



Natural Gas Financial Analysis and Rate Study

For

City of Coalinga

July 26, 2022

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Principal

I. Overview: Purpose, Approach, and Proposed Rate Increase

The purpose of this rate study is to evaluate the natural gas enterprise fund to assess expenses, especially wholesale natural gas costs, and to reset rates such that revenue is adequate for operations over the next year in preparation for extremely high wholesale gas costs this winter.

Audited financials have been reviewed to observe the history of revenues, expenses, and changing fund balances. Additionally, accounting reports have been examined to bridge the gap between the end of the last audit and the current fiscal year. Operating expense projections have been developed for the next three years through FY24/25. Revenues are adjusted upward to cover rising operating costs for the next 12 months, primarily the increased cost of wholesale natural gas.

This report proposes a 50 percent increase in gas rate effective September 1, 2022. This increase follows the 45 percent increase last December. The upcoming increases are due to the rising PG&E transportation costs and the dramatic escalation in wholesale natural gas costs.

Procedurally, increases in natural gas rates are exempt from the noticing requirements of Proposition 218. This means letters are not required by law to be sent to customers, there is no 45-day waiting period, and no formal protest process. However, in the event a rate increase is approved by City Council, customers should be notified, at a minimum, with a note on their monthly billing statements.

II. Background

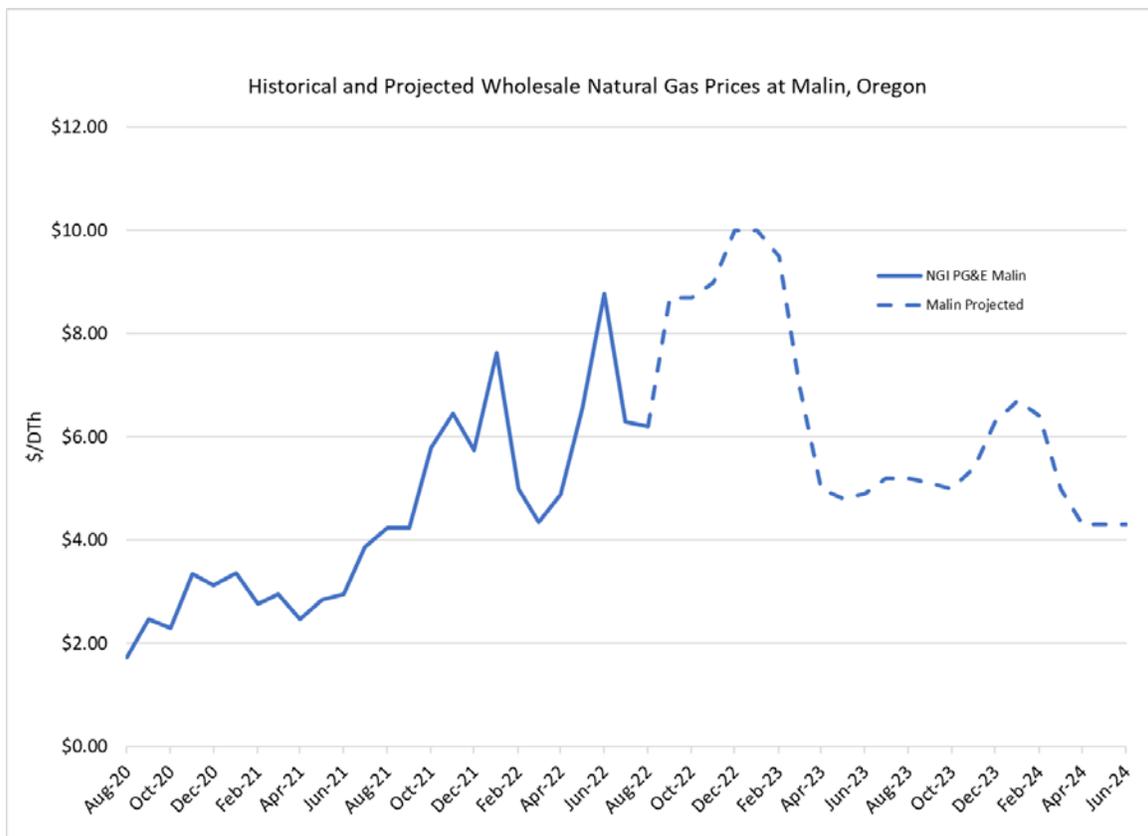
Natural gas rates in Coalinga were constant for the past 10 years until they were increased effective last December 1, 2021 (Resolution No. 48, November 4, 2021). However, following the increase last December, wholesale gas costs have continued to increase, and are projected to be even higher this coming winter, up to \$10.00 per DTh. Coalinga is a wholesale gas customer on the PG&E gas system. PG&E provides gas transportation for the city, but not gas supply. PG&E has recently imposed an additional pass-through surcharge cost on Coalinga to cover costs for the California Air Resources Board Greenhouse Gas Cap-and-Trade program. The present surcharge is \$1.02 per DTh, which is roughly 10 percent of the proposed total Coalinga rate. The Cap-and-Trade surcharge is not negotiable. (Details of PG&E charges are shown in Attachment A.) Beyond transportation, the city purchases all gas supply through Shell Trading on the wholesale market. This gives the city the option to structure its purchases, which will be proposed to City Council following this period of very high prices. As market prices were low into last summer with little volatility for so long, all gas has been purchased at monthly and daily market prices, taking full advantage of ongoing low rates.

