Customer Bills to calculate the pro forma revenues for
13 the test year for each of the Mountain and Eastern Colorado Divisions. This is
14 discussed further in the next section.

15 **Schedule 4** Rate Base Summary

16 This schedule summarizes all the components used to determine rate base for
17 each of the Mountain and Eastern Colorado Divisions. For most elements, I
18 calculated the test period rate base using thirteen-month averages for rate base
19 elements. However, because of the Tax Cuts and Jobs Act of 2017, I calculated a
20 few of the elements using December 31, 2017 balances.

21 **Schedule 5** Cost of Capital

22 This schedule shows the capital structure and overall rate of return calculations
23 proposed in this proceeding. Mr. Dylan D'Ascendis supports in his testimony

1 CNG's capital structure and proposed return on equity.

2 **Schedule 6 O&M Expense**

3 This schedule shows CNG's historical per book O&M expenses, as well as any
4 adjustments being proposed to the per book expenses to arrive at the test period
5 O&M expenses. O&M expenses are discussed further in the next section.

6 **Schedule 7 Depreciation Expense**

7 This schedule shows the depreciation expense included in the cost of service for
8 each of the Mountain and Eastern Colorado Divisions. CNG is not proposing in this
9 proceeding any new depreciation rates for its plant investment.

10 **Schedule 8 Taxes Other Than Income Taxes**

11 This schedule includes all of CNG's property taxes for the test period for each of
12 the Mountain and Eastern Colorado Divisions.

13 **Schedule 9 Over Collection of 2013 Rate Case Expenses**

14 This schedule calculates the over-collection of 2013 rate cases expenses through
15 March 31, 2018.

16 **Q. PLEASE DESCRIBE THE ANALYTICAL METHODS YOU USED TO**
17 **CALCULATE REVENUE SUFFICIENCY.**

18 A. The primary analytical methods included in Exhibit No. TDP-1, Revenue
19 Sufficiency, are listed below.

- 20 1. Base Distribution Rate: In its last rate case, CNG consolidated the rate
21 areas of Cripple Creek, Pueblo West, and Bailey/South Park, forming the
22 Mountain Division. CNG also continues to operate the Eastern Colorado
23 Division. Each division is geographically distinct and has different

1 operational cost factors. As such, I calculated revenue sufficiency for the
2 Mountain Division and the Eastern Colorado Division separately.

3 2. Adjustments and Rate Determinants: In CNG's revenue requirement, I have
4 included cost of service adjustments, primarily for non-recoverable
5 expenses. Rate determinants are based on test period actuals and adjusted
6 for normal weather.

7 3. Test Period: The test period is the twelve months ended December 31,
8 2017. The test period is the same as CNG's accounting fiscal year.

9 4. Operating Revenues: I calculated CNG's operating revenues using the
10 revenue detail contained in the December 31, 2017 trial balance, and
11 adjusted revenue for normal weather.

12 5. Operating Expenses: Operating expenses are equal to the operating
13 expenses incurred during the test period, with adjustments for non-
14 recoverable expenses. Operating expenses include Operation &
15 Maintenance, Administrative & General, Taxes other than Income Taxes,
16 and Depreciation.

17 6. Rate Base: Rate Base includes the thirteen-month average Net Utility Plant,
18 Working Capital, Storage Gas, and Customer Deposits. Both the net
19 deferred income tax liability and the net regulatory liability associated with
20 the excess deferred income taxes resulting from the Tax Cuts and Jobs Act
21 of 2017 are included as year-end December 31, 2017 balances.

22 7. Return on Rate Base: CNG's capitalization at December 31, 2017 was used
23 as the basis for developing the cost of capital. CNG's long-term debt

1 comprises four tranches of debt from a syndicate of lenders. At
2 December 31, 2017, the weighted average interest rate of all the long-term
3 debt was 5.52%. The cost of common equity was 11.90%. CNG maintains
4 a debt-to-equity ratio of approximately 56/44.

5 8. Cost Allocations: CNG's parent company, Summit, allocates overhead
6 costs to CNG and its other subsidiaries in accordance with the Dstrigas
7 formula, as explained in Amanda Tolbert's testimony.

8 9. Income Taxes: Income taxes was calculated by applying the Colorado state
9 corporate income tax rate of 4.63% to taxable income and the federal
10 corporate income tax rate of 21.00% to taxable income after being reduced
11 by state income taxes.

12 10. Revenue Credits: Miscellaneous income and transportation revenue were
13 treated as revenue credits. The transportation revenue credit was
14 calculated in Exhibit TDP-3, Weather Normalized Annual Transportation
15 Volumes and Revenues. All transportation contracts contain discounted
16 rates.

17 **Q. IS CNG SEEKING TO INCREASE ITS O&M EXPENSES FROM THE LEVELS**
18 **PROJECTED IN ITS LAST RATE CASE?**

19 A. Yes. In Docket No. 13AL-0153G, CNG identified \$1.9 million and \$0.4 million in its
20 revenue requirement for O&M for its Mountain and Eastern Colorado Divisions,
21 respectively. Those annual amounts were used to serve approximately 18,300
22 retail sales and transportation customers in Colorado. This filing requests an O&M-
23 related revenue requirement of \$6.6 million and \$0.9 million for the Mountain and

1 Eastern Colorado Divisions, respectively. Over the test period, CNG served an
2 average of 21,500 retail sales and transportation customers in Colorado.

3 **Q. ON A PER CUSTOMER BASIS, HOW DOES THE PREVIOUS FILING'S O&M**
4 **EXPENSES COMPARE TO THE CURRENT FILING'S O&M EXPENSES?**

5 A. The annual O&M cost per customer embedded in CNG's filed case in Docket No.
6 13AL-0153G was \$125. The comparable amount for this filing is \$348, which is a
7 178% increase. As noted in Mr. Birchfield's testimony, the increase in O&M costs
8 is attributable to CNG's maturation and the fact that it is pursuing fewer capital-
9 related projects.

10 **Q. HAS CNG MADE ANY ADJUSTMENTS TO O&M EXPENSES FOR NON-**
11 **RECOVERABLE EXPENSES?**

12 A. Yes. We excluded non-recoverable expenses associated with advertising
13 expenses not related to safety and customer notices and expenses associated
14 with CNG's demand side management program.

