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Florida 33013-3498
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August 18, 1997

971074-CU

Ms. Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Petition for Authority to Implement Bi-Monthly Meter Reading Program System-Wide by City Gas Company of Florida

Dear Ms. Bayo:

Enclosed for filing on behalf of City Gas Company of Florida, please find the original and 15 copies of the captioned petition.

I enclosed also a computer diskette, in WordPerfect 5.0 format, containing the enclosed petition along with the attachments.

Please acknowledge your receipt of the enclosures (together with the docket number assigned to the petition) on the duplicate copy of this letter which is enclosed.

- ACK _____
- AEA _____
- ASP _____
- CIF _____
- CMR _____
- OTB _____
- ESC _____
- LEI _____
- ITD _____
- MAP/rt _____
- REI _____
- SKL _____
- WHS _____
- OTH _____

Thank you for your assistance.

Very truly yours,

CITY GAS COMPANY OF FLORIDA

Michael A. Palecki

Michael A. Palecki
Vice President of Regulatory Affairs

MAP/rt

Encl.

RECEIVED & FILED
FPSC-DIVISION OF RECORDS

DOCUMENT NUMBER-DATE

00370 AUG 19 97

FPSC-RECORDS/REPORTING

ORIGINAL
FILE COPY

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition for Authority to Implement)
Bi-Monthly Meter-Reading Program by)
City Gas Company of Florida.)
_____)

DOCKET NO. 971074

Submitted for Filing
August 19, 1997

**PETITION OF CITY GAS COMPANY OF FLORIDA
TO IMPLEMENT BI-MONTHLY METER READING PROGRAM**

City Gas Company of Florida, an operating division of NUI Corporation, ("City Gas" or "the Company"), files this petition for authority to implement a program providing for bi-monthly reading of the meters of residential customers and in support of its petition says:

1. The name and address of the Company is:

City Gas Company of Florida
955 East 25th Street
Hialeah, FL 33013-3498

2. The names and addresses of the persons authorized to receive notices and communications with respect to this petition are:

Michael A. Palecki
City Gas Company of Florida
955 East 25th Street
Hialeah, FL 33013-3498

Raymond A. DeMoine
NUI Corporation
One Elizabethtown Plaza
Union, NJ 07083

DOCUMENT NUMBER-DATE

08370 AUG 19 97

FPSC-RECORDS/REPORTING

3. By the instant petition, City Gas seeks authority to implement a bi-monthly meter-reading program.

4. As pertinent to this petition, Rule 25-7.084, F.A.C., entitled "Meter Readings", provides:

... Unless special circumstances warrant, meters shall be read at monthly intervals on the approximated corresponding day of each meter-reading period. When there is good reason for doing so, estimated bills may be submitted. (emphasis supplied)

While Rule 25-7.085, F.A.C., entitled "Customer Billing", provides (among other things) that bills shall be rendered monthly, and contains other provisions which would be inconsistent with bi-monthly residential metering reading, specific language in Rule 25-7.084 ("[u]nless special circumstances warrant," and "[w]hen there is good reason for doing so") contemplates the Commission's authority to permit meter readings (and billings based thereon) on other than a monthly basis.

5. By its Order No. PSC-96-0583-FOF-GU, issued May 6, 1996, in Docket No. 960308-GU, the Commission approved Peoples Gas System, Inc.'s (Peoples) bi-monthly meter reading program, and allowed Peoples, in implementing the program, to use a scheduled estimated meter reading every other month for purposes of billing. The Commission's Order granted an exemption from the "monthly" meter-reading provisions of the referenced rules in order to permit Peoples' implementation of its program. City Gas seeks the same exemption.

6. City Gas is increasing the quality of service performed by its meter reader

force by, among other things, increasing training requirements for meter readers; expanding the role of meter readers in the detection of meter tampering; expanding the role of meter readers in the visual inspection of service, riser and meter installations; and utilizing meter readers to promote the use of self-read postcards. For meter read situations that regularly are inaccessible, the implementation of bi-monthly meter reading will assist these efforts by allowing greater flexibility in work assignments and more efficient use of resources, mitigating costs that would otherwise increase. This additional flexibility will also improve the quality of service provided by City Gas meter readers by affording time for advanced and improved training as well as the introduction of a quality assurance program.