III. Wholesale Gas Status

During Covid, wholesale natural gas prices reached historical lows due to very low demand. As a result, producers curtailed production and reduced drilling. Then, in February 2021, “The Great Texas Freeze” hit, creating a huge demand for natural gas and revealing the extent of elasticity in the gas market, which resulted in gas prices skyrocketing, mainly outside California. Further, in August 2021, an El Paso Natural Gas pipeline explosion occurred near Coolidge, Arizona, removing a 30-inch transmission line from service for months to come. These were the events that caused the rates to increase last December.

Since then, Russia invaded Ukraine driving up world-wide energy prices, beyond the horrific ramifications of the invasion itself. Some natural gas produced in the United States is converted to liquid natural gas and exported overseas. Accordingly, that gas can be valued based on the world market. Further, hot summer temperatures in the US are putting pressure on available gas supply, preventing enough gas from being injected into storage for this winter. As of July 15th, storage reserves are 10 percent below a year ago at this time, and 12 percent below the five-year average. Further, environmental pressures continue to grow against coal and natural gas too. Finally, drought conditions in the West reduce the availability of hydro power. These factors combined are pushing natural gas prices to record highs.

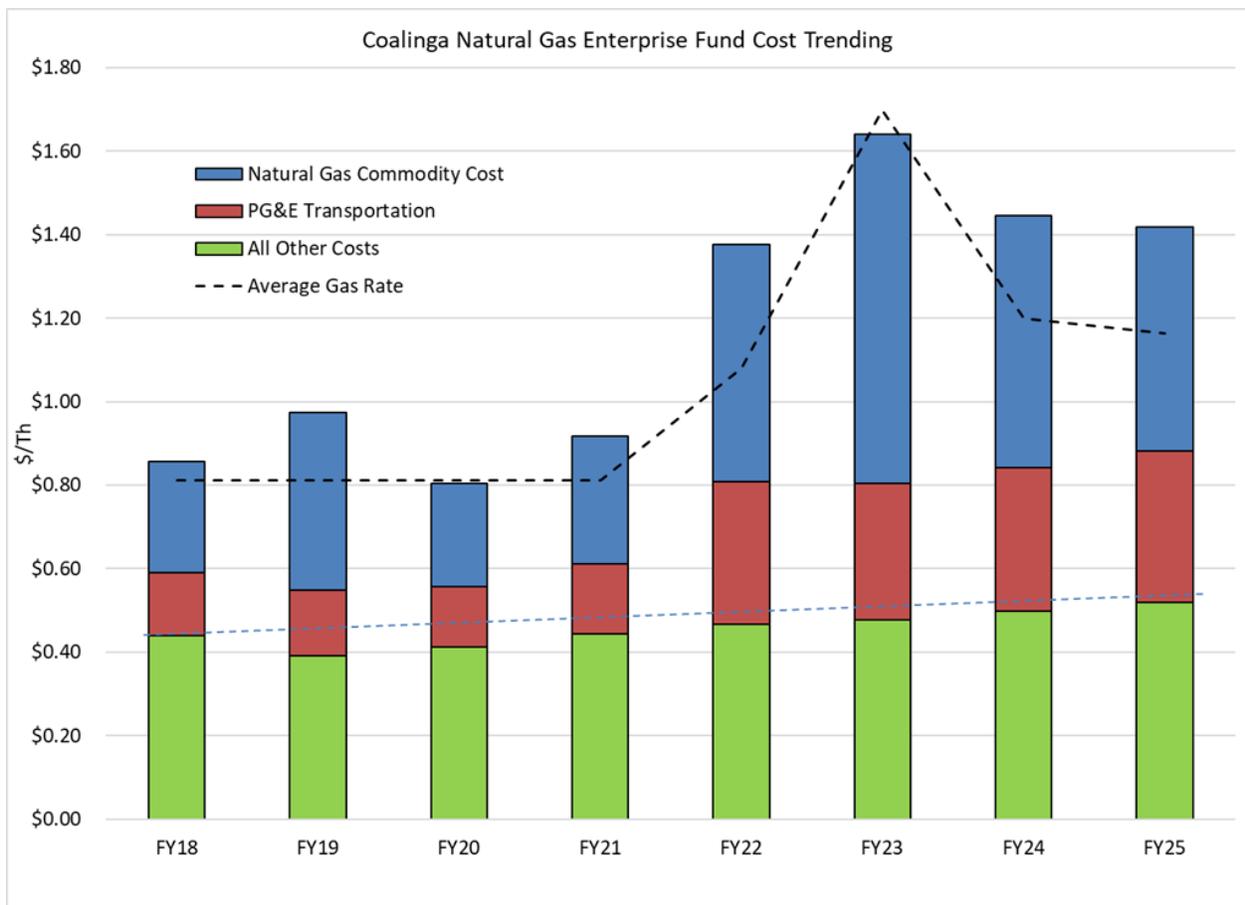
The graph below shows actual historical monthly market prices through July 2022, followed by indicative prices provided by Shell Trading through June 2024. The graph illustrates the peak prices this winter followed by lower prices for Winter 2023/2024.



IV. Natural Gas Revenue, Expense, and Fund Balance

