		ORIGINAL
1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		PREPARED DIRECT TESTIMONY
3		OF
4		THOMAS E. SMITH
5		
6	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
7	A.	My name is Thomas E. Smith. My business address is NUI Corporation,
8		550 Route 202-206, Bedminster, New Jersey 07921.
9	Q.	BY WHOM ARE YOU EMPLOYED, AND IN WHAT CAPACITY.
10	A.	I am currently employed as Director of Energy Planning for NUI
11		Corporation which includes the Florida operating division, NUI City Gas of
12		Florida(City Gas).
13	Q.	PLEASE DESCRIBE YOUR PRIOR UTILITY RELATED
14		EXPERIENCE.
15	A.	During my term of employment at NUI, I have attended the Institute of
16		Gas Technology courses on Gas Distribution Engineering and Economics
17		for Managers, the American Gas Association's (AGA) Rate Fundamentals
18		course, the Center for Professional Advancement's course on Rate
19		Setting in Public Utilities and numerous conferences, seminars, and
20		symposiums on matters relating to my job function. Currently, I am a
21		member of the American Society of Mechanical Engineers and from 1979
22		to 1988 I was a member of the AGA Rate Committee. I am also a
23		contributing editor to the 4 <sup>th</sup> Edition of the Gas Rates Fundamentals book
24		sponsored and prepared by the AGA Rate Committee and published by
		1 SEP 27 8

.

.

SEP 27 8

FPSC-RECURDS/REPORTING

AGA. I have been an instructor on Cost of Service at the AGA Gas Rates
 Fundamentals course at Madison, Wisconsin.

3

24

#### Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I am a licensed Professional Engineer in the State of New Jersey. I
received a Bachelor of Science degree in Mechanical Engineering
from Newark College of Engineering in 1970. In 1976, I received a
Master of Science degree in Mechanical Engineering from the New
Jersey Institute of Technology, formerly Newark College of
Engineering.

#### 10 Q. MR. SMITH, WHAT IS THE PURPOSE OF YOUR TESTIMONY?

11 A. The purpose of my testimony is to present the revised estimate of the 12 Company's projection of gas costs for the period September 2000 13 through December 2000 and the Company's projection of gas costs for 14 the period January 2001 through December 2001. In addition I will 15 present the development of the maximum rate to be charged to 16 customers for the period January 2001 through December 2001.

17 Q. HAS THE COMPANY PREPARED THE FORMS AS PRESCRIBED

#### 18 BY THE COMMISSION FOR THIS PURPOSE?

19 A. Yes. The forms prescribed by the Commission are being filed at this20 time. Copies are attached to my testimony.

#### 21 Q. CAN YOU EXPLAIN THE PROJECTION METHODOLOGY?

- A. Yes. Under this methodology, which was adopted by Order No. PSC93-0708-FOF-GU of this Commission on May 10, 1993 and modified in
  - 2

Docket No. 980269-PU on June 10, 1998 gas companies are to

1 project their gas costs each twelve months for the ensuing twelve 2 month period ending in December. A per therm rate is developed for 3 the weighted average cost of gas (WACOG). This rate, based on the 4 average of the winter and summer seasons, would lead to over or 5 under-recoveries of gas costs in the two seasons. This problem is 6 mitigated by establishing a maximum levelized purchased gas factor 7 based on the Company's expected winter cost of gas, thereby eliminating a large under-recovery in that season. The Company is 8 9 then able to flex downward in the summer in order to match market 10 conditions and eliminate the potential for a large over-recovery for the 11 remainder of the period.

# 12 Q. PLEASE EXPLAIN WHY GAS COMMODITY PRICES ARE FORECAST 13 TO INCREASE SO DRAMATICALLY.

14 The balance between gas supply and gas demand has become very tight Α. 15 as a result of less drilling activity on the supply side brought about by 16 historically low gas prices and robust demand for gas from a very strong 17 economy and the growing use of gas powered electric generation. In this 18 environment, gas prices rise to a level that will reduce demand to match available supply and to stimulate additional drilling activity. As additional 19 20 gas supplies are brought into the market the upward push on gas commodity prices should weaken; however, there is a time lag involved. 21 22 While gas drilling activity has increased, it is not expected that its impact 23 will be evident until well into the year 2001. However, other factors, such 24 as demand changes from weather, storage balances, hurricanes, oil price

changes and electric demand can influence the short term balance of
 supply and demand of gas and cause price volatility.

3 The increase in gas commodity prices did not just suddenly appear. 4 Prices have been increasing over the past year. However, the largest 5 increases have occurred over the last several months, as the squeeze on available gas supply to meet the needs to replenish gas storage or serve 6 7 growing electric generation demand began to materialize. Attached as schedule TES - 1 is an article published by the AGA which provides an 8 accurate overview of the current state of natural gas prices and the factors 9 10 that have influenced them.

The NYMEX is the United States Gas Industry indicator of 11 future gas prices and the benchmark used in establishing gas 12 purchase prices under virtually all contracts. Attached, as schedule 13 TES -2 is a graph that presents the actual monthly NYMEX close 14 price for the period January 2000 through September 2000 and the 15 NYMEX future months prices for the period October 2000 through 16 December 2001 based on the three day average for NYMEX trading 17 close prices for September 20<sup>th</sup>, 21<sup>st</sup> and 22<sup>nd</sup>. These future months 18 NYMEX prices are the basis for the forecast commodity prices 19 20 presented in this filing.

# 21 Q. WHAT IF THE ACTUAL COST EXCEEDS THE MAXIMUM RATE AS 22 PROJECTED?

A. If re-projected gas costs for the remaining period exceed projected
 recoveries by at least 10% for the twelve month period, a mid-course
 correction may formally be requested by the Company.

4 Q. WHAT HAPPENS TO THE DIFFERENCES THAT RESULT FROM 5 MISESTIMATES, THAT IS, THE MISMATCHES BETWEEN 6 ESTIMATED AND ACTUAL COSTS?

- 7 A. The forms take this into consideration. Form E-2 calculates the
  8 projected differences using estimated figures, and form E-4 calculates
  9 the final true-up using actual figures. These differences are flowed
  10 back to customers through the true-up factor included in gas costs
  11 billed in the subsequent twelve month period.
- 12 Q. ARE ANY FLORIDA GAS TRANSMSSION (FGT) RATE CHANGES 13 PROPOSED WHICH ARE REFLECTED IN THIS FILING?
- 14 A. No.

15 Q. DOES THE COMPANY ANTICIPATE ANY CHANGES TO THE 16 CAPACITY PORTFOLIO IN THE COMING YEAR?

17 Yes. NUI's FTS-1 contract with FGT was scheduled to expire Α. August 1, 2000. Under the Contract renewal terms, the Company has 18 elected to reduce the level of contracted service under FTS-1. The 19 20 modified FTS-1 contract has a reduction of 5.895 dth per day in the period May through September, 6,669 dth per day reduction in 21 22 October, 11,107 dth per day reduction in the period November through 23 March and 5,899 dth per day reduction in April. The Company also has 24 an agreement in place with FGT to turn back a portion of its FTS-2 capacity to be used by FGT in an expansion project. It is anticipated
that a reduction of 9,000 dth per day for the period November through
April and a reduction of 5,000 dth per day for the period of May
through October will commence in May 2001.

