LAW OFFICES
MESSER, CAPARELLO, MADSEN, GOLDMAN & METZ
A PROFESSIONAL ASSOCIATION

215 SOUTH MONROE STREET, SUITE 701
POST OFFICE BOX 1876
TALLAHASSEE, FLORIDA 32302-1876
TELEPHONE (904) 222-0720
TELECOPIERS (904) 224-4359, (904) 425-1942

July 16, 1996

960931-GU

BY HAND DELIVERY

Ms. Blanca Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
Room 110, Easley Building
2540 Shumard Oak Blvd.
Tallahassee, Florida 32399-0850

Dear Ms. Bayo:

Enclosed for filing are an original and fifteen copies of West Florida Natural Gas Company's Petition for Approval of Tariff Additions. Also enclosed are two complete sets of supporting schedules and data.

Please indicate receipt of this document by stamping the enclosed extra copy of this letter.

Your attention to this filing is appreciated.

DN 07437-96
Hmm
07442-96

Sincerely,

Norman H. Horton, Jr.

NHH/amb
Enclosures
cc: Mr. David Ging, Div. of Electric and Gas
Mr. Bill McNulty, Div. of Audit. and Financial Analysis
Beth Culpepper, Esq., Div. of Legal Services
Mr. J. E. McIntyre
Mr. Jeff Householder

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition of West Florida Natural Gas for Approval of a Weather Normalization Adjustment Tariff	Docket No. 960831-GU Filed: July 16, 1996

PETITION FOR APPROVAL OF TARIFF ADDITIONS

Comes West Florida Natural Gas Company ("WFNG") pursuant to Sections 366.06 and 366.075, Florida Statutes, and submits this Petition for approval of changes to the tariff of WFNG to add a weather normalization adjustment ("WNA") rider to the current tariff. As basis for this request West Florida would show:

1. The name and address of Petitioner is

   West Florida Natural Gas Company
   301 Maple Avenue
   Panama City, FL 32402

2. Copies of notices, orders and other documents issued in this docket should be provided to

   Norman H. Horton, Jr.,
   Messer, Caparello, Madsen,
   Goldman & Metz, P. A.
   Suite 701, 215 S. Monroe St.
   Post Office Box 1876
   Tallahassee, FL 32302-1876

   Mr. Jeff Householder
   West Florida Natural Gas Company
   Caller Box 1460
   Panama City, FL 32402

ACK ✓
AFA
APP
CAF
CMU
CTR
EAG 5+ Notebooks
LEG 1
LIN 5
OPC 1
RCH
SEC 1
WAS
OTH

3. West Florida is a natural gas utility providing service to customers in Bay, Marion and Wakulla Counties, pursuant to tariffs on file with the Commission. Service is provided primarily

to residential customers with some commercial customers receiving service as well. These customers use gas for several purposes, but a large percentage of the gas consumed is for the purpose of heating either the home or a business.

4. With this petition, WFNG is requesting the Commission to approve, on an experimental basis as provided by Section 366.075 Florida Statutes, an addition to the current tariff to implement a Weather Normalization Adjustment ("WNA") rider to the tariff. This WNA rider which is Appendix A hereto, would incorporate a formula in the tariff which, when applied to customers' bills, would adjust the bill for variances in consumption caused by weather fluctuations. The WNA, when activated, would result in adjustments in customer bills for those periods when consumption is substantially affected due to extreme variations from normal weather conditions.

5. Appendix B hereto provides an overview of various weather normalization approaches and specific details about the WFNG proposal including the development and application of the adjustment. Appendix C incorporates schedules taken from the detailed information which accompanies this filing and shows the effect of the application of the adjustment on historic and

projected periods and an example of a customer bill with the adjustment shown.

6. In addition to the information which is attached to this petition, WFNG has also submitted two (2) sets of weather and temperature data and other information supporting the development of the assumptions and calculations. Given the volume and character of this data, WFNG requests that the company not be required to submit additional copies and thereby avoid some expense. An index of the attachments and tables in this supporting data is included as part of Appendix B. Also Appendix C incorporates attachments Q through T which reflect results of the application of the adjustment on historic and projected periods.

7. Since this is a new offering, WFNG would propose that the Commission approve the tariff on an experimental basis for a period of 3 years as permitted by Section 366.075, Florida Statutes. This will permit the company and Staff an appropriate period to review the reports to be filed as described in the attachment and evaluate the effectiveness and benefits of the adjustment.

WHEREFORE, for the reasons set forth, West Florida Natural Gas respectfully requests that the Commission not withhold consent to the attached Weather Normalization Adjustment tariff sheets but to approve the tariff to be effective 60 days from the date of this petition.

Respectfully submitted this 16th day of July, 1996.