The bar chart below illustrates cost trending for the gas enterprise. The bottom section includes all fixed costs for operations such as labor, parts, and equipment. The middle section shows PG&E transportation charges that are now boosted upward by the Greenhouse Gas Cap-and-Trade pass-through charge. The top section shows the cost for wholesale natural gas. As illustrated, wholesale gas costs during FY23 are projected to be 2.7 times higher than two years ago in FY21. This is a dramatic escalation in costs.

Finally, the chart shows the average gas rate collected over the past seven years, then increased in FY22. The proposed increase is 50 percent effective September 1, 2022, to balance overall expenses with revenue for FY23. The following two years (FY24 and FY25) show revenue based on the present rates before the 50 percent increase.



Regarding expenses, the gas enterprise fund has no debt. Conversely, it has provided a loan to police and fire for \$378,000, which is owed back to natural gas. The gas enterprise has not incurred significant capital costs over the past decade but is expected to incur capital costs in the next several years for replacement of anode beds for cathodic protection for steel gas pipes. The revenue requirement for the next 12 months is not increased for capital projects but is increased only enough to maintain the fund balance at approximately \$1 million. Revenue for capital projects will be collected in subsequent years.

Detail of revenue, expense, and fund balances are displayed in Attachment B. Depreciation is shown as an annual expense item such that the presentation reconciles with audited financial statements, but then depreciation is backed out in the bottom of the table since it is not a cash operating expense. Values for all the months of FY22 are based on trial balance reports provided by the city. Projected wholesale gas values for FY23 and FY24 are based on indicative market prices provided by Shell Trading on July 26, 2022. FY25 is an estimate based on prices falling slightly from FY24 (Attachment C). Other operating costs are escalated annually at three percent, with the exception of PG&E and personnel costs, which are escalated at five percent.