7. Moreover, as City Gas experiences increased risks of margin loss as a result of changing conditions in the industry, prudence requires that City Gas find the most cost-efficient means to perform at its existing service levels. As an example of the increased risks, two large City Gas customers have recently petitioned or are threatening to petition FERC to tap directly into the FGT Pipeline, and bypass City Gas. City Gas is at risk of losing these customers entirely, or negotiating with the customers to provide service at much less than the tariff rate. Either way, margin revenues go down. Cost containment measures such as bi-monthly meter reading will mitigate the revenue loss, and help City Gas avoid additional rate increases.

8. City Gas is well prepared to institute bi-monthly meter reading immediately upon the Commission's approval. A program overview, including a program fact

sheet, description of the meter reading cycle, an outline of benefits of the bi-monthly program and a time line for implementation of the program is attached hereto as Exhibit A. A program narrative describing Elizabethtown Gas Company's calculation of estimated meter readings to be adopted by City Gas is attached hereto as Exhibit B. City Gas' sister utility, Elizabethtown Gas Company in New Jersey, (also an operating division of NUI Corporation) has been reading the meters of its 250,000 residential customers on a bi-monthly basis since 1988. In 1995, City Gas adopted the same meter reading systems, and meter estimating systems employed by Elizabethtown Gas Company, as modified for local conditions. With two winter seasons behind it and with the support of years of experience at Elizabethtown Gas Company, City Gas expects a smooth transition to bi-monthly meter reading for the coming winter season.

9. City Gas respectfully requests that the Commission grant an exemption from the *monthly requirements of Rules 25-7.084 and 25-7.085(5) and issue its order authorizing City Gas to implement a bi-monthly meter-reading program. In anticipation of Commission approval of this petition, City Gas has begun training and preparation, and proposes to implement the program starting October 1, 1997.

WHEREFORE, City Gas respectfully requests that the Commission grants the relief sought by this petition, and enter its order authorizing City Gas to implement its bi-monthly meter reading program.

Respectfully submitted this 19th day of August, 1997.

Michael A. Palecki (by vgh)

Michael A. Palecki
NUI CORPORATION - SOUTHERN DIVISION
Vice President of Regulatory Affairs
955 East 25th Street
Hialeah, FL 33013-3498

**BI-MONTHLY METER READING
PROGRAM OVERVIEW**

City Gas Company of Florida, an operating division of NUI Corporation, strives to provide the best possible service to all of our customers at the lowest possible cost. In addition, we have been concerned with the growing problem of non-access to meters for routine meter reading. Our statistics would indicate that this primarily could be attributed to two-income households. City Gas wishes to not only respond to this concern but provide more options to our customers and a higher quality of service through a *BI-Monthly Meter Reading Program*.

We have investigated the concept of a *BI-Monthly Meter Reading Program* in those customer classifications where it can be most effective; primarily all residential customers. We believe our system of estimating has a high level of accuracy and can be utilized to effectively present a reasonable representation of customer consumption during the off reading months. Accordingly, a *BI-Monthly Meter Reading Program* would enable us to provide a consistent level of accuracy of consumption on bills and to refocus on the quality of service provided by our meter readers. This can be obtained through more flexible meter reading schedules (different shifts), advanced and improved training as well as the introduction of a quality assurance program. All of these things are possible through the *BI-Monthly Meter Reading Program*.

We have thoroughly evaluated all of our customer classifications and the opportunities associated with a *BI-Monthly Meter Reading Program* and have adopted the following basic principles.

- All residential customers will benefit from this program.
- It is imperative that we maintain monthly reading cycles for our industrial and large commercial customers (approximately 3400 in South Florida and 1400 in Brevard County).
- There are twenty cycles in South Florida and the same in Brevard. One cycle will be read per day. The following routes will be read on even month's of the year: FEB, APRIL, JUNE etc.