MESSER, CAPARELLO, MADSEN,
GOLDMAN & METZ, P. A.
Suite 701, First Florida Bank
Building
Post Office Box 1876
Tallahassee, FL 32302-1876
(904) 222-0720

NORMAN H. HORTON, JR., ESQ.
FLOYD R. SELF, ESQ.

Attorneys for West Florida Natural
Gas Company

APPENDIX A

RIDER WNA

WEATHER NORMALIZATION ADJUSTMENT

Availability

Throughout the service area of the Company.

Applicability

The rates for gas sales service provided to all customers served under Rate Schedules RS and CS shall be subject to a weather normalization adjustment. The weather normalization adjustment will reflect the impact of degree day variations from normal levels, as determined on a revenue month basis, for the months of November through April, inclusive. The adjustment will be applied to a Customer's total gas consumption billed during the above defined period, on a cents per therm basis. The adjustment will not be applied to a Customer's bill in a revenue month where the cumulative actual degree day total falls within the Degree Day Dead Band.

Definition of Terms Used in This Rider

1. Commission - the Florida Public Service Commission.

2. Relevant Rate Order - the final order of the Commission in the most recent base rate case of the Company in which the weather related factors applicable to this Rider are utilized to determine normalized test year revenues, or the most recent final order of the Commission specifically prescribing the factors and procedures to be used in the application of this Rider.

3. Heating Degree Days (HDD) - the difference between 65 F and the average outdoor dry bulb temperature for a given day. A day is defined as a twenty-four hour period corresponding to the data recording period at the National Oceanic and Atmospheric Administration (NOAA) weather observation stations located at the Bay County Water Treatment Plant (Station ID # 08-6842-1) and the Ocala Water Treatment Plant (Station ID # 08-6414-3) respectively.

Rider WNA
Weather Normalization Adjustment
Continued from Sheet No. 7.529

4. Actual Heating Degree Days (AHDD) - the actual difference between 65 F and the average outdoor dry bulb temperature for a particular day or accumulation of days over a given period, based on data obtained from the National Oceanic and Atmospheric Administration (NOAA) weather observation stations identified in the HDD methodology defined above. AHDD are always zero when the average temperature for a particular day is greater than 65 F.

5. Normal Heating Degree Days (NHDD) - for any given calendar day the average of degree days for that calendar day over the rolling thirty fiscal year period ending in June of a given year, as determined from the records of the Climate Interactive Rapid Retrieval Users System (CIRRUS) based on data obtained from the National Oceanic and Atmospheric Administration (NOAA) weather observation stations identified in the HDD methodology defined above. Subsequent to the effective date of this Rider, NHDD shall be adjusted on an annual basis to correspond to the annual update of CIRRUS normal heating degree day data.

6. Heat Sensitivity Factor (HSF) - an estimate of the increase or decrease in a Customer's therm consumption for weather sensitive end-uses, occurring as the result of a one degree day change in heating degree days. A separate HSF shall be established for each applicable rate classification. Subsequent to the effective date of this Rider, the HSF shall be amended from time to time as approved by the Commission in a Relevant Rate Order.

7. Baseload Factor (BLF) - an estimate of the number of therms per Customer consumed for end-uses not substantially affected by weather conditions. A separate BLF shall be established for each applicable rate classification . Subsequent to the effective date of this Rider, the BLF shall be amended from time to time as approved by the Commission in a Relevant Rate Order.

8. Degree Day Dead Band - a range equal to two per-cent (2%) above or below the cumulative Normal Heating Degree Day total for a revenue month period.

Rider WNA
Weather Normalization Adjustment
Continued from Sheet No. 7.529

Computation of the Weather Normalization Adjustment

The Weather Normalization Adjustment shall be computed to the nearest one-hundredth of a cent per therm by the following formula:

$$WNA\,i = Ri \frac{(HSFi\ (NHDD - AHDD))}{(BLFi + (HSFi \times AHDD)}$$

Where:

i = the particular Rate Schedule to which the Weather Normalization Adjustment is applied.

WNA*i* = Weather Normalization Adjustment factor for the *i* Rate Schedule expressed in cents per therm.

R*i* = base rate less the cost of gas (Energy Charge) for the *i* Rate Schedule approved by the Commission in the Company's most recent base rate case.

NHDD = normal billing cycle heating degree days.

AHDD = actual billing cycle heating degree days.

HSF*i* = heat sensitivity factor for the *i* Rate Schedule. HSF's for the applicable Rate Schedules shall be as identified below unless amended by the Commission in a Relevant Rate Order.