V. Existing Natural Gas Rates and Proposed Increase

The existing gas rate structure is straightforward as the cost of service for gas system customers is essentially the same. The gas system serves residential and small commercial customers within the city limit. All customers tend to be winter peaking from heating load.

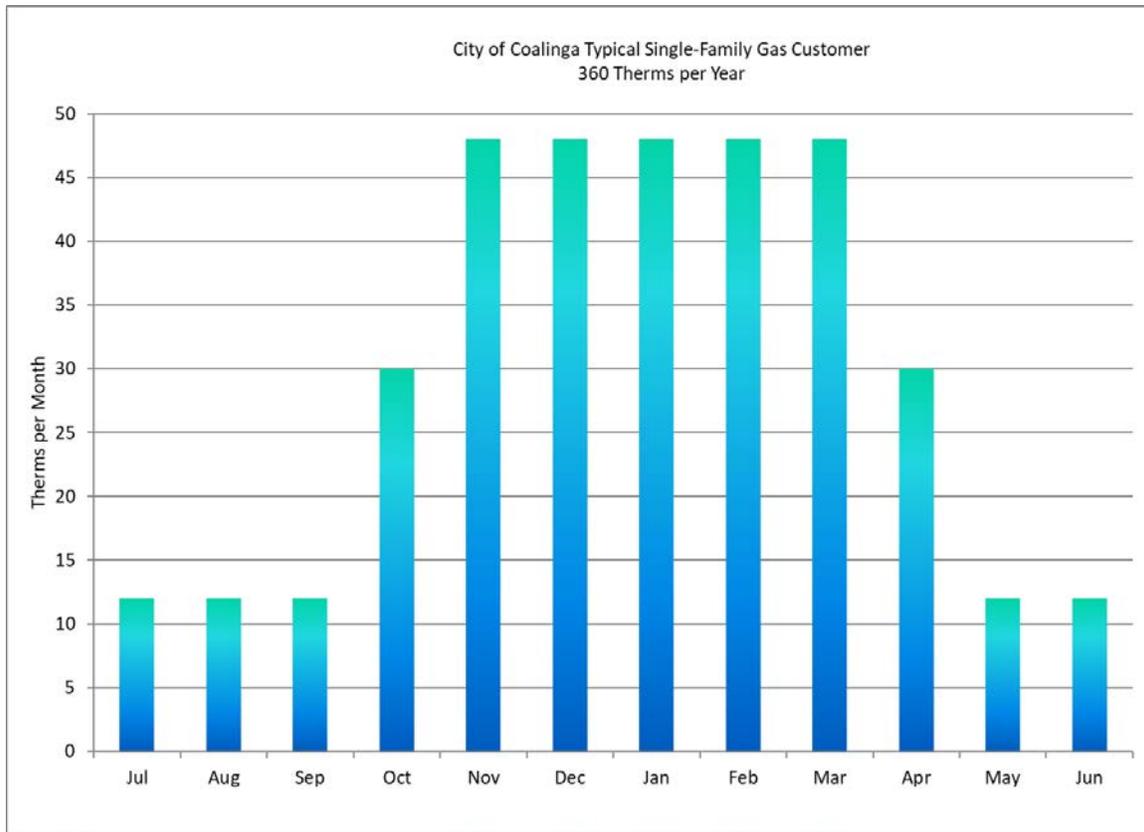
The proposed rate design is unchanged, such that most customers always pay the lower baseline rates. The summer allocation of 15 Therms per month covers water heating, cooking, and clothes drying needs in a typical home. Similarly, the winter allocation of 50 Therms per month covers the added demand of heating in a typical home.

The following table shows the current gas rates, effective December 1, 2021. Additionally, the 50 percent rate increase is included in the table. The proposed rates are for one year only, then rates will go back to the present level. This is being done because volatility in the market makes it impossible to predict rates needed for winter 2023/2024, following this coming winter. This is also being done to require staff to come back to City Council and the public to reset rates as needed following this winter.