15 **Q. HAS CNG INCLUDED ANY ADJUSTMENTS TO O&M EXPENSE RELATED TO**
16 **RATE CASE EXPENSES?**

17 A. No. CNG has not made any adjustments for rate case expenses related to this
18 proceeding but proposes to include such expenses as described below.

19 **Q. HAS CNG CONTINUED TO COLLECT RATE CASE EXPENSES FROM THE**
20 **PREVIOUS RATE PROCEEDING?**

21 A. Yes. In Docket No 13AL-0153G, the Commission-approved settlement called for a
22 three-year recovery period for rate case expenses, collected from an addition to

1 the distribution charges. CNG agreed to reduce the distribution charges related to
2 the rate case expenses at the end of the three years. The expiration should have
3 occurred in December 2016. CNG inadvertently failed to reduce its rates and
4 consequently has over-collected rate case expenses and will continue to over-
5 collect until the rates in this proceeding become effective.

6 **Q. DID CNG FULLY AMORTIZE THE PREVIOUS RATE CASE EXPENSES?**

7 A. Yes. CNG accumulated all previous rate case expenses in Account 186,
8 Miscellaneous Deferred Debits, and amortized them over three years. The rate
9 case expenses were fully amortized by December 2016, but the corresponding
10 distribution rates were not reduced at that time.

11 **Q. HOW DOES CNG PROPOSE TO REMEDY THE OVER-COLLECTION?**

12 A. First, CNG established a deferred debit account at March 31, 2018, and entered a
13 credit balance representing the over-collection through March 2018. See Exhibit
14 TDP-1, Schedule 9, Over-Collection of 2013 Rate Case Expenses for the
15 calculation. Second, that credit balance will be increased each month by the
16 monthly over-collection from April 2018 through the effective date of the rates to
17 be authorized in this proceeding. Third, this proceeding's rate case expenses will
18 be booked to the same account. A reconciliation of the account balance will occur
19 at the end of this proceeding and distribution rates will be adjusted accordingly.

20 **VII. MODIFIED COST OF SERVICE STUDY AND RATE DESIGN**

21 **Q. WHAT IS A "MODIFIED COST OF SERVICE STUDY"?**

22 A. Ordinarily, a class cost of service study includes several analytical steps to assign
23 all costs to customer classes based on their cost-causing behaviors. Included in

1 those steps is a classification process wherein costs are assigned to customer-
2 related, demand-related, and usage-related categories. Subsequent analytical
3 steps assign the costs within each category to customer classes either through
4 direct assignment or allocation. In my analysis, the classification assigns costs to
5 just two categories -- customer related and noncustomer related. In the rate design
6 calculations in Exhibit No. TDP-4, Modified Class Cost of Service, each rate area
7 shows two sets of costs for its revenue requirement. Demand-related and usage-
8 related costs were not split. Hence, the term "Modified Cost of Service Study".

9 **Q. DID YOU PERFORM THE RATE DESIGN CALCULATIONS?**

10 A. No. Mr. Kent Taylor supports the proposed rate design in his testimony and
11 supporting Exhibit KDT-1.

12 **VIII. CONCLUSION**

13 **Q. PLEASE STATE YOUR CONCLUSIONS FOR THE MOUNTAIN DIVISION.**

14 A. The Mountain Division's annual revenue deficiency is approximately \$3.3 million.
15 The Mountain Division's return on rate base at existing rates is 5.84%. The
16 proposed rates will yield an overall rate of return on rate base of 8.34%. The
17 corresponding return to common equity is 11.90%.

18 **Q. PLEASE STATE YOUR CONCLUSIONS FOR THE EASTERN COLORADO**
19 **DIVISION.**

20 A. The Eastern Colorado Division's annual revenue deficiency is approximately
21 \$0.5 million. The Eastern Colorado Division's return on rate base at existing rates
22 is 4.18%. The proposed rates will yield an overall rate of return on rate base of
23 8.34%. The corresponding return to common equity is 11.90%.

1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

2 A. Yes.

AFFIDAVIT

STATE OF KANSAS

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) 18AL _____ G, IN THE MATTER OF THE TARIFF


) SHEETS FILED BY COLORADO NATURAL GAS,

) INC. WITH ADVICE LETTER 89

SEDGWICK COUNTY


)

I, Tyson Porter, having been duly sworn upon my oath, state that I am the Regulatory Analyst for Summit Utilities, Inc., that I am duly authorized to make this affidavit on behalf of Colorado Natural Gas, Inc., and that the matters and things stated in the foregoing Testimony and exhibits thereto are true and correct to the best of my information, knowledge and belief.



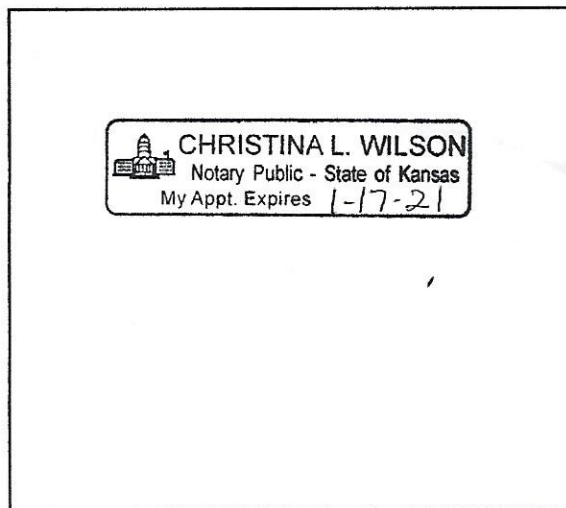
Tyson Porter

Subscribed and sworn before me to this 11 day of May, 2018



Notary Public

My Commission expires: 1/17/2021



Colorado Natural Gas, Inc.