WFNG Division	Rate Schedule	HSF
Panama City	RS	0.1099
Panama City	CS	0.4872
Ocala	FS	0.2346

Ocala	CS	0.7884

Rider WNA
Weather Normalization Adjustment
Continued from Sheet No. 7.530

BLF*i* = base load factor for the *i* Rate Schedule. BLF's for the applicable Rate Schedules shall be as identified below unless amended by the Commission in a Relevant Rate Order.

WFNG Division	Rate Schedule	BLF
Panama City	RS	14.05
Panama City	CS	299.17
Ocala	RS	16.58
Ocala	CS	413.91

APPENDIX B

West Florida Natural Gas Company
Weather Normalization Rider
Appendix

Overview

Weather normalization is a rate adjustment mechanism that offsets the impact of unusually cold or warm weather on a natural gas company's revenues and income. To compensate for deviations from normal weather, an adjustment factor is applied that increases or decreases base revenues on heat sensitive accounts. Customers of utilities with weather normalized rates have their bills adjusted downwards in unusually cold months and adjusted upwards during periods of unusually warm weather. A weather normalization clause protects the utility against revenue and earnings instability, and also ensures that gas consumers equitably contribute to the utility's cost of providing service.

Public utility regulators have historically established gas rates based on a determination of the cost incurred by a local distribution company (LDC) to provide service to its customers. The cost of service includes allowable expenses and a reasonable return on the investment in plant and equipment dedicated to serving customers on the utility's distribution system. The amount of revenue required to cover the utility's cost of service and provide a fair rate of return to its shareholders is determined during the ratemaking process. The revenue requirement is allocated among customer classes, and gas rates are established, in large part, based on the forecasted sales or transportation volumes for each customer class.

The ratemaking process is costly and time consuming. Significant time lags can occur between changes in the cost of service and changes in the rates charged by a LDC to appropriately reflect those costs. Regulators have recognized that certain major operating costs and conditions fluctuate beyond the control of the LDC, and should be adjusted without the need for a formal rate proceeding. Over the years, regulatory commissions have adopted mechanisms to allow for both increases and decreases in rates when costs or sales vary from a pre-determined level. Typically, these adjustments have provided for fluctuations in gas commodity costs, pipeline transportation and fuel charges, Btu content, taxes and similar uncontrollable costs. Adjusting rates to reflect the effects of weather on forecasted revenue is no different procedurally or effectively from adjusting rates to reflect changes in the costs listed above.

The rates charged by a natural gas utility are dependent upon assumptions of gas throughput. Forecasting future sales can be difficult because significant portions of most system supply gas is sold to residential and small commercial

customers for space heating purposes. These uses are highly weather sensitive. Utility forecasters typically base their sales assumptions on average or "normal" weather conditions. Normal weather is generally identified by determining historical temperature averages over a lengthy period of time, usually thirty years. The temperature averages are used to calculate Heating Degree Days (HDD), a statistic useful in predicting space heating requirements in buildings. Normal Heating Degree Days (NHDD) form the basis of most utility sales forecasts. Fluctuations in weather (NHDD) may cause the actual sales of a utility to vary dramatically from the forecasted volumes. When actual consumption deviates significantly from the forecast used to establish base rates, the LDC under or over recovers the revenue requirement needed to cover its cost of service. At the same time, the weather sensitive gas customer either under or over pays their share of the revenue requirement.

A weather normalization clause uses adjustment procedures, approved by the regulatory commission, to increase or decrease base rates to compensate for sales deviations caused by abnormal weather conditions. The relationship between gas sales and weather can be mathematically determined. Adjustment factors are calculated that estimate the increase or decrease in a customer's gas consumption occurring as the result of a specific change in outdoor temperature. Gas consumed for uses not substantially affected by weather, a customer's base load, is excluded from the adjustment. In times of normal weather the utility achieves its forecasted sales volumes and collects its appropriate revenue requirement. During periods when the weather is colder or warmer than normal, the adjustment factor is activated. The LDC credits or debits individual customer bills based on the deviation in weather from normal levels.

There are two basic types of weather normalization clauses. In a Type 1 clause no change occurs to the base rates in the company's filed tariff. The normalization mechanism applies a sales adjustment directly to the individual customer's monthly bill, either immediately or delayed by a month's billing cycle. The calculation may normalize the sales volumes or normalize the rate, however the result is the same: an as-billed debit or credit adjustment. A Type 2 clause aggregates total revenue deviations due to weather in a special deferred revenue account. A true-up filing is typically required by the regulatory agency in which the deferred account is reconciled and the utility projects future sales volumes. The deferred revenues are divided by the expected sales in a future period and a change is made to the base rate. Sales in the next forecast period are made at the new rate.