City of Coalinga Existing and Proposed Gas Rates					
	Summer Therms	Winter Therms	Existing Rates from 12/1/21	Proposed 9/1/22	Proposed 9/1/23
				50%	-50%
Monthly Charge (\$/Mo)			\$10.15	\$15.23	\$10.15
Residential Single-Family Baseline (\$/Th)	15	50	\$0.73	\$1.10	\$0.73
Residential Single-Family Excess (\$/Th)	Over 15	Over 50	\$1.09	\$1.64	\$1.09
Commercial and All Other (\$/Th)	All Supply		\$1.09	\$1.64	\$1.09

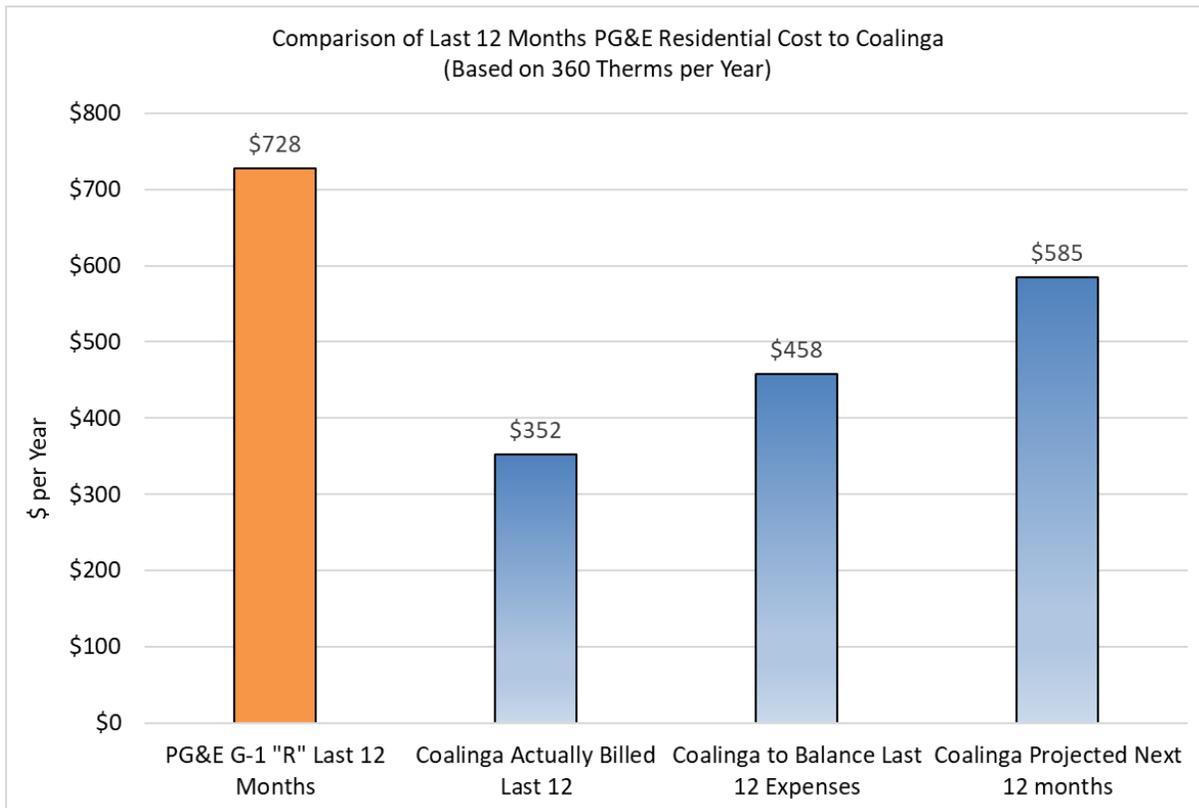
VI. Effect on a Residential Customer and Comparison to PG&E

A typical single-family residential customer in Coalinga uses 360 Therms per year, most of which is used in the winter for space heating. Summer gas usage is for water heating, cooking, and cloths drying only. This is illustrated in the bar chart below.