## 5 Q. WHAT IS THE MONETARY IMPACT OF THIS CAPACITY 6 REDUCTION ON THE PGA?

7 The savings from the reduction in the FTS-1 Α. contract will be approximately \$1.1 million annually . The savings for the period August 8 9 2000 through December 2000 will be \$466,821. The savings from the 10 reduction in the FTS-2 contract will be approximately \$2 million 11 annually. During the projected period January 2001 through December 12 2001 the FTS-2 contract reduction will generate a savings of \$1.1 million. 13

# 14Q.CAN YOU SUMMARIZE THE CONTENTS OF THE SCHEDULES15SUBMITTED AS PART OF THIS FILING?

16 Yes. For the projected period, January 2001 through December 2001, Α. we estimate the gas purchases for resale will be 51,525,916 therms at 17 a total cost of \$34,156,435, with a resulting WACOG of 66.290 cents 18 19 per therm (before the application of the true-up factor and the 20 regulatory assessment fee). The difference between the estimated 21 actual and actual true-up for the prior period, January 1999 through 22 December 1999, is an over-recovery of \$705,430. The projected true-23 up for the current period, January 2000 through December 2000 is an 24 under-recovery of \$4,513,148. The total true-up as shown on

1		Schedule E-4 is an under-recovery of \$3,807,71	8 for a true-up factor
2		of 7.364 cents per therm that would be applied	during the projected
3		period. This true-up factor increases the gas of	ost factor during the
4		January 2001 through December 2001 period	to 73.654 cents per
5		therm (before the regulatory assessment fee).	With the regulatory
6		assessment fee added, the PGA factor is 74.0	024 cents per therm
7		based on the average of the winter and summer	seasons. City Gas,
8		however, has chosen to establish a maximum lev	elized purchased gas
9		factor based on the Company's expected winter c	ost of gas as follows:
10		Winter Average	
11		Total Cost (Line 11) \$1	9,862,823
12		Total Therm Sales (Line 27) 2	27,845,006
13		(Line 11/ Line 27)	\$0.71334
14		True-up	\$0.07364
15		Before Regulatory Assessment	\$0.78698
16		Revenue Tax Factor	1.00503
17		Purchased Gas Factor	\$0.79093
18		As shown above, the maximum levelized purcha	sed gas factor based
19		on the Company's expected winter cost of gas	is 78.698 cents per
20		therm before the regulatory assessment fee.	This is the maximum
21		gas cost factor that City Gas may charge its cus	tomers for the period
22		January 2001 through December 2001.	
23	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?	

24 A. Yes, it does.



Policy Analysis Issues

Parta y Angely an Usery ( da) Ne davaty (St. NA Neshinston, DC 2000) www.ngcany

IB 2000-04

June 30, 2000

### THE POTENTIAL IMPACT OF HIGHER NATURAL GAS PRICES ON RESIDENTIAL CUSTOMERS

#### Introduction

During the first part of 2000, the price of natural gas in the spot and futures markets has increased significantly. Because many gas suppliers are currently purchasing some gas for consumption this winter, it is likely that most consumers will pay significantly more for each unit of natural gas this winter than they did last winter.

A number of factors influence the price of gas in the marketplace:

- Natural Gas Production -- Low wellhead prices in 1998 and into 1999 contributed to a decline in the number of working rigs drilling for natural gas. The situation has reversed and rig counts are now well above the levels of the same period last year. However, due to the historic time lag between increased drilling activity and a price response, it is unlikely that this increased drilling will have a significant impact on consumer bills this winter.
- Natural Gas Underground Storage -- Natural gas storage levels have been significantly lower this year than at the same time last year but only somewhat lower than the average for the past five years. All indications are that they will be up to targeted volumes by the onset of the winter.
- Natural Gas Imports -- Natural gas imports from Canada have grown well over 100 percent in the last decade, currently accounting for about 13 percent of U.S. gas consumption. Canadian imports are expected to continue to grow incrementally with U.S. demand growth.

Natural Gas Demand - During the last decade demand for natural gas has increased in all sectors at an average rate of 2.8 percent per year. Forty percent of the natural gas consumed in the U.S. is used by factories and other industrial customers (including cogenerators), so the ongoing economic growth continues to push natural gas demand. Gas-fired electricity generation from electric utility plants and IPP's is a smaller (approximately 15 percent) but faster growing component of gas demand. Data is not yet available to quantify the magnitude of the impact of the electricity generation market on current natural gas demand. Relatively high oil prices have kept many factories and electricity generators from switching from natural gas to fuel oil.

#### Impact of Higher Gas Prices on Consumer Bills

In understanding the possible impact of these current natural gas prices, it is important to keep the following in mind: weather is a key variable affecting residential gas bills during the winter heating season. Thus, a return to normal weather (from the mild levels of the winter of 1999-2000) – even if natural gas prices were unchanged from their relatively low levels last, year – would increase consumers' heating bills. Consumers should expect significantly higher natural gas bills if the present increase in gas commodity prices combines with higher gas consumption due to colder (but normal) weather.

Almost all local natural gas utilities do not add any profit margin to the price they pay for each unit of natural gas. Their customers normally do not pay any more for gas than the utilities do. On average, the cost of gas makes up about one-third to one-half of a residential customer's bill. Therefore, an increase in the cost of the gas itself produces a lower overall percentage increase in the customer's total bill. The remainder of the customer's bill for service includes amounts for the transmission and distribution of gas, system maintenance, safety and inspection programs, customer service, metering, billing and other costs. It should be noted that state public service commissions regulate the prices that local natural gas utilities charge.

- In many states purchased gas costs for gas utilities are averaged over a season or even a year and passed on to consumers as an average cost of gas. This does not mean that the purchase price for a gas utility's gas supplies' cannot increase unexpectedly. What it does mean is that a particular spike in gas prices for a day or week or even months may be mitigated by the averaging of costs over the year.
- Consumers should not attempt to estimate their monthly natural gas bills based on fluctuations in the daily "spot" prices of natural gas. Daily spot prices are not indicative of average gas costs to consumers because only a portion of all gas supplies (particularly during seasonal peaks) is purchased in the daily market. The majority of supplies are purchased under monthly, multi-month or even multiyear contracts. Some prices in these agreements are tied to various indices, while others are fixed.

Gas utilities use a portfolio approach for winter heating season and other gas purchases. Many companies employ a pricing strategy that includes a *basket of indices* from first-of-the-month to multi-month fixed price schedules. During the 1999-2000 winter heating season peak-day, companies in AGA's annual Winter Heating Season Survey indicated that over 90 percent of their gas purchases were made in a form other than daily spot purchases and were, therefore, not subjected directly to daily spot price volatility.

Source: Monthly Energy Review, Energy Information Administration, U.S. Department of Energy.