MIAMI: 10, 30, 50, 70, 90, 110, 130

BREVARD: 11, 31, 51, 71, 91, 111,

The remaining routes will be read on odd month's of the year: JAN, MARCH, MAY etc.

MIAMI: 20, 40, 60, 80, 100, 120, 255

BREVARD: 21, 41, 61, 81, 101,

- Customers who prefer not to have an estimated bill may return a completed meter reading card to the office for billing implementation. This feature will be further enhanced by the purchase of an IVR (Impulse Voice Response) unit. This investment will enable customers to read their own meter and report the reading to our office via the telephone keypad.
- Time available due to the reduction of "reads" will be devoted to team meetings, training and quality assurance.
- The program will "open up" the meter reading schedule allowing us to offer extended hours and Saturday readings for customers who are consistently not home during normal working hours.
- All customers that have not had a true reading for more than a six month period will be "flagged" so that we can schedule an appointment with them.

**FACT SHEET
CITY GAS COMPANY
BI-MONTHLY METER READING PROGRAM**

City Gas Company will soon begin reading customers' meters every other month. Beginning in October, some customers will have their meters read while other will not. Those who do not have their meters read in October will have them read in November.

WHY BI-MONTHLY?

City Gas will read meters Bi-monthly to reduce operating costs and most importantly keep customers bills as low as possible. The program also will allow us to enhance the quality of service provided due to more time for training, quality assurance and team meetings. All of these things will mean better service to the customer!

HOW WILL CUSTOMERS BE AFFECTED?

Customers will still receive a bill each month; one month based on an actual reading and the next month based on an estimate. As always, estimated bills will be calculated using past usage patterns and considering seasonal conditions. Any "under" or "over" billing will be automatically corrected with the next actual read.

WHEN WILL THE NEXT ACTUAL READ TAKE PLACE

City Gas's meter readers will continue to be predictable and reliable, visiting customers to read their meters on scheduled days shown on their bills. The date of the meter reader's next visit will appear on both actual and estimated bills.

CAN CUSTOMERS STILL READ THEIR OWN METERS?

Customers can still read their own meters. To read a meter, customers should simply read the meter dials from the left, reading the lesser number if the arrow is between numbers. (Digital meters should be read like a car odometer.) Beginning in 1998, customers will be able to report their meter reading over the telephone by utilizing the keypad. It will not even be necessary to talk to a customer service representative!

THE METER READING CYCLE

1. City Gas sends meter readers out every business day to read meters at customers' homes. There are fixed *read routes* designed to get the most reads in one day. Every *read route* is part of a *read cycle*: usage is read or estimated approximately every thirty days. Within a read route, meters are read in a set *read sequence* arranged for the convenience and productivity of the reader, who is walking the route.

2. Meter reads are entered into CSS (computer billing system) through nightly batch processing. CSS plugs the read into the billing programs, which calculate the bill. The system then prints the bill.

3. The bill is issued a day or two after the meter is read; the *billing cycle* is not the same as the *read cycle*. A *billing period* usually contains about 20 read and billing cycles, representing the weekdays in the month, which repeat itself every billing period. All read cycles must be worked for one period before the next period begins.

- Specific details on how meters are estimated are available on file "estimate".

BENEFITS OF BI-MONTHLY PROGRAM

- More time available for advanced training to include:
 1. Leak Detection
 2. Corrosion
 3. Detection of tampering with meters
 4. Identifying meters not properly marked with company logo
 5. Customer Service

