BEFORE THE PUBLIC UTILITIES COMMISSION

I. INTRODUCTION

A.

Exhibit RJA – 4, WNA Historical Analysis – Average Residential Customer

Exhibit RJA – 5, Summary of Annual Residential Bill Impacts by Temperature Zone

Exhibit RJA – 6, WNA Historical Analysis – Annual Cash Flow Impact

Exhibit RJA – 7, Summary ofs– 7d 0 T 0.280 (er)h/4 Tw 0.28 006 Tc 0.006 Tw 0.28 0 Td (7,)Tj

A.

1 Q. Please describe the type a5d source of the data you used to a5alyze t he

0 For example, [illegible] 6.94 [illegible]

smaller the overall difference between the actual and forecasted HDD. The formula for the RMSE is:

$$RMSE = \sqrt{\frac{2}{2}(i)(SE82)7y \text{ over. teer t i:}}$$

basis for forecasting HDD during the time when the Company's approved rates in

Moreover, this approach provides for a more accurate and timely adjustment for the customer. There is no time lag between when the customer experiences the bill variability and when the bill leveling adjustment is made.

Q. Please provide a formulaic representation of the WNA mechanism that you just described.

A.

Q.

TABLE 3

D. Summary of WNA Benefits

Q. How would cus tomers benefit from -0 01nesNA-31 omeis

Q.

A. Yes.

		Normal HDDs	Average HDDs	Normal HDDs	Average HDDs	Normal HDDs	Average HDDs	Normal HDDs	Average HDDs	Normal HDDs		
January	1,501	1,536	1,152	1,187	1,521	1,558	1,011	1,062	1,033	1,206		
February	1,296	1,302		1,152	1,024	1,010	1,293	1,298	849	843		89
		March	1,204	1,240	900	944	1,107	1,146	658	688		72
		April	951	983	711	732	839		1	9	11	
	September	504	532	284								

Evergreen 30 Year

Exhibit

	Average (Rolling)	30 Year Average (Static)	30 Year Average (Rolling)	20 Year Average (Rolling)	10 Year Average (Rolling)	5 Year Average (Rolling)	30 Year Average (Static)	30 Year Average (Rolling)	30 Year Average (Static)
Sum	4,716,204	5,408,252	4,023,040	3,217,271	2,503,448	2,352,785	4,725,718	1,522,800	1,896,573
Mean	188,648	216,330	201,152						

Summit Utilities Colorado Natural Gas
WNA

Summit Utilities Colorado Natural Gas
WNA Historical Analysis – Average Residential Customer
Pueblo

Exhibit

					$ 2
19	April	596,762	$ 701,496		$ 2

					$ 197,185	$ 915,491	814	678	(136)	16.7%	r

20 May 403>-41 0 TD (637,968)Tj -1.6455 0 TD ($)Tj /TT1 1 Tf .5068 0 TD <000300030003000493 ET 353.28 339.42 .42001 33.18 re f BT /TT2 1 Tf 0 6.6 -6.6 0 351.48 389.16 Tm (504,110)Tj -1.6455 0 TD ($)Tj /TT1 1 Tf .5068 0 TD <00030

Summit Utilities Colorado Natural Gas
WNA Historical Analysis Annual CNG Cash Flow Impact
Cripple Creek temperature zone (Lake George, CO weather station)

Line	Residential Customer Class RGr

Summit Utilities Colorado Natural Gas
WNA Historical Analysis Annual CNG Cash Flow Impact
Pueblo temperature zone (Pueblo Reservoir, CO weather station)

Line	Residential Customer Class RGM, Pueblo West Service Area		
1	Distribution Charge (R)	$	1.0106 per therm
2	Degree Day Factor (DDF)		421.61 therms per HDD
3	Base Load Factor		51,630 therms per month
4	Service and	0 0 0 0 0 0	per

Summit Utilities Colorado Natural Gas
WNA Historical Analysis Annual CNG Cash Flow Impact
Pueblo temperature zone

Summit Utilities Colorado Natural Gas
WNA Historical Analysis Annual CNG Cash Flow Impact
Eastern Colorado temperature zone (Denver Satpleton, CO weather station)

Line	Residential Customer Class RGEC, Eastern Colorado Service Area		
1	Distribution Charge (R)	$	0.3079 per therm
2	Degree Day Factor (DDF)		395.19 therms per HDD
3	Base Load		

Summit Utilities Colorado Natural Gas
WNA

Summit Utilities Colorado Natural Gas
Summary Ž ó•pÐ 0
Average

								WNA Adjustment	Average With WNA	HDD from Normal	Difference		
1	Annual Impact												
2	2016	2017	Heating Season	$	6,305,439	$	5,774,086	$ 351,891	$ 6,125,977	8.3%	6.1%		
3	2015	2016	Heating Season	$	6,305,439	$	5,988,925	$ 152,162	$ 6,141,088	3.6%	2.5%		
4	2014	2015	Heating Season	$	6,305,439	$	9 December	$	$ 846,315	$ (26,925)	$ 817,390		
				10	2015	2016	Heating Season						
				11	January			$ 1,066,271	$ 1,129,952	$ (58,754)			

Summit Utilities Colorado Natural Gas
Summary of Utilities ,3

Company	State	Tariff