#### **Natural Gas Production**

- Almost all (87 percent) of the natural gas used in the United States is produced in the United States. Most of the remainder (about 13 percent) comes from Canada. Natural gas production in the U.S. grew 9 percent from 1990 to year-end 1998 (17.2 Tcf annually in 1990 to 18.7 Tcf in 1998). Imports of natural gas to the U.S. from Canada grew 111% percent during the same time period, from 1.4 Tcf in 1990 to 3.1 Tcf in 1998.
- According to the Department of Energy's Energy Information Administration (EIA) the last year-to-year U.S. production increase came in 1997 (0.3 percent greater than 1996). Natural gas production in 1998 was down 1.1 percent, and 1999 down 0.3 percent. However, year-to-date estimates through May 2000 (Natural Gas Monthly, May 2000) showed domestic gas production to be 0.7 percent greater than January-May 1999 production.
- According to EIA, average wellhead prices were below \$2.00 per Mcf (thousand cubic feet) for nine straight months, August 1998-April 1999. As a result, by April 1999 most production indicators were very low -- that is, rigs drilling for gas were down to 371 monthly average, while gas well completions were only 656 for the month. Beginning May 1999, prices climbed above \$2.00 per Mcf and have been there since. In response to the wellhead price increase, natural gas exploration and production have improved dramatically. (See Figure 2 Gas Directed Drilling Activity and Crude Oil and Gas Prices.) By October 1999 (after about five months of gas prices above \$2.00), more than 600 rigs were drilling for natural gas -- a more than a 60 percent increase from five months earlier -- and have essentially remained at that level. Gas well completions also increased and have been greater than 1,000 per month since October 1999 (a 30+ percent increase).
- These increases in drilling indicators point to an expectation that domestic production capability will remain strong and resilient in the foreseeable future and that price signals in the marketplace will encourage additional drilling, which will in turn produce downward pressure on prices over time. However, historic experience indicates that there is a time lag between increased drilling and a significant price response. Therefore, price reductions resulting from an increased level of drilling may not be realized in the upcoming heating season.

Sources: Preliminary Findings Concerning Natural Gas Reserves, American Gas Association.

U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves, Energy Information Administration, DOE. Natural Gas Monthly, April 2000.

# Natural Gas in Underground Storage - This Year Compared to a Five-Year Average

Supplies of natural gas held in underground storage are only somewhat below the five-year average for this time of year (mid-June). As shown in the attached chart (Figure 1), working gas inventories as of June 23, 2000, were only 10 percent less than the five-year average (1995-1999). A comparison of current storage levels (1,567 Bcf as of June 23, 2000) to levels of a year ago (2,033 Bcf on June 25) can be misleading. In 1999 storage levels in June were unusually high, due to the warmer-than-normal winter of 1998-1999 and unusually low early summer natural gas prices that encouraged purchases for injection. In fact, the storage level today exceeds the levels on this date in both 1996 and 1997.

- Working gas in storage actually exceeded the five-year average for 10 of the first 15 weeks this year. However, early season injection rates are beginning to trail the five-year average, according to the American Gas Storage Survey. It is too early to tell what impact storage injection requirements, summer electric generation load, production deliverability and commodity prices will have on summer underground storage refill.
- It should be noted that the Consuming Region East (the most heating-load sensitive region) has ended the winter heating season as little as 9 percent full (April 1996) and as high as 31 percent full (April 1999) based on records back to 1994. In every case and under significantly different price and demand conditions, summer injections have resulted in working gas levels that were 95-99 percent full by November, the traditional start of the winter heating season.

Source: American Gas Storage Survey, American Gas Association.

#### **Natural Gas Imports**

- Natural gas imports from Canada have exceeded 3 trillion cubic feet (Tcf) for two consecutive years and currently account for about 13 percent of the gas consumed in the U.S. This trend is expected to continue with Canadian imports growing incrementally with U.S. demand growth.