- Increased coaching and counseling for quality improvement

- Introduction of a formalized quality assurance program

- Extended and varied meter reading hours to better meet customers' needs

- Introduction of formal weekly meetings

- More time available for re-reads

- No reduction in productivity due to vacations and absenteeism

BI-MONTHLY METER READING SCHEDULE October

Miami Division

Brevard Division

Day	Cycle	Routes	Added Value Day	Routes	Added Value Day
1	31	10, 30, 50, 70, 90, 110.	X	11, 31, 51, 71, 91, 111	
2	32	10, 30, 50, 70, 90, 110.	X	11, 31, 51, 71	
3	33	10, 30, 50, 70, 90, 110, 130		11, 31, 51	
4					
5					
6	34	10, 30, 50, 70, 90, 110, 130		11, 31, 51	
7	35	10, 30, 50, 70, 90, 110	X	11, 31, 51	
8	36	10, 30, 50, 70, 90, 110, 130		11, 31, 51	
9	37	10, 30, 50, 70, 90, 110, 130	X	11, 31, 51	
10	38	10, 30, 50, 70, 90, 110, 130	X	11, 31, 51	
11					
12					
13	39	10, 30, 50, 70, 90, 110, 130	X	11, 31, 51	
14	40	10, 30, 50, 70, 90, 110, 130		11, 31, 51	
15	41	10, 30, 50, 70, 90, 110, 130	X	11, 31, 51	
16	42	10, 30, 50, 70, 90, 110, 130	X	11, 31, 51	
17	43	10, 30, 50, 70, 90, 110, 130		11, 31, 51	X
18					
19					
20	44	10, 30, 50, 70, 90, 110, 130		11, 31, 51	
21	45	10, 30, 50, 70, 90, 110, 130	X	11, 31, 51	
22	46	10, 30, 50, 70, 90, 110, 130		11, 24, 41, 61	
23	47	10, 30, 50, 70, 90, 110, 130	X	11, 31, 51	
24	48	10, 30, 50, 70, 90, 110, 130	X	11, 31, 51	X
25					
26					
27	49	10, 30, 50, 70, 90, 110, 130	X	11, 31, 51	
28	50	10, 30, 50, 70, 90, 110, 130	X	11, 31, 51	
29					
30					
31					

*Added Value: Days where workload will allow time for training, quality assurance and/or team meetings. All of these things will enhance the quality of service provided.

BI-MONTHLY METER READING SCHEDULE *November*

Miami Division

Brevard Division

Day	Cycle	Routes	Added Value Day	Routes	Added Value Day
1	31	20, 40, 60, 80, 100, 255	X	21, 41, 61, 81, 101	
2	32	20, 40, 60, 80, 100, 255		21, 41, 61	X
3	33	20, 40, 60, 80, 100, 120	X	21, 41, 61	
4					
5					
6	34	20, 40, 60, 80, 100, 120	X	21, 41, 61	
7	35	20, 40, 60, 80, 100, 120	X	21, 41, 61	
8	36	20, 40, 60, 80, 100, 120		21, 41, 61	
9	37	20, 40, 60, 80, 100, 120	X	21, 41, 61	
10	38	20, 40, 60, 80, 100, 120	X	21, 41, 61	
11					
12					
13	39	20, 40, 60, 80, 100, 120	X	21, 41, 61	
14	40	20, 40, 60, 80, 100, 120	X	21, 41, 61	
15	41	20, 40, 60, 80, 100, 120	X	21, 41, 61	
16	42	20, 40, 60, 80, 100, 120	X	21, 41, 61	
17	43	20, 40, 60, 80, 100, 120	X	21, 41, 61	X
18					
19					
20	44	20, 40, 60, 80, 100, 120		21, 41, 61	
21	45	20, 40, 60, 80, 100, 120	X	21, 41, 61	
22	46	20, 40, 60, 80, 100, 120	X	21, 41, 61	
23	47	20, 40, 60, 80, 100, 120	X	21, 41, 61	X
24	48	20, 40, 60, 80, 100, 120	X	21, 41, 61	X
25					
26					
27	49	20, 40, 60, 80, 100, 120	X	21, 41, 61	
28	50	20, 40, 60, 80, 100, 120	X	21, 41, 61	
29					
30					
31					

*Added Value: Days where workload will allow time for training, quality assurance and/or team meetings. All of these things will enhance the quality of service provided.