Revenue Sufficiency Study

Exhibit No. TDP-1

May 11, 2018

Colorado Natural Gas, Inc.
CPUC Docket No 18AL -
Revenue Sufficiency - Mountain System

Mountain System							
Line No	Description	Reference	Test Year	Adjustments	Proforma	Revenue Increase	Adjusted Test Year
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Revenue						
1	facility charges	2017 actual	\$ 3,034,180	\$ 18,020 (1)	\$ 3,052,200	\$ -	\$ 3,052,200
2	distribution charges	2017 actual	13,837,932	800,086 (2)	14,638,018	-	14,638,018
3	Demand Side Management	2017 actual	88,583	(88,583) (3)	-	-	-
4	transportation charges	2017 actual	716,885	(126,512) (4)	590,373	-	590,373
5	miscellaneous	2017 actual	173,756	-	173,756	-	173,756
7	base rate revenue change		-	-	-	3,325,325	3,325,325
8	total operating revenue		<u>\$ 17,851,336</u>	<u>\$ 603,011</u>	<u>\$ 18,454,347</u>	<u>\$ 3,325,325</u>	<u>\$ 21,779,672</u>
9	O&M	Schedule 6	\$ 6,684,887	(114,652) (3)	\$ 6,570,235		\$ 6,570,235
10	Depreciation and Amortization	Schedule 7	3,570,973	-	3,570,973		3,570,973
11	Taxes Other Than Income Taxes	Schedule 8	1,562,013	-	1,562,013		1,562,013
12	Operating expenses		<u>\$ 11,817,873</u>	<u>\$ (114,652)</u>	<u>\$ 11,703,221</u>	<u>\$ -</u>	<u>\$ 11,703,221</u>
13	Income before interest and income taxes		\$ 6,033,463	\$ 717,663	\$ 6,751,126	\$ 3,325,325	\$ 10,076,452
14	Assigned Interest (rate base * component cost of debt)		<u>(3,082,676)</u>	<u>-</u>	<u>(3,082,676)</u>		<u>(3,082,676)</u>
15	Net income before income taxes		\$ 2,950,787		\$ 3,668,450	\$ 3,325,325	\$ 6,993,775
16	Income taxes at 24.66%		<u>727,664</u>		<u>904,640</u>	<u>1,232,366</u>	<u>1,724,665</u>
17	Net income		<u>\$ 2,223,123</u>		<u>\$ 2,763,810</u>	<u>\$ 2,092,960</u>	<u>\$ 5,269,110</u>
18	Rate of return on rate base		<u>5.30%</u>		<u>5.84%</u>		<u>8.34%</u>
19	Rate of return on equity		<u>5.02%</u>		<u>6.24%</u>		<u>11.90%</u>
20	Net income target @ 11.90% (rate base * component cost of ROE)		<u>5,269,141</u>		<u>5,269,141</u>		<u>5,269,141</u>
21	net income excess (deficiency)		<u>\$ (3,046,018)</u>		<u>\$ (2,505,331)</u>		<u>\$ (31)</u>
22	net income excess (deficiency) grossed up for income taxes		<u>\$ (4,042,980)</u>		<u>\$ (3,325,325)</u>		<u>\$ (41)</u>
23	Rate Base		<u>\$ 100,138,660</u>		<u>\$ 100,138,660</u>		<u>100,138,660</u>

Notes: (1) Adjustmtnent to reflect facility charge revenue based on avg customer count for 2017 - See Exhibit TDP-1 Schedule 3 Pro Forma Revenue
(2) Adjustment to reflect weather normalized distribution revenue - See Exhibit TDP-1 Schedule 3 Pro Forma Revenue
(3) Adjustment to eliminate DSM related revenue and expense - See Exhibit TDP-1 Schedule 6 O&M Expense Summary
(4) Adjustment to reflect normalized transportation revenue - See Transport Study Exhibit TDP-3

Colorado Natural Gas, Inc.
CPUC Docket No 18AL -
Revenue Sufficiency - Eastern Colorado

Eastern Colorado							
Line No	Description	Reference	Test Year	Adjustments	Proforma	Revenue Increase	Adjusted Test Year
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Revenue						
1	facility charges	2017 actual	\$ 573,042	\$ 1,602 (1)	\$ 574,644	\$ -	\$ 574,644
2	distribution charges	2017 actual	1,090,968	117,813 (2)	1,208,781	-	1,208,781
3	demand side management	2017 actual	22,612	(22,612) (3)	-	-	-
4	transportation charges	2017 actual	-	-	-	-	-
5	miscellaneous	2017 actual	40,501	-	40,501	-	40,501
7	base rate revenue change		-	-	-	519,168	519,168
8	total operating revenue		<u>\$ 1,727,124</u>	<u>\$ 96,803</u>	<u>\$ 1,823,926</u>	<u>\$ 519,168</u>	<u>\$ 2,343,094</u>
9	O&M	Schedule 6	\$ 931,655	\$ (24,682) (3)	\$ 906,973		\$ 906,973
10	Depreciation and Amortization	Schedule 7	338,831	-	338,831		338,831
11	Taxes Other Than Income Taxes	Schedule 8	151,860	-	151,860		151,860
12	Operating expenses		<u>\$ 1,422,347</u>	<u>\$ (24,682)</u>	<u>\$ 1,397,665</u>	<u>\$ -</u>	<u>\$ 1,397,665</u>
13	Income before interest and income taxes		\$ 304,777	\$ 121,485	\$ 426,262	\$ 519,168	\$ 945,430
14	Assigned Interest (rate base * component cost of debt)		<u>(289,235)</u>		<u>(289,235)</u>		<u>(289,235)</u>
15	Net income before income taxes		\$ 15,542		\$ 137,027	\$ 519,168	\$ 656,195
16	Income taxes at 24.66%		<u>3,833</u>		<u>33,791</u>	<u>192,404</u>	<u>161,818</u>
17	Net income		<u>\$ 11,709</u>		<u>\$ 103,236</u>	<u>\$ 326,764</u>	<u>\$ 494,377</u>
18	Rate of return on rate base		<u>3.20%</u>		<u>4.18%</u>		<u>8.34%</u>
19	Rate of return on equity		<u>0.28%</u>		<u>2.48%</u>		<u>11.90%</u>
20	Net income target @ 11.90% (rate base * component cost of ROE)		<u>\$ 494,382</u>		<u>\$ 494,382</u>		<u>\$ 494,382</u>
21	net income excess (deficiency)		<u>\$ (482,673)</u>		<u>\$ (391,146)</u>		<u>\$ (5)</u>
22	net income excess (deficiency) grossed up for income taxes		<u>\$ (640,651)</u>		<u>\$ (519,168)</u>		
23	Rate Base		<u>\$ 9,395,601</u>		<u>\$ 9,395,601</u>		