- Recent additions to pipeline capacity moving Canadian gas to U.S. markets has added supply flexibility for U.S. consumers. The Northern Border Expansion, production from Sable Island (offshore eastern Canada) and the expectation that new gas supplies will begin flowing to Midwest markets through the Alliance pipeline in mid-November 2000 are representative of the new supply additions.

#### Conclusion

Natural gas is a clean, safe, efficient and reliable fuel, which is why the market is demanding natural gas, and why demand from all customer sectors is increasing. Recent fluctuations in natural gas prices indicate that market forces are attempting to balance supply and demand.

The North American natural gas resource base is ample to supply the growing market.



#### FIGURE 2

# Gas Directed Drilling Activity and Crude Oil and Gas Prices



### **NYMEX Natural Gas Prices**



Schedule TES -2

E1	W	inter

#### COMPANY: CITY GAS COMPANY OF FLORIDA A Division of NUI Corporation

#### SCHEDULE E-1 (REVISED 9/22/00)

					PROJECTIO	<u>N</u>		
COST OF GAS PUP	RCHASED	OCT	NOV	DEC	JAN	FEB	MAR	TOTAL
1 COMMODITY (Pipeline)		\$16,188	\$17,079	\$19,039	\$22,547	\$22,324	\$21,320	\$118,49
2 NO NOTICE RESERVATION		\$11,180	\$26,190	\$27,063	\$27,063	\$24,444	\$27,063	\$142,96
3 SWING SERVICE		\$0	\$0	\$0	\$0	<b>S</b> O	\$0	5
4 COMMODITY (Other)		\$1,758,794	\$1,902,656	\$2,167,920	\$2,990,657	\$2,818,435	\$2,547,229	\$14,183,89
5 DEMAND		\$519,563	\$842,816	\$870,910	\$1,085,294	\$980,265	\$1,085,294	\$5,384,14
6 OTHER	1	\$5.554	\$4,431	\$5,742	\$5,926	\$5,926	\$5,733	\$33,31
LESS END-USE CONTRACT		\$0	\$0	\$0	\$0	50	\$0	
7 COMMODITY (Pipeline)	Ì	\$0	\$0	so	\$0 J	\$0	\$0	:
8 DEMAND		\$0	\$0	50	\$0	so	<b>S</b> 0	
<b>a</b>	ļ	50	\$0	\$0	<b>\$</b> 0	so	\$0	
5 10		\$0	\$0	50	so	so	\$0	
	+5+6\-(7+8+9+10	\$2 311 250	\$2 793 172	\$3.090 873	\$4.131.686	\$3,849,394	\$3.666.639	\$19,862.8
	+3+0)-(7+0+3+10	\$2,011,209 CO	42,7 00,172 ¢n	\$0,000,010	44,101,000 101	\$0,010,051 \$0	\$0,000,000	•••••••
		40 004)	(610.407)	(\$10.329)	/811.661)	(\$10.972)	(\$11.003)	(\$63.4
13 COMPANY USE		(150.54) (150.170)	(\$10,407)	(\$10,320) \$2,080,346	\$4 420 025 I	\$3 919 471	\$3.675.635	C10 700 1
14 THERM SALES REVENUES		\$2,302,178	\$2,782,765	\$3,000,340	34,120,023	33,636,421	43,073,033 ]	
THERMS PURCHA	SED							
15 COMMODITY (Pipeline)		3,808,870	4,018,690	4,479,750	5,305,120	5,252,630	5,016,570	27,681,6
6 NO NOTICE RESERVATION		1,240,000	2,910,000	3,007,000	3,007,000	2,716,000	3,007,000	15,887,0
17 SWING SERVICE	Í	•	1	-	-	•	-	
18 COMMODITY (Other)		3,808,870	4,018,690	4,479,750	5,305,120	5,252,630	5,016,570	27,861,
19 DEMAND		10,921,610	17,673.000	18,262,100	21,052,100	19,014,800	21,052,100	107,975,
20 OTHER		8,900	7,100	9,200	9.495	9,495	9,186	53,:
LESS END-USE CONTRACT	ļ	-	-	-	-	-	-	
21 COMMODITY (Pipeline)		.	- [	- 1	•	- 1	-	
22 DEMAND	-	-	-	-	-	-		
23		•	-	-	•	-	-	
24 TOTAL PURCHASES (+17+1	.8+20)-(21+23)	3,817,770	4,025,790	4,488,950	5,314,615	5,262,125	5,025,756	27,935,
25 NET UNBILLED			·	-		-	· • j	
26 COMPANY USE		(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(90,0
27 TOTAL THERM SALES	(24-26)	3,802,770	4,010,790	4,473,950	5,299,615	5,247,125	5,010,756	27,845,0
CENTS PER THER	M							
COMMODITY (Pinalina)	(1/15)	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425	0.00
	(1/15)	0.00000	0.00020	0.0000	0.00000	0.00000	0.00900	0.01
29 NO NUTILE RESERVATION	(2/10)	0.00900	0.00900	0.00900	0.00900	0.00000	0.00000	0.0
SU SWING SERVICE	(3/1/)	0.00000	0.00000	0.00000	0.0000	0.00000	0.00000	0.00
	(4(4.0))	***	#0.1701F	FO 45504	0 56077	0.50000	0 60770	0.60
SI COMMODITY (Uther)	(4/18)	\$0.46176	\$0.47345	\$0,46394	0.063/7	0.05620	0.00176	0.00
32 DEMAND	(5/19)	\$0.04757	\$0.04769	\$0.04769	0.00155	0.05755	0.00100	0.04
33 OTHER	(6/20)	\$0.62408	\$0.62408	\$0.62408	0.62408	0.02408	0.62408	0.624
LESS END-USE CONTRACT								
34 COMMODITY Pipeline	(7/21)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0,00
35 DEMAND	(8/22)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0,00
36	(9/23)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
37 TOTAL COST	(11/24)	0.60539	0.69382	0.68851	0.77742	0.73153	0.73355	0.71
38 NET UNBILLED	(12/25)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0,00
39 COMPANY USE	(13/26)	0.60539	0.69382	0.68851	0.77742	0.73153	0.73355	0.71
IO TOTAL THERM SALES	(11/27)	0.60778	0.89641	0.69082	0.77962	0.73362	0.73574	0.71
41 TRUE-UP	(E-2)	0.07364	0.07364	0.07364	0.07364	0.07364	0.07364	0.07
42 TOTAL COST OF GAS	(40+41)	0.68142	0.77006	0.76446	0.85326	0.80726	0.80939	0.78
43 REVENUE TAX FACTOR		1.00503	1.00503	1.00503	1.00503	1.00503	1.00503	1.00
44 PGA FACTOR ADJUSTED FOI	R TAXES (42x43)	0.68485	0.77393	0.76830	0.85755	0.81132	0.81346	0,79
		0.000	0.774	0.769	0 060 3	0.944	0.912	0