TIME LINE FOR IMPLEMENTATION OF PROGRAM

May 1 st – May 16 th	Analyze Customer Data and Trends
May 16 th – May 30 th	Determine Tariff Changes, Procedural Changes to Policies and Procedures
June 1 st – June 30 th	Determine Rerouting
July 1 st – July 30 th	Develop Monitoring & Quality Assurance Programs
August 1 st – August 29 th	Analyze Training Needs of Meter Readers
August 11 th – September 5 th	Develop Computer Program Changes
August 15 th – September 15 th	Develop PR Campaign
September 1 st – 15 th	Develop CSR Training Program
September 2 nd	Introduce New Program to Meter Readers
September 2 nd – September 26 th	Deliver Training to CSR
October 1 st	Begin Program

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Program Function: To develop seasonal estimating factors by analysis of previous consumption history for the purpose of creating default factors based on rate plan, read cycle and read route for residential accounts or creating seasonal estimating factors for accounts in appropriate rate plans.

Program Inputs:

- PMR - Customer Account Premise Master File
- ICP - Customer Account Installation Control File
- IPE - Customer Account Installation Element File
- DDF - Degree Day File
- BHH - Bill History Header File
- BTR - Bill History Transaction Record File
- BTI - Bill History Transaction Input File
- ENT - Table Entry File
- EDF - Estimate Default File (Estimate run)
- FCSJC01 - CSS Parameter file

Program Outputs: EDF - Estimate Default File (Default run)
Report PCSER100

Program Overview: The program has two functions:

A. To develop estimating default consumption factors for residential customers based on rate plan, read cycle and read route; these defaults will be utilized by accounts with insufficient valid history during the estimating calculation run; they are maintained in the EDF.

B. To calculate estimating factors for both base usage and winter usage for all residential customer meters utilizing available valid usage or defaults previously calculated and to update the appropriate IPE record with these factors; to calculate estimate factors for defined usage periods for other commercial customer meters within estimable rate plans and update the IPE with these factors.

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DEFAULT CALCULATION RUN

The program has four main processes: 1. accumulation of valid readings, 2. analysis of the readings, 3. calculation of the factors and 4. update of the IPE with these factors or the update of the EDF with factor components depending on the calculation run type.

The purpose of the Default Calculation run is to build the EDF. The EDF will contain valid factor components which can be used for accounts with insufficient history in the Estimating Calculation run. The components in the EDF are accumulated within rate plan, meter read cycle within rate plan and meter read route within meter read cycle within rate plan. Each valid factor calculation will result in the maintenance of three EDF records. With this design, defaults will be available for all residential meters at one of these levels.

The program will read all PMR records in account number sequence. All ICP records related to the PMR record are then read. If the rate plan for the particular ICP is a non-estimable plan (see Appendix A) or a commercial plan (see Appendix B), further processing will be bypassed. All residential plans will continue processing by reading the billing history database (BHH, BTR, BTI) accepting all meter readings with valid meter codes for estimating (see Appendix C) which have a positive effect on that PMR's billing history.

Meter readings will be accumulated by meter within rate plan for two different factor periods beginning with most recent history backwards until all history has been exhausted. The first factor period is to calculate base usage and extends from April 15 to October 14. The second factor period is for winter usage and extends from October 15 to April 14. Meter readings for over 179 days are rejected as they would distort the factors. Changes in the rate plan will terminate accumulation for that particular meter. When all history has been read, each factor period will be analyzed for each meter within each rate plan. The base load period is analyzed first. The intent is to capture 2 or more valid readings within the factor period for analysis. The first valid (and most recent) reading is saved as the start point. If the meter read code is an "A" code (see Appendix C) the reading is saved a second time. Each subsequent read is then checked. If the reading is within the same yearly season and for the same meter, it is accepted as the end point. Again if the reading is an "A" code the reading will be saved again. This continues until the yearly season changes or a different meter is recognized. If at that time there are both a valid start and valid end reading, analysis ceases for that meter. If an end reading has not been found, all analysis begins anew for the new yearly season. If the new yearly season does not produce valid start and end readings processing ceases for that meter.