The majority of weather normalization filings in the United States have recommended the Type 1 clause. During the 1994-95 heating season, thirty-three weather normalization clauses were in effect. Twenty-three used a Type 1 clause and ten used a Type 2 clause. The Type 1 clause has the advantage of an immediate bill reduction for customers during periods of cold weather. Rates

that are normalized with a Type 1 adjustment more closely match the cost of service to each customer receiving service in a given billing period. Additionally, the administrative cost of implementation is significantly reduced with an immediate as-billed adjustment. The Type 2 clause, although administratively burdensome, does include the advantage of stretching the customer's bill payment period due to the amortization of the weather related revenues over a future period. The utility potentially benefits from increased rate stability also due to the longer amortization period.

Brooklyn Union Gas Company introduced the first weather normalization clause in 1980. Since then over thirty gas utilities in fourteen states have implemented weather normalization procedures. These states are: Alabama, California, Connecticut, Georgia, Kentucky, Maryland, New Jersey, New York, North Carolina, Ohio, South Carolina, Tennessee, Texas and Virginia. Interest in weather normalization appears to be growing. A recent survey conducted by the American Gas Association indicated that forty-four companies, operating in fifty-two jurisdictions across twenty-six states and Canada have either filed for or put weather normalization clauses into effect. The above listing of states indicates particular interest in weather normalization among southern gas utilities. Although operating in relatively temperate climates, southern utilities frequently find winter load forecasting problematic. As an illustration, over the past thirty years actual annual heating degree days in the north Florida climate region have ranged from a high of 2311 to a low of 1047. Forecasting gas sales at the thirty year normal weather heating degree day level of 1543 leaves a significant opportunity for forecast error, and thus for under or over recovering the company's revenue requirement.

Traditional gas utility ratemaking, using sales forecasts based on normal weather, results in customers paying "too much" during cold winters and "not enough" in warm winters. Without weather normalization customers pay skewed rates that disadvantage them at a time they may be least able to afford it, during times of very cold weather that necessitate increased gas usage. With weather normalizaton, customers pay for the service they receive at rates that reflect the utility's approved cost of service. From the utility's perspective weather normalization is a simple ratemaking tool that allows recovery of the cost of service during the period that service is rendered. And, from the regulatory agency's perspective weather normalization offers an equitable and reliable ratemaking tool to utilize in exercising its oversight responsibilities.

West Florida Natural Gas Weather Normalization Tariff Rider

The following discussion provides an overview of the weather normalization tariff rider proposed by West Florida Natural Gas. In this appendix and the attached exhibits, the Company intends to explain and document the technical process used in developing the rider. Additionally, the appendix will describe certain procedures (obtaining reliable daily weather data, for example) that the company proposes to use on an on-going basis to administer the rider. Organizationally, the major topics addressed in this appendix are as follows:

- WFNG Distribution System Weather Sensitivity
- Weather Normalization Methodology and Billing Procedure
- Weather Normalization Adjustment Calculation Factors
- Test of Customer Information System Billing Procedure
- Projected Company/Ratepayer Impacts
- Implementation/Administrative Issues

I. WFNG Distribution System Weather Sensitivity

The initial step in the development of the WFNG Weather Normalization Tariff was a general assessment of the effects of weather on the company's load profiles. Of particular interest was the identification and comparison of weather sensitivity differences experienced in the company's two operating divisions. The Ocala and Panama City divisions are approximately 200 miles apart , and located in different state climatic regions. In addition, the company recognized that an analysis of weather sensitivity by rate class would be necessary to account for variations in customer usage characteristics.

Historical system gas supply purchase data for both operating divisions was compiled as recorded by Florida Gas Transmission Company's (FGT) gate station metering equipment. This data became readily available in July, 1990, with the implementation of FERC Order 436 requiring open access on interstate pipelines. Table 1 provides the FGT metered delivery point throughput data for each day during the past five years for Panama City and Ocala. Table 2 summarizes the same data by month and fiscal year.

Historical weather data was initially obtained from the National Oceanic and Atmospheric Administration (NOAA), National Weather Service. Later in the tariff development process the company determined, in conjunction with PSC staff, that it would use weather data from the Climate Interactive Rapid Retrieval Users Service (CIRRUS). To avoid unnecessary confusion, the Heating Degree Day data displayed in Table 3 for Panama City and Table 4 for Ocala is the

updated CIRRUS data. Weather data will be discussed in detail later in this appendix.

The gas supply purchase data was compared to the heating degree data on a monthly and fiscal year basis. Table 2 which displays the monthly gas throughput by Division since July, 1990, also includes the respective heating degree days for the same period. A comparison of both factors identified a clear pattern of therm consumption swings consistent with variations in heating degree days. The data indicated that further analysis appeared to be warranted. As was obvious from the start, an analysis by rate class would be required. Since gas purchase data was not available by rate class, sales data would need to be compiled to conduct further detailed evaluations.