#### PURCHASED GAS ADJUSTMENT COST RECOVERY CLAUSE CALCULATION

SCHEDULE E-1 (REVISED 9/24/00)

ORIGINAL ESTIMATE FOR THE PROJECTED PERIOD:

JANUARY 2001 Through DECEMBER 2001

		PROJECTION												
COST OF GAS PURCH	ASED	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV_	DEC	TOTAL
1 COMMODITY (Pipeline)		\$22,547	\$22,324	\$21,320	\$19,517	\$17,531	\$16,038	\$15,787	\$15,517	\$16,425	\$16,188	\$17,079	\$19,039	\$219,312.
2 INTRA-DAY SUPPLY RESERVATION	N	\$27,063	\$24,444	\$27,063	\$13,500	\$10,463	\$10,125	\$10,463	\$10,463	\$10,125	\$11,160	\$26,190	\$27,063	\$208,121
3 SWING SERVICE		\$0	\$0	\$0	<b>\$</b> 0	<b>\$</b> 0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 COMMODITY (Other)		\$2,990,857	\$2,816,435	\$2,547,229	\$2,197,087	\$1,932,392	\$1,759,438	\$1,724,786	\$1,694,049	\$1,787,264	\$1,758,794	\$1,902,656	\$2,167,920	\$25,278,907
5 DEMAND		\$1,085,294	\$980,265	\$1,085,294	\$612,187	\$484,125	\$468,508	\$484,125	\$484,125	\$468,508	\$519,563	\$842,816	\$870,910	\$8,385,718
6 OTHER		\$5.926	\$5,926	\$5,733	\$6,008	\$4,935	\$5,354	\$4,660	\$5,117	\$4,993	\$5,554	\$4,431	\$5,742	\$64,378
LESS FND-USE CONTRACT				4-1/ 00	••,	• .,	••••	• • • • • • •						
7 COMMODITY (Pineline)		( so	so	\$D	\$0	\$0	\$0	\$0	\$0	\$0	so	\$0	<b>so</b> .	so
8 DEMAND		\$0 \$0	\$n	\$0	\$0	50	<b>S</b> 0	\$0	<b>\$</b> 0	\$0	\$0	\$0	\$0	so
g		\$0 \$0	\$0 \$0	50	\$0	\$0	50	\$0	\$0	\$0	\$0	\$0	50	\$0
10		50	\$0	¢0	\$0	\$0	50	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 TOTAL COST (1+2+3+4+	5+6-(7+8+9+10)	\$4 131 686	\$3.840.304	\$3 686 630	\$2 848 290	\$2 449 445	\$2 259 464	\$2 239 820	\$2,209,271	\$2 287 314	\$2,311,259	\$2,793,172	\$3.090.673	\$34,156,435
	510)(/1015110)	44,701,000 60	40,040,084 \$0	\$0,000,009 ¢0	¢2,0-10,285	¢2,-++0,-++0 ¢0	\$0	\$0	\$n	\$0	\$0	\$0	\$0	\$0
		30 (E41.664)	(610.072)	40 (\$11.000)	100 104)	400 /EQ 9001	/69.0613	(\$0.027)	(\$0.056)	(\$9.850)	(\$0.081)	(\$10.407)	(\$10 328)	(\$117.531)
14 THERM CALSE DEVENUES		(\$11,001)	(\$10,973):	(311,003)	(\$8,204) (\$3,2045)	(30,090)	(30,501)	(#0,027) #2 220 702	(33,030) \$2,200,215	\$2 278 455	\$2 302 178	\$2 782 765	\$3,080,346	\$34.038.905
14 THERM SALES REVENUES		\$4,120,025	\$3,838,421	33,075,035	\$2,039,015	\$2,440,555	\$2,250,503	\$2,230,793	\$2,200,210	<u> 42,270,400</u>	\$2,502,170	<b>#2,702,703</b>	1 \$5,000,340	404,000,800
THERMS PURCHASED														
15 COMMODITY (Pipeline)		5,305,120	5,252,630	5,016,570	4,592,220	4,124,930	3,773,740	3,714,480	3,650,990	3,864,770	3,808,870	4,018,690	4,479,750	51,602,760
16 INTRA-DAY SUPPLY RESERVATION	N	3,007,000	2,716,000	3,007,000	1,500,000	1,162,500	1,125,000	1,162,500	1,162,500	1,125,000	1,240,000	2,910,000	3,007,000	23,124,500
17 SWING SERVICE		0	0	0	0	0	0	0	0	0	0	0	0	0
18 COMMODITY (Other)		5,305,120	5,252,630	5,016,570	4,592,220	4,124,930	3,773,740	3,714,480	3,650,990	3,864,770	3,808,870	4,018,690	4,479,750	51,602,760
19 DEMAND		21,052,100	19,014,800	21,052,100	11,527,800	9,977,350	9,655,500	9,977,350	9,977,350	9,655,500	10,921,610	17,673,000	18,262,100	168,746,560
20 OTHER		9,495	9,495	9,186	9,627	7,907	8,579	7,467	8,200	8,000	8,900	7,100	9,200	103,156
LESS END-USE CONTRACT			1								ļ			
21 COMMODITY (Pipeline)		0	0	0	0	0	0	0	0	1 0	0	0	0	0
22 DEMAND		0	} 0	0	0	0	0	] 0	٥	0	0	0	0	0
23		0	0	0	0	0	0	0	0	0	0	( O	0	( 0
24 TOTAL PURCHASES (+17+18+20	)-(21+23)	5,314,615	5,262,125	5,025,756	4,601,847	4,132,837	3,782,319	3,721,947	3,659,190	3,872,770	3,817,770	4,025,790	4,488,950	51,705,916
25 NET UNBILLED		0	0	0	0	0	0	0	0	0	0	. 0	0	0
26 COMPANY USE		(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(180,000)
27 TOTAL THERM SALES	(24-26)	5,299,615	5,247,125	5,010,756	4,586,847	4,117,837	3,76 <u>7,31</u> 9	3,706,947	3,644,190	3,857,770	3,802,770	4,010,790	4,473,950	51,525,916
CENTS PER THERM														
28 COMMODITY (Pipeline)	(1/15)	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425	0,00425	0.00425	0.00425	0.00425	0.00425	0.00425	0.00425
29 INTRA-DAY SUPPLY RESERVATION	N (2/16)	0.00900	0.00900	0.00900.0	0.00900	0.00900	0.00900	0,00900.0	0.00900	0.00900	0.00900	0.00900	0.00900	0.00900
30 SWING SERVICE	(3/17)	0.00000	0,00000	0 00000	0.00000	00000 0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	(-/-/)	0.00000												
31 COMMODITY (Other)	(4/18)	0.56377	0.53620	0.50776	0,47844	0.46647	0.46623	0.46434	0.46400	0.46245	0.46176	0.47345	0.48394	0.48988
32 DEMAND	(5/19)	0.05155	0.05165	0.05155	0.05311	0.04852	0.04852	0.04852	0.04852	0.04852	0.04757	0.04769	0.04769	0.04969
33 OTHER	(6/20)	0.62408	0.62408	0.62408	0.62408	0.62408	0.62408	0.62408	0.62408	0.62408	0.62408	0.62408	0.62408	0.62408
LESS END-USE CONTRACT	(													
34 COMMODITY Pipeline	(7/21)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
35 DEMAND	(8/22)	0 00000	0,00000	0 00000	0 00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
36	(9/23)	00000	0 00000	00000	0,00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
37 TOTAL COST	(11/24)	0 77742	0.73153	0 73355	0.81895	0 59268	D.59738	0.60179	0 60376	0.59061	0.60539	0.69382	0.68851	0.66059
38 NET LINBILLED	(12/25)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	00000	0,00000	0 00000	0 00000	0.00000	0.00000	0 00000
39 COMPANY LISE	(13/26)	0 77742	0.73153	0.73366	0.61805	0.59268	0 59739	0 60179	0.60376	0.59061	0 60539	0 69382	0 68851	0 66059
40 TOTAL THERM SALES	(11/27)	0.77067	0.73363	0.73535	0.01005	0.55494	0.5007#	0 60422	0.60624	0.50201	0.60778	0 69641	0 60082	0.66200
	(E-7)	0.11902	0.73362	0.730/4	0.0208/	0.03404	0.000/0	0.00422	0.00024	0.07264	0.07284	0.00041	0.03002	0.00280
	(L-2) (40+41)	0.07304	0.07364	0.07364	0.07304	0.07304	0.07304	0.07304	0.07304	0.07304	0.88147	0.07304	0.07304	0.073664
42 TOTAL CUST OF GAS	(70791)	0.85326	0.00726	0.00939	0,09461	4,00503	0.07339	1.00#00	4.00502	1 00600	1.00502	1.00502	1.00502	1.00503
43 REVENUE TAX FACTOR	EC (ADVAD)	1.00503	1.00503	1.00503	1,00503	1,00503	1.00503	1.00503	1.00503	0.86000	0.00003	0.77300	0.00003	0.00003
	EGT 001	0,85755	0.81132	0.81348	0.89813	0.6/164	0.0/0/8	0.0612/	0.06331	0.00990	0.00405	0.77393	0.76830	0.74024
TO FOR FACTOR ROUNDED TO NEAR		868.0	0.011	0.813	0.098	0.012	0.077		0.083	0.070	0.005	0.774	0.708	0.740
											1			