Notes: (1) Adjustmtnent to reflect facility charge revenue based on avg customer count for 2017 - See Exhibit TDP-2
(2) Adjustment to reflect weather normalized distribution revenue - See Exhibit TDP-2
(3) Adjustment to eliminate DSM related revenue and expense - See Exhibit TDP-1 Schedule 6

**Colorado Natural Gas, Inc.
CPUC Docket No 18 AL-
Pro Forma Revenue**

Mountain Division							
Line No.	Description	Avg Number of Bills (1)	Weather Normalized Annual Volume (Dth) (1)	Current Facility Charge	Pro Forma Facility Charge Revenue	Current Distribution Charge/Dth	Pro Forma Distribution Charge Revenue
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	Residential	201,420	1,229,310	\$ 14.00	\$ 2,819,880	\$ 10.106	\$ 12,423,410
2	Commercial	5,808	219,138	\$ 40.00	\$ 232,320	\$ 10.106	\$ 2,214,608
3	Total	207,228	1,448,448		\$ 3,052,200		\$ 14,638,018

Eastern Colorado Division							
	Description	Avg Number of Bills	Weather Normalized Annual Volume (Dth)	Current Facility Charge	Pro Forma Facility Charge Revenue	Current Distribution Charge/Dth	Pro Forma Distribution Charge Revenue
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
4	Residential	46,272	294,248	\$ 10.00	\$ 462,720	\$ 3.079	\$ 905,988
5	Commercial	3,612	47,211	\$ 27.00	\$ 97,524	\$ 3.079	\$ 145,364
6	Large Volume	360	51,130	\$ 40.00	\$ 14,400	\$ 3.079	\$ 157,429
7	Total	50,244	392,589		\$ 574,644		\$ 1,208,781

8 Notes

9 (1) Average number of customer bills and weather normalized usage was taken from TDP-2 Weather Normalized Annual Sales Volumes and Annual Customer Bills.

Colorado Natural Gas, Inc.
CPUC Docket No 18AL -
Rate Base Summary

Line No	Description (a)	Reference (b)	Mountain System				Classified	
			Test Year (c)	Adjustments (d)	Proforma (e)	Customer (f)	Noncustomer (g)	
Net Plant								
1	Gross Plant	rate base wp	\$ 146,374,247	\$ -	\$ 146,374,247	\$ 63,975,987	\$ 82,398,259	
2	Reserve for Depreciation	rate base wp	<u>\$ (31,694,483)</u>	<u></u>	<u>(31,694,483)</u>	<u>\$ (12,496,848)</u>	<u>\$ (19,197,635)</u>	
3	Net Plant	rate base wp	<u>\$ 114,679,764</u>	<u>\$ -</u>	<u>\$ 114,679,764</u>	<u>\$ 51,479,139</u>	<u>\$ 63,200,625</u>	
Other Rate Base								
4	Investment in Stored Gas - ECU only	Acct 117	\$ -	\$ -	\$ -	\$ -	\$ -	
5	Materials and supplies	Acct 154	710,687		710,687	316,908	393,780	
6	Prepayments	Acct 165	83,044		83,044	37,031	46,013	
7	Customer deposits	Acct 235	(136,209)		(136,209)	(60,738)	(75,471)	
8	Customer Advances	Acct 252	(679,053)		(679,053)	(302,802)	(376,251)	
9	Subtotal		<u>\$ (21,530)</u>	<u>\$ -</u>	<u>\$ (21,530)</u>	<u>\$ (9,601)</u>	<u>\$ (11,930)</u>	
10	Net Regulatory Liability	Acct 254	<u>(6,220,065)</u>	<u>\$ -</u>	<u>(6,220,065)</u>	<u>(2,773,636)</u>	<u>(3,446,429)</u>	
11	Net Deferred Tax Liability	Acct 282	<u>\$ (8,299,508)</u>	<u>\$ -</u>	<u>\$ (8,299,508)</u>	<u>(3,700,896)</u>	<u>(4,598,612)</u>	
12	Total other rate base		<u>\$ (14,541,104)</u>	<u>\$ -</u>	<u>\$ (14,541,104)</u>	<u>\$ (6,484,132)</u>	<u>\$ (8,056,971)</u>	
13	Total Historical Test Year Rate Base		<u><u>\$ 100,138,660</u></u>	<u><u>\$ -</u></u>	<u><u>\$ 100,138,660</u></u>	<u><u>\$ 44,995,006</u></u>	<u><u>\$ 55,143,654</u></u>	

Colorado Natural Gas, Inc.
Rate Base - Eastern Colorado

Line No	Description (a)	Reference (b)	Eastern Colorado				Classified	
			Test Year (c)	Adjustments (d)	Proforma (e)	Customer (f)	Noncustomer (g)	
Net Plant								
1	Gross Plant	rate base wp	\$ 13,504,228	\$ -	\$ 13,504,228	\$ 5,628,955	\$ 7,875,273	
2	Reserve for Depreciation	rate base wp	\$ (2,875,112)		(2,875,112)	\$ (1,066,758)	\$ (1,808,354)	
3	Net Plant	rate base wp	\$ 10,629,116	\$ -	\$ 10,629,116	\$ 4,562,197	\$ 6,066,919	
Other Rate Base								
4	Investment in Stored Gas - ECU only	Acct 117	\$ 170,795	\$ -	\$ 170,795	\$ 73,035	\$ 97,760	
5	Materials and supplies	Acct 154	118,972		118,972	\$ 50,874	\$ 68,097	
6	Prepayments	Acct 165	20,135		20,135	\$ 8,610	\$ 11,525	
7	Customer deposits	Acct 235	(33,025)		(33,025)	\$ (14,122)	\$ (18,903)	
8	Customer Advances	Acct 252	(164,642)		(164,642)	\$ (70,404)	\$ (94,238)	
9	Subtotal		\$ 112,235	\$ -	\$ 112,235	\$ 47,994	\$ 64,241	
10	Net Regulatory Liability	Acct 254	\$ (576,508)	-	\$ (576,508)	\$ (246,525)	\$ (329,983)	
11	Net Deferred Tax Liability	Acct 282	\$ (769,241)	-	\$ (769,241)	\$ (328,942)	\$ (440,300)	
12	Total other rate base		\$ (1,233,515)	\$ -	\$ (1,233,515)	\$ (527,473)	\$ (706,042)	
13	Total Historical Test Year Rate Base		\$ 9,395,601	\$ -	\$ 9,395,601	\$ 4,034,724	\$ 5,360,877	