Subsequent to the initial system-wide determination of weather sensitivity, a review of individual rate class sensitivity was conducted. As a first step, transportation and system purchase volumes were separately identified. Since 1990, WFNG customers have been migrating to transportation service. To date, the migration to transportation has primarily occurred among the company's industrial customers. While transportation service represents a large portion of total throughput (48% in FY 1994/95) generally, this customer class is not significantly weather sensitive. However, as unbundling efforts continue to make transportation available to smaller volume customers we expect weather effects to have a much greater impact on the transportation classes.

The company's industrial and interruptible rate classes were also evaluated. As was the case with the company's existing transportation rate class, these rate classes were determined to be either only marginally affected by weather fluctuations, or were not homogeneous enough to allow the application of a standardized weather adjustment clause. The WFNG large commercial rate class appears to have significant heat sensitivity and may be a good candidate for weather normalization in the future. Clearly, the transportation service classes will need to be addressed again as the customer characteristics continue to change. At this time, however, the company is proposing an experimental tariff rider limited to the residential and small commercial rate classes.

The residential and small commercial rate classes were analyzed in detail. Historical consolidated sales statistics were compiled for both rate classes. Table 5 identifies residential sales by month for each fiscal year since 1982. Table 6 provides the same data for the small commercial rate class. It should be noted that the company split the commercial rate class into two separate classes effective July 8, 1992. The large commercial rate class data is displayed separately on Table 6 for information purposes only, and was not included in the small commercial analysis. In general, the data show a significant increase in sales during the winter months for both the residential and small commercial rate

classes. Additionally, sales in both classes track the historical variations in weather.

The next level of analysis in assessing system weather sensitivity involved separating the sales statistics by operating division. Tables 7 and 8 display actual residential gas sales in Panama City and Ocala, respectively, since FY 1990. Tables 9 and 10 provide the small commercial sales data in the same format. The small commercial data begins in FY 1992, when the rate class was established. Tables 7-10 also provide a comparison of residential and small commercial sales data to the recorded monthly heating degree days. Sales in both rate classes and in both divisions vary dramatically as weather conditions change (increasing as much as 750% from non-heating to heating months in the Panama City residential class, for example). In addition, the number of active customers for each rate class by month are included.

The review of the data in Tables 7-10 also began to allow quantification of the sales impact related to annual and monthly fluctuations in weather from normal conditions. Significant swings in recorded heating degree days had already been observed in the thirty year historical weather data presented in Tables 3 and 4. In Panama City, 1228 HDD separated the highest annual total (2265) from the lowest (1037). In Ocala, 1063 HDD separated the highest annual total (1423) from the lowest (360). In addition to these extremes, it was also apparent that in both Panama City and Ocala the annual variation from the 30 year average was frequently several hundred degree days. The sales data in Tables 7-10 track the heating degree data, i.e. an increase or decrease in HDD corresponds to an increase or decrease in sales over the same period.

A more detailed analysis of the sales and HDD information contained in Tables 7-10 indicated several anomalies in the data. While sales and HDD generally tracked as described above, there were a number of inconsistencies. For example, in FY 1993/94 residential sales for Panama City in December totaled 705,928 therms with 472 HDD; in February sales jumped to 909,890 therms but only 263 HDD were recorded. A subsequent review of the data pointed to the cause of the inconsistencies. The HDD were reported on a calendar month basis, while the sales data was accumulated based on the company's revenue month. A revenue month is based on a company's billing cycles, and for most rate classes is not consistent with a calendar month time period. Significant sales volumes consumed during a given calendar month are recorded in a billing period which often falls in the next calendar month. Table 11 provides a graphic display of the cycle billing effects that define a revenue month.

Obviously, to continue the development of the tariff the company had to find a method of matching sales volumes to the HDD recorded over the same time period. Initially, several relatively crude procedures were attempted. Sales

volumes were lagged across months. The HDD were lagged in an attempt to match the billing cycles. These and other similar efforts produced significant improvements in the tracking of sales data to HDD. Ultimately, however, the company determined that to match HDD with sales both would have to be recorded on a cycle billing basis. The weather data was recompiled to allow the company to derive HDD on a daily basis. It was then possible to accumulate HDD on a billing cycle basis, consistent with sales volumes. For the purposes of this filing the company will describe HDD's matched to billing cycle periods as "Sales Degree Days" (SDD). The application of "Sales Degree Days" enabled the company to achieve an acceptable correlation of weather events to sales. Tables 7-10 display SDD which demonstrate a marked improvement in correlation to sales volumes as compared to the calendar month HDD. Later in this appendix the concept and application of "Sales Degree Days" is explained in more detail.