#### PURCHASED GAS ADJUSTMENT COST RECOVERY CLAUSE CALCULATION

SCHEDULE E-1/R (REVISED 9/24/00)

REVISED ESTIMATE FOR THE PROJECTED PERIOD:

JANUARY 00 Through DECEMBER 00

		ACTUAL REVISED PROJECT														
COST OF GAS PURCHASED	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL			
1 COMMODITY (Pipeline)	\$80,387	\$72,962	\$87,836	\$49,230	\$36,393	\$43,051	\$43,245	\$37,009	\$16,669	\$15,717	\$17,041	\$18,458	\$51,7,998			
2 NO NOTICE RESERVATION	17,741	16,597	-	-	-	-		Í -	9,990	11,160	26,190	27,063	\$108,741			
3 SWING SERVICE	-			-	-	-	-	-	-	-	- 1	· ·	\$0			
4 COMMODITY (Other)	1,842,115	1,405,959	1,221,559	1,186,074	995,877	1,405,758	1,399,568	1,440,035	1,887,008	2,011,229	2,231,007	2,468,297	\$19,494,484			
5 DEMAND	1,232,905	1,152,297	1,205,448	894,734	678,222	654,415	854,291	682,103	583,768	638,665	1,050,284	1,085,294	\$10,512,426			
6 OTHER	5,090	6,491	5,360	5,162	4,438	4,986	4,660	4,994	4,993	5,554	4,431	5,742	\$61,900			
LESS END-USE CONTRACT																
7 COMMODITY (Pipeline)		-			-	-		-	so	so	\$0	so	\$0			
8 DEMAND					-	-	_	ļ <u>.</u>	so so	so so	50	\$0	\$0			
9	-		<u> </u>	-	-	-		<u> </u>	50	50	so	\$0	50			
10	_		l <u>.</u>	_				! .	50	50	50	50	\$0			
11 TOTAL COST (1+2+3+4+5+6)-(7+8+9	1+10) 3 178 238	2 654 306	2 520 203	2 135 200	1 714 930	2 1/18 208	2 101 764	2 164 141	\$2 502 428	\$2 692 325	\$3 328 053	53 674 853	\$30.606.549			
12 NET UNBILLED	0,110,200	2,004,000	2,020,203	2,100,200	1,714,000	2,100,200	2,101,104	2,104,141	\$0	42,002,020 en	40,020,000 en	\$0,004,000	400,080,048			
13 COMPANY LISE	(1.082	(1 705)	(1 704)	(1 765)	(15 377)	-	1	1 (962)	(20 597)	(\$10,900)	40 (£10,499)	(640.467)	φυ (\$70.074)			
14 THERM SALES DEVENILIES	62 200 042	(1,700) \$0,400,700	(1,704)	(1,755) Et oco opt	(15,577)	(1,114) 64 760 545	(904)	(002)	(39,507)	(210,090)	(\$12,470)	(\$12,407)	(\$70,874)			
	\$2,209,943	\$2,400,700	\$2,300,747	\$1,900,021	\$1,656,062	\$1,700,545	\$1,870,960	\$1,924,450	\$2,492,840	\$2,071,427	33,310,475	\$3,592,300	\$28,362,608			
THERMS PURCHASED																
15 COMMODITY (Pipeline)	21,369,670	21,246,630	21,704,980	14,296,390	11,827,332	10,707,510	11,537,530	10,412,780	3,922,200	3,698,050	4,009,640	4,342,990	139,075,702			
16 NO NOTICE RESERVATION	3,007,000	2,813,000	l •	•	-	-	-		1,110,000	1,240,000	2,910,000	3,007,000	14,087,000			
17 SWING SERVICE	-	-		-	-	-	-	- 1	0	0	0	0	0			
18 COMMODITY (Other)	6,123,171	5,583,229	5,951,099	4,085,715	3,159,276	3,436,669	3,344,924	3,584,436	3,922,200	3,698,050	4,009,640	4,342,990	51,241,399			
19 DEMAND	24,342,130	22,763,840	21,528,820	15,835,500	13,144,720	12,676,200	12,671,970	13,267,380	11,165,500	12,471,610	20,373,000	21,052,100	201,282,770			
20 OTHER	9,495	9,495	9,186	9,627	7,907	8,579	7,467	7,575	8,000	8,900	7,100	9,200	102,531			
LESS END-USE CONTRACT									1			[				
21 COMMODITY (Plpeline)	· ·	-	-	-	-	-	-		0	0	0	0	0			
22 DEMAND		-	-				[ _	-	0	0	0	0	0			
23	-		- 1	-	-				0	0	0	0	0			
24 TOTAL PURCHASES (17+18+20)-(21+23)	6,132,566	5,592,724	5,960,285	4,095,342	3,167,183	3,445,248	3,352,391	3,592,011	3,930,200	3,706,950	4.016,740	4,352,190	51.343.930			
25 NET UNBILLED						-			0	0	0	0	0			
26 COMPANY USE	(4.399	(3.961)	(3.961)	(3,895)	(34,126)	139	(116)	(1.914)	(15.000)	(15,000)	(15 000)	(15 000)	(112 233)			
27 TOTAL THERM SALES (24-26)	5 977 258	6 001 725	5 759 038	4 805 565	4 420 947	4 009 303	3 791 245	3 623 975	3 915 200	3 691 950	4 001 740	4 337 100	64 335 134			
		0,001,120		4,000,000	4,420,841	4,000,000	1,	1	0,010,200	0,001,850	4,001,140	4,001,100	04,000,104			
												· · · · · · · · · · · · · · · · · · ·				
	0.00376	0.00343	0.00405	0.00344	0.00308	0.00563	0.00563	0.00563	0.00425	0.00425	0.00425	0.00425	0.00372			
29 NO NOTICE RESERVATION (2/16)	0.00590	0.00590	#DIV/0!	0.00561	0.00561	0.00590	0.00590	0.00590	0.00900	0.00900	0.00900	0.00900	0.00772			
30 SWING SERVICE (3/1/)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0,00000			
31 COMMODITY (Other) (4/18)	0.30084	0.25182	0.20527	0.29030	0.31522	0.26351	0.26511	0.27912	0.48111	0.54386	0.55641	0.56834	0.38044			
32 DEMAND (5/19)	0.05065	0.05062	0.05599	0.05850	0.05160	0.05197	0.05081	. 0.05116	0.05233	0.05121	0.05155	0.05155	0.05223			
33 OTHER (6/20)	0.53607	0.68362	0.58350	0.53620	0.56127	0.53394	0.53394	0.53394	0.62405	0.62408	0.62408	0.62408	0.60372			
LESS END-USE CONTRACT	l															
34 COMMODITY Pipeline (7/21)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000	0.00000	0.00000			
35 DEMAND (8/22)	0.0000.0	00000.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000			
36 (9/23)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000			
37 TOTAL COST (11/24)	0.51825	0.47460	0.42283	0.52137	0.54147	0.61192	0.62694	0.60249	0.63672	0.72359	0.82877	0.82828	0.59784			
38 NET UNBILLED (12/25)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000			
39 COMPANY USE (13/26)	0.45056	0.45064	0.44534	0.45058	0.45059	0.61192	0.62694	0.60249	0.00000	0.0000.0	0.00000	0.0000.0	0.63238			
40 TOTAL THERM SALES (11/27)	0.53172	0.44226	0.43761	0.44432	0.38791	0.52583	0,55437	0.59717	0.63916	0.72653	0.83184	0.83115	0.56493			
41 TRUE-UP (E-2)	(0.02577	(0.02577)	(0.02577)	(0.02577)	(0.02577)	(0.02577)	(0.02577)	(0.02577)	(0.02577)	(0.02577)	(0.02577)	(0.02577)	(0.02577)			
42 TOTAL COST OF GAS (40+41)	0.50595	0.41649	0.41184	0.41855	0.36214	0.50006	0.52880	0.57140	0 61330	0 70078	0.80811	0.80538	0.53016			
43 REVENUE TAX FACTOR	1 00503	1 00503	1.00502	1 00502	1 00503	1 00503	1 00503	1 00503	1 00602	1.00503	100602	1 00502	1.00503			
44 PGA FACTOR ADJUSTED FOR TAYES (4	1.00000	0.44920	0.4304	0.4205	0.26206	0.500000	0.53426	0.57409	0.64947	0.70400	0.84040	0.00503	1.00503			
45 PGA FACTOR ROLINDED TO NEADEST OUT		0.41000	0.41391	0.42005	0.30390	0.50257	0.03120	0.57420	0.0104/	0.70429	0.81016	0.80943	0.54187			
TO THE TOR ROUTDED TO HEAREST .VUI		0.419	<u> </u>	0.421	0.304	0.503	0.531	0.5/4	0.616	0,704	0.81	0,809	<u>U.542</u>			
		<u> </u>	1	<b></b>	<u> </u>	L	L	L	<u></u>	I						

#### CALCULATION OF TRUE-UP AMOUNT

(REVISED 9/24/99)