Colorado Natural Gas, Inc.
CPUC Docket No 18 AL-
Cost of Capital at December 31, 2017

Line No.	Description (a)	Amount (1) (b)	Capital Ratio (c)	Cost of Capital (d)	Weighted Cost of Capital (c) * (d) (e)
1	Total Long Term Debt	\$ 59,645,750	55.78%	5.52%	3.08%
2	Common Equity (note 3)	47,279,202	44.22%	11.90%	5.26%
3	Total	<u>\$ 106,924,952</u>	<u>100.00%</u>		<u>8.34%</u>
4	Income tax effect: .3273 * Weighted average cost of common equity (note 2)				<u>1.72%</u>
5	Pretax return on rate base				<u>10.06%</u>

- Notes: (1) amounts taken from December 31, 2017 trial balance
(2) Colorado state income tax rate at 4.63%; Federal income tax rate at 21.00% - effective rate 24.66%
(3)

Common equity from 12-31-17 trial balance

Common stock issued	\$ 14,147,781
Premium on capital stock	17,485,284
Capital stock expense	(1,233,284)
Dividends Declared and Paid	(7,360,000)
Retained earnings	22,997,468
Net income for CY 2017	1,241,954

<u>\$ 47,279,202</u>	Total Common Equity
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Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Cost of Long Term Debt at December 31, 2017

Line No	Issue (a)	Principal Amount (1) (b)	Premium/ (Discount) (c)	Underwriting Expense (d)	Actual Debt Costs (e)	Annual Cost (f)	Interest Rate (g)
1	CoBank Fixed Rate Term Loan - 2010 Series	\$ 24,010,000				\$ 1,263,526	5.263%
2	CoBank Fixed Rate Term Loan - 2011 Series	\$ 4,059,750				\$ 206,885	5.096%
3	MetLife Refinance - 2012	\$ 23,800,000				\$ 1,309,000	5.500%
	Metlife 2014	\$ 7,776,000				\$ 406,685	5.230%
4	Unamortized Debt Expense Bond Issue			\$ 1,268,532		\$ 85,519	
5	Unamortized Debt Expense 2012 Bonds/Metlife Refinance			\$ 163,328		\$ 10,888	
6	Unamortized Debt Expense CoBank			\$ 115,815		\$ 9,083	
7	Total	\$ 59,645,750			5.52%	\$ 3,291,586	

Notes: (1) Amounts taken from December 31, 2017 trial balance

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Operation and Maintenance Expense - Test Period as Adjusted

			Mountain System		
Line No	Description (a)	Reference (b)	Total (c)	Customer (d)	Noncustomer (e)
Operating and Maintenance Expense					
1	Test Year O&M	O&M detail from GL	\$ 6,684,509	\$ 3,307,428	\$ 3,377,081
2	Adjustment #1 - Eliminate DSM Expense	Adj #1	\$ (101,986)	\$ (101,986)	\$ -
3	Adjustment #2 - Eliminate Advertising Expenses	Adj #2	\$ (12,288)	\$ (12,288)	\$ -
4	Adjustment #3 - Adjustment for Rate Case Expenses				
5	Adjusted Test Year O&M		<u>\$ 6,570,235</u>	<u>\$ 3,193,154</u>	<u>\$ 3,377,081</u>

			Eastern Colorado		
Line No	Description (a)	Reference (b)	Total (c)	Customer (d)	Noncustomer (e)
Operating and Maintenance Expense					
1	Test Year O&M	O&M detail from GL	\$ 932,034	418,836	\$ 513,198
2	Adjustment #1 - Eliminate DSM Expense	Adj #1	(22,082)	(22,082)	-
3	Adjustment #2 - Eliminate Advertising Expenses	Adj #2	(2,979)	(2,979)	-
4	Adjustment #3 - Adjustment for Rate Case Expenses				
5	Adjusted Test Year O&M		<u>\$ 906,973</u>	<u>\$ 393,775</u>	<u>\$ 513,198</u>

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Depreciation Expense CY 2017
Mountain Division