The final activity related to the company's initial assessment of weather sensitivity was the calculation of therm consumption per customer by rate class. Tables 5 and 6 provide historical consolidated average sales per customer for the residential and small commercial rate classes. This data was separated by division and recompiled. Originally, our intent was to use this information to evaluate seasonal base load requirements. Eventually, usage levels per customer per day for a given month were determined, and used in the analysis of customer heat sensitivity.

The analysis of WFNG distribution system weather sensitivity indicated significant sales variations that could be tied to fluctuations in weather conditions, specifically increases or decreases in Heating Degree Days. It was apparent that the Transportation, Industrial, Interruptible and Large Volume Commercial rate classes either did not exhibit substantial weather sensitivity or were beyond the scope of the company's current technical review. The residential and small commercial rate classes, however, appeared to be good candidates for the application of a weather normalization tariff. The next step in developing such a tariff was the selection of a computation methodology to quantify the effects of weather variations on an individual customers bill.

II. Weather Normalization Methodology and Billing Procedure

The Overview section of this Appendix described the two basic types of weather normalization adjustment clauses. Type 1 clauses apply the debit or credit adjustment directly to a customers monthly bill during the revenue month in which the weather variation occurred. The company's base rates do not change. Type 2 clauses on the other hand aggregate the revenue deviations due to weather in a special account. At the end of the winter an over or under recovery rate adjustment filing is approved, and the new rate is billed in a future period.

WFNG staff discussed weather adjustment tariffs and billing procedures with several gas utilities across the country. The majority of these utilities were operating Type 1 clauses. We reviewed at length the Type 1 filings of Atlanta Gas Light, Pennsylvania and Southern, Corning Gas, Piedmont Gas, United Cities and Public Service Company of North Carolina. In addition, the company researched the Type 2 programs in place at Elizabethtown Gas and New Jersey Natural Gas. Of particular interest was the weather normalization clause implemented by Piedmont Gas in their South Carolina division. Originally required to be filed as a Type 2 clause, the company and the PUC agreed to convert it to a Type 1 clause in 1995, citing ease of administration and greater customer understanding as reasons for the revision.

The relative ease of administering a Type 1 clause was obviously attractive to the company. WFNG is a small LDC with limited resources. A primary management objective for the weather normalization project was the development of an adjustment clause that required no new staff and no significant modifications to existing CIS billing software. In April, 1994, the company converted its CIS, billing and accounting software to a standardized package provided by OrCOM Systems, Inc. OrCOM is a software development and support services company headquartered in Bend, Oregon. They specialize in utility related software, and currently serve approximately 160 gas, electric and water utilities in the United States and Canada. Attachment A provides addition information on OrCOM Systems. The billing system purchased from OrCOM by WFNG included a Type 1 weather normalization adjustment billing procedure. Given the administrative burden of Type 2 clauses, and the fact that the company already owned a Type 1 billing system, it was determined that a Type 1 clause would be filed.

The OrCOM WNA billing software is currently used by several gas utilities across the country (United Cities, Corning Gas, Pennsylvania and Southern). The computation methodology and equations used in the OrCOM software are virtually identical to non-OrCOM based WNA clauses used by most companies implementing Type 1 clauses (Atlanta Gas Light, National Fuel Gas Distribution Company, Consolidated Edison, Lone Star Gas, et. al.). Attachment B provides a

general overview of the OrCOM WNA operational procedure as excerpted from the OrCOM Customer Information System User Manual.

The billing procedure we propose calculates a weather normalization adjustment factor for each customer in the rate class. Most customers in a given meter read route or billing cycle will have the same adjustment factor since their meters are read at essentially the same time of the month. However, for those customers who are off-cycle for some reason (inaccessible meter, mid-cycle open or closing accounts) OrCOM customizes the WNA factor to account for the specific days in a given customers billing cycle. At the end of the billing period each customer receives a bill that adjusts their payment amount to reflect the specific weather conditions occurring during their billing cycle. To quantify the weather conditions during a given billing cycle, OrCOM protocol requires that normal heating degree days (NHDD) and actual heating degree days (AHDD) be input into the billing system. A Type 1 adjustment clause, especially one that accounts for cycle billing, requires that AHDD be input into the billing system on a daily basis. The company's procedure for the daily update of AHDD is addressed later in this Appendix.

The WNA factor calculated by the OrCOM billing system equation is determined by computing an individual customer's increase or decrease in gas consumption based on the difference in AHDD vs. NHDD, and multiplying the adjusted consumption volume by the applicable base rate. If AHDD are above normal the WNA factor will be negative. If AHDD are below normal the WNA factor will be positive. The WNA factor is multiplied by the customer's actual therm consumption, increasing or decreasing their billing amount. The base rate used in the calculation of a customer's bill is the Commission approved rate as published in the company's tariff.