FOR TH	IE CURRENT PERIOD	<b>)</b> :	JANUARY 99		Through		DECEMBER 9	9 ·					
		ACT				UAL					ROJECTIONS		TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	PERIÓD
TRUE-UP CALCULATION 1 PURCHASED GAS COST 2 TRANSPORTATION COST 3 TOTAL COST	\$1,847,205 <u>\$1,331,033</u> \$3,178,238	\$1,412,450 <u>\$1,241.856</u> \$2,654,306	\$1,226,919 <u>\$1,293,284</u> \$2,520,203	\$1,191,236 <u>\$943,964</u> \$2,135,200	\$1,000,315 <u>\$714.615</u> \$1,714,930	\$1,410,742 <u>\$697.466</u> \$2,108,208	\$1,404,228 <u>\$697.536</u> \$2,101,764	\$1,445,029 <u>\$719,112</u> \$2,164,141	\$1,892,001 <u>\$610.427</u> \$2,502,428	\$2,016,783 <u>\$665.542</u> \$2,682,325	\$2,235,438 <u>\$1.093.515</u> \$3,328,953	\$2,474,039 <u>\$1,130,814</u> \$3,604,853	\$19,556,384 <u>\$11,139,164</u> \$30,695,549
4 FUEL REVENUES (Net of Revenue Tax) 4a Under-recovery* 4b ADJUSTED NET FUEL REVENUES *	\$2,209,943 <u>\$0</u> \$2,209,943	\$2,400,700 <u>\$0</u> \$2,400,700	\$2,306,747 <u>\$0</u> \$2,306,747	\$1,960,021 <u>\$0</u> \$1,960,021	\$1,856,082 <u>\$0</u> \$1,856,082	\$1,760,545 <u>\$0</u> \$1,760,545	\$1,870,986 <u>\$0</u> \$1,870,986	\$1,924,456 <u>\$0</u> \$1,924,456	\$2,492,840 ( <u>\$52,615)</u> \$2,440,226	\$2,671,427 ( <u>\$373,525)</u> \$2,297,901	\$3,316,475 <u>(\$827,876)</u> \$2,488,598	\$3,592,386 <u>(\$893,851)</u> \$2,698,535	\$28,362,608 ( <u>\$2,147,868)</u> \$26,214,740
5 TRUE-UP COLLECTED OR (REFUNDED) 6 FUEL REVENUE APPLICABLE TO PERIOD (LINE 4 (+ or -) LINE 5)	<u>\$4,019</u> \$2,213,962	<u>\$4.019</u> \$2,404,719	<u>\$4.019</u> \$2,310,766	<u>\$4.019</u> \$1,964,040	<u>\$4.019</u> \$1,860,101	<u>\$4.019</u> \$1,764,564	<u>\$4.019</u> \$1,875,005	<u>\$4.019</u> \$1,928,475	<u>\$4.019</u> \$2,444,245	<u>\$4.019</u> \$2,301,920	<u>\$4.019</u> \$2,492,617	<u>\$4,019</u> \$2,702,554	<u>\$48,228</u> \$26,262,968
7 TRUE-UP PROVISION - THIS PERIOD (LINE 6 - LINE 3) 8 INTEREST PROVISION-THIS PERIOD (21) 9 ADDITECT PROVISION - MONTHS' INTEREST	(\$964,276) \$1,280	(\$249,587) (\$1,643)	(\$209,437) (\$2,848)	(\$171,160) (\$3,940)	\$145,171 (\$4,213)	(\$343,644) (\$4,932)	(\$226,759) (\$6,516)	(\$235,666) (\$7,794)	(\$58,183) (\$8,656)	(\$380,404) (\$9,914)	(\$836,335) (\$13,290)	(\$902,300) (\$18,100)	(\$4,432,581) (\$80,567)
9 BEGINNING OF PERIOD TRUE-UP AND INTEREST	\$753,670	(\$213,345)	(\$468,594)	(\$684,898)	(\$864,017)	(\$727,078)	(\$1,079,675)	(\$1,316,969)	(\$1,564,447)	(\$1,635,305)	(\$2,029,643)	(\$2,883,288)	\$753,670
10 TRUE-UP COLLECTED OR (REFUNDED) (REVERSE OF LINE 5) 10a FLEX RATE REFUND (if applicable) 11 TOTAL SETURATED (ACTUAL TRUE UP	(\$4,019) \$0 (\$212.245)	(\$4,019) \$0 (\$468 E04)	(\$4,019) \$0 (#684 808)	(\$4,019) \$0 (#864_017)	(\$4,019) \$0 (¢777,078)	(\$4,019) \$0 (¢1.079.675)	(\$4,019) \$0 (\$1,315,969)	(\$4,019) \$0 (#1 554 447)	(\$4,019) \$0 (\$1,635,305)	(\$4,019) \$0 (\$2,029,643)	(\$4,019) \$0 (\$2,883,288)	(\$4,019) \$0 (\$3,807,707)	(\$48,228) \$0 (\$3,807,706)
(7+8+9+10+10a)	(\$213,545)	(\$400,594)	(3004,050)	(\$604,017)	(\$727,076)	(\$1,075,075)	(\$1,510,505)	(),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(\$1,000,000)	(\$2,029,049)	(\$2,005,200)	(\$3,607,707)	(40,007,700)
INTEREST PROVISION 12 BEGINNING TRUE-UP AND INTEREST PROVISION (9)	\$753,670	(\$213,345)	(\$468,594)	(\$684,898)	(\$864,017)	(\$727,078)	(\$1,079,675)	(\$1,316,969)	(\$1,564,447)	(\$1,635,305)	(\$2,029,643)	(\$2,883,288)	
13 ENDING TRUE-UP BEFORE INTEREST (12+7-5)	(\$214,625)	(\$466,951)	(\$682,050)	(\$860,077)	(\$722,865)	(\$1,074,741)	(\$1,310,453)	(\$1,556,654)	(\$1,626,649)	(\$2,019,729)	(\$2,869,997)	(\$3,789,606)	
14 TOTAL (12+13) 15 AVERAGE (50% OF 14) 16 INTEREST RATE - FIRST DAY OF MONTH	\$539,045 \$269,522 0.05600	(\$680,296) (\$340,148) 0.05800	(\$1,150,645) (\$575,322) 0.05800	(\$1,544,977) (\$772,487) 0.06070	(\$1,586,883) (\$793,441) 0.06180	(\$1,801,820) (\$900,910) 0.06570	(\$2,390,128) (\$1,195,064) 0.06580	(\$2,873,622) (\$1,436,811) 0.06510	(\$3,191,097) (\$1,595,548) 0.06510	(\$3,655,034) (\$1,827,517) 0.06510	(\$4,899,641) (\$2,449,820) 0.06510	(\$6,672,894) (\$3,336,447) 0.06510	
17 INTEREST RATE - FIRST DAY OF SUBSEQUENT MONTH	0.05800	0.05800	0.06070	0.06180	0.06570	0.06580	0.06510	0.06510	0.06510	0.06510	0.06510	0.06510	
10 101AL (10+17) 19 AVERAGE (50% OF 18) 20 MONTHLY AVERAGE (19/12 Months) 21 INTEREST BROWEION (15-20)	0.11400 0.05700 0.00475 1.280	0.11600 0.05800 0.00483	0.011870 0.05935 0.00495	0.06125	0.12/50 0.06375 0.00531	0.13150 0.06575 0.00548 (4.932)	0.13090 0.06545 0.00545	0.13020 0.06510 0.00543 (7.794)	0.13020 0.06510 0.00543	0.13020 0.06510 0.00543	0.06510 0.00543 (13.290)	0.13020 0.06510 0.00543	
* Under-recovery = Monthly sales volume * (Pr	Djected Cost of Gas (So	thed E/1 line 24	) - anticipated F	PGA rate)	(4,213)	(7,332)		(77 <del>71</del> )	(0,050)	(2,514)	(13,290)	(10,100)	

#### TRANSPORTATION PURCHASES SYSTEM SUPPLY AND END USE

SCHEDULE E-3

(REVISED 9/24/99)