Line No	Account code and name		Depreciation	Allocation	Customer	
			Expense	Factor	Customer	Noncustomer
	(a)	(b)	(c)	(d)	(e)	
1	04.1080.3020.00.002	A/D-Franchise-CC	11,043	1	4,805	6,238
2	04.1080.3020.00.003	A/D-Franchise-PW	5,948	1	2,588	3,360
3	04.1080.3020.00.004	A/D-Franchise-SP	13,000	1	5,657	7,343
4	04.1080.3020.00.005	A/D-Franchise-CCR	1,600	1	696	904
5	04.1080.3750.00.001	A/D-Structures-BY	10,387	1	4,520	5,867
6	04.1080.3750.00.002	A/D-Structures-CC	57	1	25	32
7	04.1080.3760.00.001	A/D-Mains-BY	611,536	Direct	-	611,536
8	04.1080.3760.00.002	A/D-Mains-CC	289,816	Direct	-	289,816
9	04.1080.3760.00.003	A/D-Mains-PW	243,247	Direct	-	243,247
10	04.1080.3760.00.004	A/D-Mains-SP	328,192	Direct	-	328,192
11	04.1080.3760.00.005	A/D-Mains-CCR	204,016	Direct	-	204,016
12	04.1080.3780.00.001	A/D-Meas-BY	10,878	Direct	-	10,878
13	04.1080.3780.00.002	A/D-Meas-CC	9,065	Direct	-	9,065
14	04.1080.3780.00.003	A/D-Meas-PW	2,663	Direct	-	2,663
15	04.1080.3780.00.004	A/D-Meas-SP	2,271	Direct	-	2,271
16	04.1080.3780.00.005	A/D-Meas-CCR	7,761	Direct	-	7,761
17	04.1080.3800.00.001	A/D-Services-BY	443,796	Direct	443,796	-
18	04.1080.3800.00.002	A/D-Services-CC	184,906	Direct	184,906	-
19	04.1080.3800.00.003	A/D-Services-PW	176,377	Direct	176,377	-
20	04.1080.3800.00.004	A/D-Services-SP	132,631	Direct	132,631	-
21	04.1080.3800.00.005	A/D-Services-CCR	62,906	Direct	62,906	-
22	04.1080.3810.00.001	A/D-Meters-BY	81,750	Direct	81,750	-
23	04.1080.3810.00.002	A/D-Meters-CC	36,824	Direct	36,824	-
24	04.1080.3810.00.003	A/D-Meters-PW	29,445	Direct	29,445	-
25	04.1080.3810.00.004	A/D-Meters-SP	12,820	Direct	12,820	-
26	04.1080.3810.00.005	A/D-Meters-CCR	7,903	Direct	7,903	-
27	04.1080.3820.00.001	A/D-Meters Inst-BY	86,732	Direct	86,732	-
28	04.1080.3820.00.002	A/D-Meters Inst-CC	11,747	Direct	11,747	-
29	04.1080.3820.00.003	A/D-Meters Inst-PW	37,546	Direct	37,546	-
30	04.1080.3820.00.004	A/D-Meters Inst-SP	30,622	Direct	30,622	-
31	04.1080.3820.00.005	A/D-Meters Inst-CCR	11,058	Direct	11,058	-
32	04.1080.3830.00.001	A/D-Regulators-BY	3,064	Direct	3,064	-
33	04.1080.3830.00.002	A/D-Regulators-CC	1,272	Direct	1,272	-
34	04.1080.3830.00.003	A/D-Regulators-PW	339	Direct	339	-
35	04.1080.3830.00.004	A/D-Regulators-SP	18	Direct	18	-
36	04.1080.3830.00.005	A/D-Regulators-CCR	604	Direct	604	-
37	04.1080.3900.00.001	A/D-Structure-BY	10,563	1	4,596	5,967
38	04.1080.3900.00.002	A/D-Structure-CC	11,185	1	4,867	6,318
39	04.1080.3900.00.003	A/D-Structure-PW	436	1	190	247
40	04.1080.3900.00.004	A/D-Structure-SP	577	1	251	326
41	04.1080.3900.00.005	A/D-Structure-CCR	47	1	20	26
42	04.1080.3910.00.001	A/D-Office Furn-BY	4,611	1	2,006	2,605
43	04.1080.3910.00.002	A/D-Office Furn-CC	1,823	1	793	1,030
44	04.1080.3910.00.003	A/D-Office Furn-PW	3,202	1	1,393	1,808
45	04.1080.3910.00.004	A/D-Office Furn-SP	2,597	1	1,130	1,467
46	04.1080.3910.00.005	A/D-Office Furn-CCR	595	1	259	336
47	04.1080.3911.00.001	A/D-Computers-BY	186,640	1	81,215	105,425
48	04.1080.3920.00.001	A/D-Transport-BY	73,117	1	31,816	41,301
49	04.1080.3920.00.076	A/D- Transport-AD	14,187	1	6,174	8,014
50	04.1080.3940.00.001	A/D-Tools-BY	39,858	1	17,344	22,514
51	04.1080.3940.00.002	A/D-Tools-CC	11,345	1	4,937	6,409
52	04.1080.3940.00.003	A/D-Tools-PW	18,247	1	7,940	10,307
53	04.1080.3940.00.004	A/D-Tools-SP	17,896	1	7,787	10,109
54	04.1080.3940.00.005	A/D-Tools-CCR	930	1	405	525
55	04.1080.3960.00.001	A/D-Power EQ-BY	28,235	1	12,286	15,949
56	04.1080.3960.00.002	A/D-Power EQ-CC	1,813	1	789	1,024
57	04.1080.3960.00.003	A/D-Power EQ-PW	6,276	1	2,731	3,545
58	04.1080.3960.00.004	A/D-Power EQ-SP	3,939	1	1,714	2,225
59	04.1080.3970.00.001	A/D-Comm EQ-BY	3,060	1	1,331	1,728
60	04.1080.3970.00.002	A/D-Comm EQ-CC	2,137	1	930	1,207
61	04.1080.3970.00.003	A/D-Comm EQ-PW	2,448	1	1,065	1,383
62	04.1080.3970.00.004	A/D-Comm EQ-SP	445	1	194	251
63	04.1080.3980.00.001	A/D-Misc EQ-BY	16,860	1	7,337	9,524
64	04.1080.3980.00.002	A/D-Misc EQ-CC	4,064	1	1,768	2,295
65		Total	3,570,973		1,573,921	1,997,052

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Depreciation Expense CY 2017
Eastern Colorado Division

Line No	Account code and name (a)	Depreciation	Allocation	Customer / Noncustomer	
		Expense (b)	Factor (c)	(d)	(e)
1	04.1080.3020.00.006 A/D-Franchise-EC	166	1	69	97
2	04.1080.3750.00.006 A/D-Structures-EC	351	1	146	205
3	04.1080.3760.00.006 A/D-Mains-EC	128,975	Direct	-	128,975
4	04.1080.3780.00.006 A/D-Meas-EC	35,006	Direct	-	35,006
5	04.1080.3800.00.006 A/D-Services-EC	85,194	Direct	85,194	-
6	04.1080.3810.00.006 A/D-Meters-EC	29,112	Direct	29,112	-
7	04.1080.3820.00.006 A/D-Meters Inst-EC	5,492	Direct	5,492	-
8	04.1080.3830.00.006 A/D-Regulators-EC	728	Direct	728	-
9	04.1080.3900.00.006 A/D-Structure-EC	378	1	158	221
10	04.1080.3910.00.006 A/D-Office Furn-EC	(3,381)	1	(1,409)	(1,972)
11	04.1080.3920.00.006 A/D- Transport-EC	40,884	1	17,042	23,842
12	04.1080.3920.00.076 A/D- Transport-AD	3,440	1	1,434	2,006
13	04.1080.3930.00.006 A/D-Stores-EC	24	1	10	14
14	04.1080.3940.00.006 A/D-Tools-EC	9,794	1	4,082	5,711
15	04.1080.3960.00.006 A/D-Power EQ-EC	1,770	1	738	1,032
16	04.1080.3970.00.006 A/D-Comm EQ-EC	899	1	375	524
17	Total	338,831		143,170	195,661