The WNA factor is not applied to conservation recovery adjustments, flex rate adjustments, purchased gas adjustments, taxes or any other billing or adjustments. The company has local control of the CIS software and billing statement process. The initial establishment and periodic update of weather data, rate files, and other inputs to the WNA equation are the responsibility of the company and are subject to inspection and audit as appropriate. The company's Information Systems and Billing Department will activate and deactivate the WNA billing procedure in the appropriate months, as defined by the tariffs applicability section.

The weather normalization adjustment factor is computed to the nearest one-hundredth of a cent per therm by the following formula:

$$WNA\,i = Ri \frac{(HSFi\ (NHDD - AHDD))}{(BLFi + (HSFi \times AHDD)}$$

Where:

i = the particular Rate Schedule to which the Weather Normalization Adjustment is applied.

WNA*i* = Weather Normalization Adjustment factor for the *i* Rate Schedule expressed in cents per therm.

R*i* = base rate less the cost of gas (Energy Charge) for the *i* Rate Schedule approved by the Commission in the Company's most recent base rate case.

NHDD = normal billing cycle heating degree days.

AHDD = actual billing cycle heating degree days.

HSF*i* = heat sensitivity factor for the *i* Rate Schedule. HSF's for the applicable Rate Schedules shall be as identified in the tariff unless amended by the Commission in a Relevant Rate Order

BLF*i* = base load factor for the *i* Rate Schedule. BLF's for the applicable Rate Schedules shall be as identified in the tariff unless amended by the Commission in a Relevant Rate Order.

III. Weather Normalization Adjustment Calculation Factors

To produce a weather normalized bill, the OrCOM billing system requires the input of four calculation factors, in addition to the standard billing inputs of location, rate class and base rate. These factors as identified in the WNA equation above are: Normal Heating Degree Days (NHDD), Actual Heating Degree Days (AHDD), Heat Sensitivity Factor (HSF), and the Base Load Factor (BLF). The bulk of the time devoted to producing this tariff has been spent developing these factors. This section of the Appendix is intended to provide a general overview of the company's development process and the rationale for the specific calculation factors included in the tariff.

Normal Heating Degree Days (NHDD)

NHDD are based on an accumulation of temperature data for a particular location over a given period of time. The daily high and low temperature recordings for the location are converted to degree days. The recorded degree days are arithmetically averaged over relatively long periods, typically thirty years, to derive normal heating degree days. Defining an appropriate NHDD level in the billing system is critical as the normals serve as the baseline for quantifying weather fluctuations, and have a significant influence on the billing adjustment amounts. The OrCOM billing system requires that the company identify NHDD for each day of each month that the WNA tariff is applicable. Tariff applicability is defined as the revenue months of November through April. Since WFNG bills on a revenue month basis consistent with defined meter read routes, it was necessary to develop NHDD for each day in the months of October through April.

The company and the Commission staff spent a great deal of time mutually researching and debating the sources of weather data. Several years ago the company had identified NOAA weather stations in both of its operating divisions. A ten year data base of HDD had been accumulated from the Bay County Water Treatment Plant (NOAA Station ID # 08-6842-1) and the Ocala Water Treatment Plant (NOAA Station # 08-6414-3). While the ten year data was judged by the company to be insufficient for the determination of long-term NHDD, it pointed to a potential source of appropriate data.

The water treatment plants reported daily temperature data to NOAA's National Weather Service. The company requested thirty years of HDD data from NOAA. We were able to obtain daily minimum and maximum temperature data for Panama City and Ocala for the period 1969-1994. Subsequently, temperature data for 1995 was obtained. Attachment C, NOAA Temperature Data for Panama City, contains the actual climatolgical observation data sheets provided to the company by NOAA. Attachment D provides the same information for Ocala. Company staff converted the temperature data to degree days. A Microsoft Excel spreadsheet was used to create a HDD data base and derive the daily normals for both divisions over a twenty-five year period. Attachments C-1, Section One and D-1, Section One provide the company's twenty- five year HDD calculations. The company's initial calculations and testing were based on these normals.