	ESTIMATED FOR	THE PROJECTED	PERIOD OF	:		JANUARY 2001	Through	DECEMBER 2001			
						CO	MODITY C	OST			TOTAL
	PURCHASED	PURCHASED	SCH	SYSTEM	END	TOTAL	THIRD		DEMAND	OTHER CHARGES	CENTS PER
MONTH	FROM	FOR	TYPE	SUPPLY	USE	PURCHASED	PARTY	PIPELINE	COST	ACA/GRI/FUEL	THERM
01/01	Various	Sys/End-Use	FTS	5,305,120	•	5,305,120		\$17,348	\$1,112,357	\$5,199	21.39260
02/01	Various	Sys/End-Use	FTS	5,252,630		5,252,630		\$17,176	\$1,004,709	\$5,148	19.55274
03/01	Various	Sys/End-Use	FTS	5,016,570		5,016,570		\$16,404	\$1,112,357	\$4,916	22.59865
04/01	Various	Sys/End-Use	FTS	4,592,220		4,592,220		\$15,017	\$625,687	\$4,500	14.04993
05/01	Various	Sys/End-Use	FTS	4,124,930		4,124,930		\$13,489	\$494,587	\$4,042	12.41520
06/01	Various	Sys/End-Use	FTS	3,773,740		3,773,740		\$12,340	\$478,633	\$3,698	13.10825
07/01	Various	Sys/End-Use	FTS	3,714,480		3,714,480		\$12,146	\$494,587	\$3,640	13.74012
08/01	Various	Sys/End-Use	FTS	3,650,990		3,650,990		\$11,939	\$494,587	\$3,578	13.97166
09/01	Various	Sys/End-Use	FTS	3,864,770		3,864,770	-	\$12,638	\$478,633	\$3,787	12.80951
10/01	Various	Sys/End-Use	FTS	3,808,870		3,808,870		\$12,455	\$530,723	\$3,733	14.35887
11/01	Various	Sys/End-Use	FTS	4,018,690		4,018,690		\$13,141	\$869,006	\$3,938	22.04911
12/01	Various	Sys/End-Use	FTS	4,479,750		4,479,750	3	\$14,649	\$897,973	\$4,390	20.47016
	:										
TOTAL				51 602 700		51 603 760		A160 74+	40 E02 020	#E0 E71	17.07094
IUTAL				51,002,700		51,002,700		\$100,741	\$0,595,659	\$20,271	17.07884
1			1	1 1				1			

COMPANY: NUI CITY GAS COMPANY OF I	LORIDA			CALCULATION OF TRUE-UP AMOUNT PROJECTED PERIOD								
ESTIMATED FOR TH	E PROJECTED I	PERIOD:		JANUARY 01	Through	DECEMBER 01		(REVISED 9/24/99)				
		PRIOR PERI	iod: Janu,	ARY 99 - DECEMBER	₹ 99	CURRENT PERIC JAN '00 - DEC	)D: '00	•··				
		(1) EIGHT MONTH PLUS FA MONTHS REVIS	IS ACTUAL OUR ED ESTIMATE	(2) ACTUAL	(3) Col(2)-Col(1) DIFFERENCE	(4) EIGHT MONTHS J PLUS FOUR MO REVISED ESTI	ACTUAL INTHS MATE	(5) Col(3)+Col(4) TOTAL TRUE-UP				
1 TOTAL THERM SALES \$	E-2 Line 6	\$23,957,075	A-2 Line 6	\$22,857,374	(\$1,099,701)	E-2 Line 6	\$26,262,968	\$25,163,267				
2 TRUE-UP PROVISION FOR THIS PERIOD OVER (UNDER) COLLECTION	E-2 Line 7	(\$1,202,907)	A-2 Line 7	(\$503,349)	\$699,558	E-2 Line 7	(\$4,432,581)	(\$3,733,023)				
3 INTEREST PROVISION FOR THIS PERIOD	E-2 Line 8	\$129,460	A-2 Line 8	\$135,332	\$5,872	E-2 Line 8	(\$80,567)	(\$74,695)				
4 END OF PERIOD TOTAL NET TRUE-UP	L2+L3+L3a	(\$1,073,447)		(\$368,017)	\$705,430		(\$4,513,148)	(\$3,807,718)				
NOTE: EIGHT MONTHS ACTU	JAL FOUR MONTH	IS REVISED ESTIMA	TE DATA OBTAIN	ied from schedul	Е (Е-2).							
COLUMN (1) DATA OBTAINED FRO COLUMN (2) DATA OBTAINED FRO LINE 4 COLUMN (3) SAME AS LINE 7 SCHE LINE 4 COLUMN (1) SAME AS LINE 8 SCHE LINE 2 COLUMN (4) SAME AS LINE 7 SCHE LINE 3 COLUMN (4) SAME AS LINE 8 SCHE	m Schedule (e- m Schedule (a- Edule (a-7) Edule (a-7) Edule (e-2) Edule (e-2)	2)	TOTAL TRUE-UP I PROJECTED THER	DOLLARS IM SALES	<u>(\$3,807,718)</u> 51,706,660	equals	0.07364 7.364 Cents Per	\$/Therm Therm True-Up				

COMPANY: NUI CITY GAS COMPAN	IY OF FLORIDA		THERM SA	LES AND CUS	TOMER DA	<u>IA</u>				SCHEDULE E-5 (REVISED 9/24/99)			
	ESTIMATED F	OR THE PROJI	CTED PERIOD:	JANUARY 01 Through DECEMBER 01				l					·
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
THERM SALES (FIRM) RESIDENTIAL (RS & GS) COMMERCIAL (CS, LCS &NGV)	2,482,840 2,740,180	2,403,580 2,767,050	2,138,220 2,797,350	1,713,050 2,804,670	1,392,310 2,671,520	1,271,970 2,432,170	1,227,190 2,419,590	1,163,170 2,426,420	1,207,220 2,593,850	1,182,990 2,565,480	1,354,120 2,584,170	1,855,230 2,557,120	19,391,890 31,359,570
TOTAL FIRM	5,223,020	5,170,630	4,935,570	4,517,720	4,063,830	3,704,140	3,646,780	3,589,590	3,801,070	3,748,470	3,938,290	4,412,350	50,751,460
THERM SALES (INTERRUPTIBLE)													1
INTERRUPTIBLE (IP) LARGE INTERRUPTIBLE(IL)	79,600 0	79,600 0	79,600 0	79,600 0	79,600 0	79,600 0	79,600 0	79,600 0	79,600 0	79,600 0	79,600 0	79,600 0	955,200 0
TOTAL INTERRUPTIBLE	79,600	79,600	79,600	79,600	79,600	79,600	79,600	79,600	79,600	79,600	79,600	79,600	955,200
TOTAL THERM SALES	5,302,620	5,250,230	5,015,170	4,597,320	4,143,430	3,783,740	3,726,380	3,669,190	3,880,670	3,828,070	4,017,890	4,491,950	51,706,660
NUMBER OF CUSTOMERS (FIRM)										· · · · · · · · · · · · · · · · · · ·			
RESIDENTIAL (RS & GS) COMMERCIAL (CS, LCS &NGV)	96,481 4,342	96,640 4,225	96,785 4,337	96,388 4,232	95,809 4,330	95,605 4,228	95,441 4,322	95,280 4,224	95,341 4,331	95,375 4,330	96,092 4,318	96,495 4,350	95,978 4,297
TOTAL FIRM	100,823	100,865	101,122	100,620	100,139	99,833	99,763	99,504	99,672	99,705	100,410	100,845	100,275
NUMBER OF CUSTOMERS (INT.)													
INTERRUPTIBLE (IP) LARGE INTERRUPTIBLE(IL)	4 0	4	4 0	4 0	4	4	4 0	4	4	4 0	4 0	4 0	4 0
TOTAL INTERRUPTIBLE	4	4	4	4	4	4	4	4	4	4	4	4	4
TOTAL CUSTOMERS	100,827	100,869	101,126	100,624	100,143	99,837	99,767	99,508	99,676	99,709	100,414	100,849	100,279
THERM USE PER CUSTOMER													
RESIDENTIAL (RS & GS) COMMERCIAL (CS, LCS &NGV)	26 631	25 655	22 645	18 663	15 617	13 575	13 560	12 574	13 599	12 592	14 599	19 588	202 7 <b>,29</b> 7
INTERRUPTIBLE (IP) LARGE INTERRUPTIBLE(IL)	19,900 0	19,900 0	19,900 0	19,900 0	19,900 0	19,900 0	19,900 0	19,900 0	19,900 0	19,900 0	19,900 0	19,900 0	238,800 0