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Property Tax Detail

Mountain Division				
Line No.	County	2017 Property Tax	Customer Related	Non-Customer Related
1	Jefferson	\$ 280,328	125,003	155,325
2	Clear Creek	\$ 9,028	4,026	5,002
3	Gilpin	\$ 81,962	36,548	45,414
4	Park	\$ 466,062	207,825	258,237
5	Pueblo	\$ 495,443	220,927	274,516
6	Summit	\$ 66,156	29,500	36,656
7	Teller	\$ 163,034	72,700	90,334
8	Total	\$ 1,562,013	\$ 696,529	\$ 865,484

Eastern Colorado Division				
Line No.	County	2017 Property Tax	Customer Related	Non-Customer Related
11	Adams	\$ 61,651	\$ 26,363.08	\$ 35,287.92
12	Arapahoe	\$ 67,977	\$ 29,068.19	\$ 38,908.81
13	Cheyenne	\$ 7,617	\$ 3,257.17	\$ 4,359.83
14	Kiowa	\$ 14,615	\$ 6,249.64	\$ 8,365.36
15	Total	\$ 151,860	\$ 64,938	\$ 86,922

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Over-Collection of 2013 Rate Case Expenses

Line No	Description (a)	Mountain Division (b)	Eastern Colorado Division (c)
1	Annual Amortization of Rate Case Expenses included in Prior Rate Case \$	94,905	\$ 5,095
2	Sales Volumes from 2013 Rate Case Docket No. 13AL-0153G (Dth)	1,349,583	351,460
3	Rate Case Expenses per Dth (Ln 1 ÷ Ln 2) \$	0.07	\$ 0.01
4	Actual Retail Sales Volumes from December 2016 through March 2018 (Dth)	2,137,951	606,738
5	Over-Collection through March 2018 (Ln 3 X Ln 4) \$	\$ 150,344	\$ 8,796

Colorado Natural Gas, Inc.

Weather Normalized Annual Sales Volumes and Annual Customer Counts

Exhibit No. TDP-2

May 11, 2018

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Rate Determinants Summary
Volumes in Dt's except where noted

Line No	Particulars	Annual Bills note 1	Average Customer Count note 1	30 Yr Rolling Avg HDDs note 1	Base Monthly Usage per Customer note 2	Heating Degree Day Factor Volume	Annual Excess Volume Per Customer (Dth)	Annual Usage Per Customer (Dth)	Total Annual Sales Volume
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)
Bailey									
1	residential	81,180	6,765	7,527	1.82	0.0083	62.59	84.46	571,373
2	commercial	1,788	149	7,527	14.78	0.0413	310.65	488.06	72,721
		<u>82,968</u>	<u>6,914</u>						<u>644,094</u>
South Park									
3	residential	25,152	2,096	10,583	2.53	0.0055	58.16	88.52	185,538
4	commercial	1,248	104	10,583	10.60	0.0231	244.67	371.85	38,673
		<u>26,400</u>	<u>2,200</u>						<u>224,211</u>
Cripple Creek									
5	residential	34,056	2,838	9,481	1.44	0.0052	48.93	66.20	187,884
6	commercial	1,824	152	9,481	17.24	0.0323	306.37	513.29	78,021
		<u>35,880</u>	<u>2,990</u>						<u>265,905</u>
Pueblo West									
7	residential	61,032	5,086	5,254	1.02	0.0083	43.76	55.94	284,515
8	commercial	948	79	5,254	6.02	0.0579	304.01	376.24	29,723
		<u>61,980</u>	<u>5,165</u>						<u>314,239</u>
Mountain System									
9	residential	201,420	16,785						1,229,310
10	commercial	5,808	484						219,138
		<u>207,228</u>	<u>17,269</u>						<u>1,448,448</u>
Eastern Colorado									
11	residential	46,272	3,856	5,826	1.38	0.0103	59.73	76.31	294,248
12	commercial	3,612	301	5,826	3.19	0.0204	118.62	156.85	47,211
13	large volume	360	30	5,826	25.58	0.2398	1,397.32	1,704.33	51,130
		<u>50,244</u>	<u>4,187</u>						<u>392,589</u>

Notes: (1) data taken from "Final CNG 2017 Usage Per Customer" file derived from the billing system.
(2) data taken from Base Excess Calculation - See "Base Excess" schedule
(3) data taken from Weather Factor calculation - Schedule 2

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Calculation of Base Usage per Customer from 2017

Base Excess Method						
Line No	Particulars	Heating Degree Day Factor	30 year Rolling Average	Annual Excess Volume	Add: Base Volume (1)	Annual Usage (dt)
	(a)	(b)	(c)	(d)	(e)	(f)
Cripple Creek						
1	residential	0.0052	9,481	48.93	17.27	66.20
2	commercial	0.0323	9,481	306.37	206.92	513.29
Bailey						
3	residential	0.0083	7,527	62.59	21.87	84.46
4	commercial	0.0413	7,527	310.65	177.41	488.06
Pueblo West						
5	residential	0.0083	5,254	43.76	12.18	55.94
6	commercial	0.0579	5,254	304.01	72.23	376.24
South Park						
7	residential	0.0055	10,583	58.16	30.36	88.52
8	commercial	0.0231	10,583	244.67	127.19	371.85
Eastern Colorado						
9	residential	0.0103	5,826	59.73	16.58	76.31
10	commercial	0.0204	5,826	118.62	38.23	156.85
11	large volume	0.2398	5,826	1,397.32	307.01	1,704.33

Notes: (1)

Base Load calculations	Lowest Month	Ave usage for lowest month
Cripple Creek - residential	Aug 17	1.44
Cripple Creek - commercial	Aug 17	17.24
Bailey - residential	Aug 17	1.82
Bailey - commercial	Aug 17	14.78
Pueblo West - residential	Aug 17	1.02
Pueblo West - commercial	Aug 17	6.02
South Park - residential	Aug 17	2.53
South Park - commercial	Aug 17	10.60
EC - residential	Aug 17	1.38
EC - commercial	Aug 17	3.19
EC - Large Volume	Aug 17	25.58

Colorado Natural Gas, Inc.