The next bar chart shows a Coalinga typical customer comparison to what would be paid on the PG&E system. This comparison is important because Coalinga's retail gas costs continue to be significantly lower than PG&E's. The gas system, owned and operated by the City of Coalinga, is a valuable service asset to city gas customers.

The PG&E-calculated amount is for a Fresno-based customer on the PG&E system using the same 360 Therms as a Coalinga customer. Over the past 12 months, that PG&E customer would have paid \$728 for natural gas. The next column is the amount a Coalinga customer actually paid, which was \$352; however, this amount was too low to cover the city's expenses due to cost increases beyond those anticipated for the last rate increase. A fair comparison to PG&E would be what Coalinga customers should have paid to cover expenses, which was \$458. Finally, the last value of \$585 is the amount a typical residential customer will pay during the next 12 months. It is important to note that, based on current wholesale gas cost projections, PG&E's costs will also need to be higher in the coming year, higher than the \$728 shown. Detail for the bar chart is shown in Attachment D.



VII. Recommendation of this report

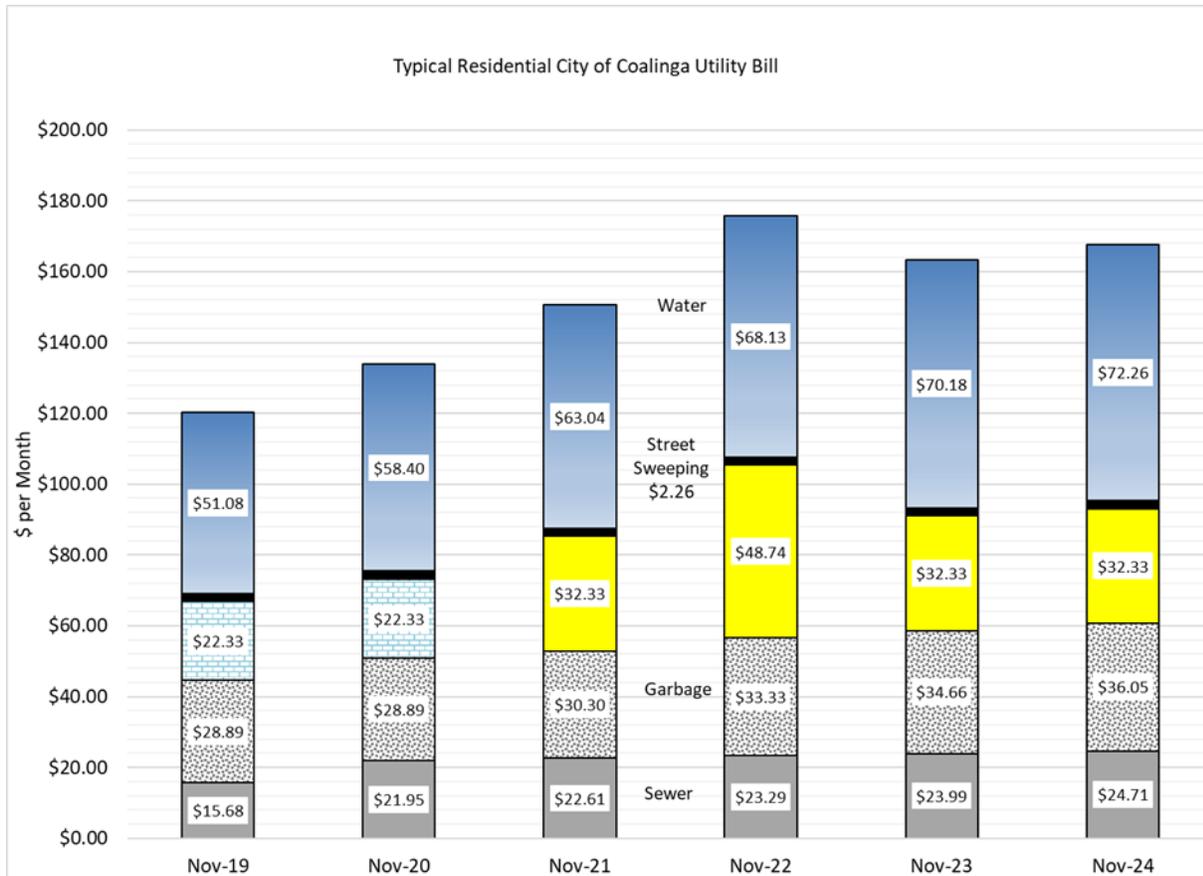
The 50 percent increase is recommended for the next 12 months, effective September 1, 2022.