The start and end readings are the basis for the factor calculation. The program then calculates the number of days between the start and end dates of the readings and the

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consumption used during that period. The base usage factor is determined by dividing the consumption by the number of days.

For residential non-heating customers the winter usage is analyzed and calculated exactly as the base usage using the readings for the winter usage period. For residential heating customer meters the analysis for winter usage is the same for the base usage period as for residential non-heating customers' meters. However, the calculation differs substantially. The usage between the two valid readings in the period is determined by the difference of the two readings. By utilizing the DDF the number of heating degree days is determined for the period of analysis, as is the number of days in that period. The number of days in the period is then multiplied by the previously calculated base usage factor to determine the load unrelated to the heating season. This is then subtracted from the total usage for the period. This resultant usage field is divided by the number of heating degree days for the period to determine the winter usage per degree day.

The components of the estimating factors for both periods are then used to update the EDF. The EDF is used to maintain valid customer consumption for the estimating periods for accounts within rate plan, read cycle within rate plan and read route within read cycle and rate plan. These will be used for accounts during the estimating run if sufficient history is not available for one or both of the estimating periods.

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ESTIMATING CALCULATION RUN

The purpose of the Estimating Calculation run is to update the appropriate IPE records with calculated estimating factors for defined consumption periods. Residential meters will default to factors from the EDF if the sufficient history is not available.

As in the Default Calculation run, the program will read all PMR records in account number sequence. All ICP records related to the PMR record are then read. If the rate plan for the particular ICP is a non-estimable plan (see Appendix A) further processing will be bypassed. All estimable rate plans will continue processing by reading the billing history database (BHH, BTR, BTI) accepting all meter readings with valid meter codes for estimating (see Appendix C) which have a positive effect on that PMR's billing history.

Each customer class within the Estimate Calculation differs in one or more of the main processes of the program. Each class is best discussed separately.

Residential Non-heating

As in the Default Calculation run meter readings will be accumulated by meter within rate plan for the two different factor periods. Analysis of each period and the factor calculation are the same as in the Default Calculation run. However, if there is insufficient history to calculate a factor, the program will access the EDF. EDF entries are only valid as defaults if they contain the valid calculated factors of 12 or more meters. It will first attempt to find an entry for the meter's rate plan, read cycle and read route. If this is unsuccessful or the entry is invalid, the EDF will be accessed by rate plan and read cycle. If this is still unsuccessful or the entry is invalid, the EDF will be accessed by the rate plan alone. The valid calculated factors or the default factors from the EDF will then update the IPE record for that meter.

Residential Heating

The accumulation of readings, analysis and factor calculation for residential heating customers are the same as in the Default Calculation run with the exception of the use of the EDF if sufficient history is not available. The base usage factor, whether derived from actual readings or defaults from the EDF, will be used to determine the load unrelated to the heating season for the winter usage factor calculation. As with the residential non-heating in the Estimate Calculation run, it is possible for both factors to be derived from the EDF. The valid calculated factors or the default factors from the EDF will then update the IPE record for that meter.

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APPENDIX A

Non-estimable Rate Plans

180
190
191
250
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APPENDIX B

<u>Rate Plan</u>	<u>Customer Type</u>
010	Residential Non-heat
020	Residential Heat
021	
022	
030	
031	
070	
710	
230	Commercial Non-heat
231	
370	
371	
150	Commercial Heat
151	
152	
160	
161	
170	
410	
411	
510	
511	
512	
513	
720	
730	

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APPENDIX C

VALID METER READ CODES FOR ESTIMATING

<u>Meter Read Code</u>	<u>Translation</u>	<u>Type</u>	
A	Read at meter installation	A	
B	Read at meter exchange		A
C	Manually set reading	A	
H	Customer read Badger		B
I	Meter reader read Badger	A	
J	Normal reading		A
K	Verified reading		A
M	Metscan		A
O	Catmark customer reading	B	
S	Customer card reading		B
T	Customer called reading		B