Weather Normalized Transportation Volumes and Revenues

Exhibit No. TDP-3

May 11, 2018

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Weather Normalized Transportation Volumes and Revenues - Monthly Regression
for the 12 months ended December 31, 2017
Pueblo West

Line No	Particulars (a)	Reference (b)	GCC (c)	PW Schools (d)	Arm, LLC (e)	Total (f)
<u>Distribution Charges</u>						
1	12 mo ended 12/31/2017 transportation volume (Dt's)	PW monthly usage	15,665	8,015	17,552	41,232
2	Weather normalized volume from regressions tab base volume (Dt's)	regressions wp	-	581	3,761	4,341
3	weather sensitive volume (Dt's)	regressions wp	-	7,701	16,277	23,978
4	Total Weather adjusted volume	regressions wp	15,665 (1)	8,282	20,038	43,985
5	Weather normalization volume adjustment	line 4 - line 1	-	267	2,486	2,753
6	Transportation rate	note 2	\$ 5.00	\$ 5.27	\$ 5.00	
7	Test period distribution revenues	ln 5 * ln 6	\$ 78,325	\$ 43,644	\$ 100,191	\$ 222,159
<u>Service & Facility, Demand Charges</u>						
8	Annual revenue at \$150 per month	note 2	3,600 (3)	5,400 (4)	1,800	10,800
9	Demand charge		-	-		-
10	Total Test Period revenue	ln 7 + ln 8 + ln 9	\$ 81,925	\$ 49,044	\$ 101,991	\$ 232,959

Notes:

- (1) Unadjusted for weather normalization as GCC usage is unrelated to temperature.
- (2) per contract
- (3) S&F charge at GCC is \$300 per month
- (4) S&F charge at PW Schools is \$450 per month

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Weather Normalized Transportation Volumes and Revenues - Monthly Regression
for the 12 months ended December 31, 2017
Cripple Creek

Line No	Particulars	Reference	Mine	(1) Schools	Black Hills	Sanborn Ranch	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
<u>Distribution Charges</u>							
1	12 mo ended 12/31/2017 transportation volume (Dt's)	CC monthly usage	126,348	13,075	30,898	5,801	176,122
Weather normalized volume from regressions tab							
2	base volume (Dt's) - Main Meter	regressions wp	21,086	6,520	2,232	3,995	33,834
3	weather sensitive volume (Dt's) - Main Meter	regressions wp	68,516	6,937	28,935	2,307	106,695
4	Total Weather adjusted volume	regressions wp	89,603	13,457	31,168	6,302	140,529
5	12 mo ended 12/31/2017 transportation volume (Dt's) ADR2 Meter	CC monthly usage	30,980	(2)			30,980
	Weather normalization volume adjustment	line 4 - line 1	(5,765)	382	270	501	(4,613)
6	Transportation rate	note 2	\$ 2.93	\$ 2.74	\$ 0.98	\$ 2.93	
7	Test period distribution revenues	ln 5 * ln 6	\$ 262,536	\$ 36,873	\$ 30,541	\$ 18,464	\$ 348,413
<u>Service & Facility, Demand Charges</u>							
8	Annual revenue at \$150 per month	note 3	3,600	1,800	1,800	1,800	9,000
9	Demand charge		-	-	-	-	-
10	Total Test Period revenue	ln 7 + ln 8 + ln 9	\$ 266,136	\$ 38,673	\$ 32,341	\$ 20,264	\$ 357,413

Notes:

- (1) Gold Mine has two meters
- (2) Meter ADR2 is unadjusted due to lack of time in service
- (3) S&F charge for the Gold Mine is \$300

Colorado Natural Gas, Inc.

Modified Class Cost of Service

Exhibit No. TDP-4

May 11, 2018

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Modified Class Cost of Service - Mountain System

Line No	Description (a)	Reference (b)	Mountain System		
			Total	Customer Related	Non-customer Related
			(c)	(d)	(e)
1	O&M	Exh TDP-1 Sch 6	\$ 6,570,235	\$ 3,193,154	\$ 3,377,081
2	Depreciation and Amortization	Exh TDP-1 Sch 7	3,570,973	1,573,921	1,997,052
3	Taxes Other Than Income Taxes	Exh TDP-1 Sch 8	1,562,013	696,529	865,484
4	Income taxes	capital structure/Rate Base Summary	1,724,514	774,871	949,643
5	Revenue credits	Op Income	(764,129)	(173,756)	(590,373)
6	Operating expenses		<u>\$ 12,663,606</u>	<u>\$ 6,064,718</u>	<u>\$ 6,598,887</u>
7	Return on rate base	capital structure/Rate Base Summary	<u>8,351,817</u>	<u>3,752,697</u>	<u>4,599,120</u>
8	Total Cost of Service		<u>\$ 21,015,423</u>	<u>\$ 9,817,416</u>	<u>\$ 11,198,007</u>
9	Rate Base	rate base summary	<u>\$ 100,138,660</u>	<u>\$ 44,995,006</u>	<u>\$ 55,143,654</u>

Colorado Natural Gas, Inc.
CPUC Docket No 18AL - _____ G
Modified Class Cost of Service - Eastern Colorado

Line No	Description (a)	Reference (b)	Eastern Colorado		
			Total (c)	Customer Related (d)	Non-customer Related (e)
1	O&M	Exh TDP-1 Sch 6	\$ 906,973	\$ 393,775	\$ 513,198
2	Depreciation and Amortization	Exh TDP-1 Sch 7	338,831	143,170	195,661
3	Taxes Other Than Income Taxes	Exh TDP-1 Sch 8	151,860	64,938	86,922
4	Income taxes	capital structure/Rate Base Summary	161,804	69,483	92,321
5	Revenue credits	Op Income	(40,501)	(40,501)	-
6	Operating expenses		<u>\$ 1,518,967</u>	<u>\$ 630,865</u>	<u>\$ 888,103</u>
7	Return on rate base	capital structure/Rate Base Summary	<u>783,617</u>	<u>336,506</u>	<u>447,111</u>
8	Total Cost of Service		<u>\$ 2,302,584</u>	<u>\$ 967,371</u>	<u>\$ 1,335,213</u>
9	Rate Base	rate base summary	<u>\$ 9,395,601</u>	<u>\$ 4,034,724</u>	<u>\$ 5,360,877</u>