This increase accomplishes the following:

- Anticipates high wholesale gas costs this coming winter based on current futures
- Covers increased PG&E transportation costs, including the Cap-and-Trade pass through
- Maintains the cash balance in the gas enterprise fund at approximately \$1 million
- Is limited to one-year only to require a reset of rates for September 1, 2023
- Does not provide for capital expenditures, to be deferred until gas costs drop
- Continues to provide rates relatively attractive to Coalinga customers

VIII. Illustration of Combined Coalinga Utility Services and Charges

The chart below shows the one-year increase for natural gas compared to other Coalinga utilities, also showing already-approved increases for other utilities. The natural gas value of \$48.74 is the average monthly value. The actual gas charges will be higher in heating months and lower in the summer.



Attachment B: Revenue, Expense, and Fund Balances

City of Coalinga Natural Gas Revenue and Expense Model									
	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	
	Audited	Audited	Audited	Audited	Unaudited	Projected	Projected	Projected	
Operating Revenue									
Natural Gas Sales		1,730,518	1,845,219	1,708,227	2,355,000	3,740,000	2,626,000	2,546,000	
Other Customer Revenue		75,310	15,956	693	50,000	50,000	50,000	50,000	
Totals	1,675,386	1,805,828	1,861,175	1,708,920	2,405,000	3,790,000	2,676,000	2,596,000	
Operating Expenses									
Wholesale Gas Cost	543,714	916,329	570,220	679,156	1,265,000	1,867,000	1,346,000	1,200,000	From Worksheet
PG&E Transportation	311,803	338,815	335,358	376,979	757,000	732,000	769,000	807,000	5% Inflation
Personnel Services	590,171	532,503	629,660	700,762	712,000	748,000	785,000	824,000	5% Inflation
Bad Debt Expense	23,610	0	17,815	22,976	47,000	25,000	26,000	27,000	3% Inflation
Contract Svc	148,572	152,252	185,842	154,302	150,000	155,000	160,000	165,000	3% Inflation
Supplies and Materials	134,771	154,192	118,000	106,964	131,000	135,000	139,000	143,000	3% Inflation
Depreciation	44,425	48,821	62,087	60,000	60,000	60,000	60,000	60,000	Estimates
Totals	1,797,066	2,142,912	1,918,982	2,101,139	3,122,000	3,722,000	3,285,000	3,226,000	
Operating Income	(121,680)	(337,084)	(57,807)	(392,219)	(717,000)	68,000	(609,000)	(630,000)	
Nonoperating revenue									
Interest	12,790	19,739	10,069	2,515	3,000	10,000	10,000	10,000	
Adjustments for Balance Sheet									
Total Income w/Depreciation	(108,890)	(317,345)	(47,738)	(389,704)	(714,000)	78,000	(599,000)	(620,000)	
Remove Depreciation	44,425	48,821	62,087	60,000	60,000	60,000	60,000	60,000	
Capital/Ad just to Bal Sheet	(74,232)	(97,693)	(2,180)	(10,441)	0	0	0	0	
Yr End Current Cash Asset	2,427,432	1,866,403	1,878,572	1,538,427	884,427	1,022,427	483,427	(76,573)	
DTh Sales	204,379	214,877	230,588	222,403	222,508	223,100	223,100	223,100	
Therm Sales	2,043,790	2,148,770	2,305,880	2,224,030	2,225,080	2,231,000	2,231,000	2,231,000	
Average Cost of Supply (\$/Th)*	\$0.27	\$0.43	\$0.25	\$0.31	\$0.57	\$0.84	\$0.60	\$0.54	
* Not including PG&E Transportation									