Early in the development of the tariff WFNG included the Commission staff in its deliberations over the appropriateness of the NOAA weather data. The company and staff shared two common goals. First, all the weather data (normals and actuals) should be provided by an unimpeachable, qualified third party. Second, the base data should be auditable and accessible to the Commission directly from the source. Over the course of several months a number of weather data

options were explored. Ultimately, the company agreed to use degree day data from the Climate Interactive Rapid Retrieval Users System (CIRRUS). CIRRUS is headquartered in Columbia, South Carolina at the Southeast Regional Climate Center of the South Carolina Water Resources Commission, and is a NOAA affiliated agency. The NOAA weather data collected at the local water treatment facilities forms the basis for the CIRRUS HDD data. CIRRUS subjects the data to a quality control process designed to correct recording mistakes and other errors. CIRRUS offers a subscription service and is accessible on the Internet. The company subscribed to the service.

A detailed review of the CIRRUS data indicated some irregularities that had to be resolved. The company aggregated degree days on a fiscal year not a calendar year. The CIRRUS data is truncated, which necessitated that the actual degree days used to develop HSF's and BLF's also be truncated. Additionally, a procedure to truncate AHDD input to the billing system was required. The Commission staff was interested in identifying potential differences in the base data recorded at the water treatment plants and the data reported by CIRRUS. The company provided to the Commission its spreadsheet database of NOAA daily temperature recordings from the water plants and the corresponding HDD calculations. A comparison of this data and the CIRRUS reports indicated no material differences. Also resolved were periodic gaps in the reported data. Throughout this process several conference calls were held, with Milt Brown at CIRRUS, Bill McNulty of the Commission staff and several company representatives participating.

Attempts to establish acceptable degree day normals began with an effort to obtain valid degree day actuals for a thirty year period. Attachment E provides thirty years of CIRRUS actual heating degree day data for Panama City. The CIRRUS data includes missing AHDD values for the 1965-1971 period. However, daily minimum and maximum temperature data was available from CIRRUS for earlier periods. CIRRUS utilizes the NOAA weather station temperature observations as its base data. The missing years of Panama City AHDD data were calculated by the company using the NOAA temperature data referenced in Attachment C, and four years of temperature data(1965-1968) obtained from CIRRUS. The CIRRUS temperature data is included in Section 2 of Attachment C-1. Section 3 of the same Attachment provides the degree day conversion of the CIRRUS temperature data. The AHDD's calculated by the company were truncated to match the twenty-five year CIRRUS AHDD data.

Attachment F provides thirty years of CIRRUS AHDD's for Ocala. The Ocala data was available from CIRRUS for the full thirty year period, however, there were several gaps in the data. Over the course of the thirty year period, a number of days, occasionally a full month of data, were missing. The company, working with Commission and CIRRUS staff, recalculated the missing degree days using the base temperature data available from the NOAA weather station

in Ocala. As with the Panama City data, the missing degree day values were calculated by the company using NOAA and CIRRUS temperature data for the missing periods. The NCAA temperature data is referenced in Attachment D. The CIRRUS temperature data is included in Section 2 of Attachment D-1. Section 3 provides the degree day conversions of the CIRRUS data.

Normal heating degree day data is available directly from CIRRUS. The company extracted thirty year average heating degree day data from the CIRRUS database for Panama City and Ocala. The thirty year period extends from July, 1965 through June, 1995. Attachment G provides the CIRRUS thirty year NHDD for Panama City. The CIRRUS NHDD data for the Ocala division was incomplete. The reported totals were significantly lower than expected. The company, working with CIRRUS and Commission staff, conducted a detailed review of the Ocala normals. It was determined that the missing data identified in the effort to obtain actual degree days was affecting the Ocala normals. It was agreed by all parties that the company would replace the missing data with the AHDD recalculated from the NOAA base temperature data, as described in the previous paragraph. Attachment H provides the corrected thirty year NHDD for Ocala. Attachment I provides the spreadsheet that derived the missing data recalculations for Ocala. The thirty year normals were determined to be 1543 HDD for Panama City and 858 HDD for Ocala.

The OrCOM weather normalization billing system requires that NHDD be input for each day of the normalization period (revenue months of November through April). Table 12 and Table 13 display annual NHDD by day for Panama City and Ocala, respectively. The data from these Tables will form the NHDD database in the OrCOM system. Each year the NHDD will be updated in OrCOM to reflect the rolling thirty year normals. The procedure to accomplish this update is discussed later in the appendix.

Actual Heating Degree Days (AHDD)

AHDD measure the actual difference between 65 F and the average recorded temperature for a given twenty-four hour period. The identification of AHDD was important to the development of the tariff in three ways. First, the thirty year accumulation of AHDD form the basis for establishing the normal heating degree days discussed in the preceeding section. The methodology outlined above discusses the deliberations that resulted in the use of CIRRUS AHDD weather data. Second, after determining historical AHDD it was possible to match the degree days to a billing cycle meter read schedule and produce "Sales Degree Days", necessary in analyzing heat sensitivity and base load. Third, AHDD are required as daily inputs to the OrCOM customer billing system.

The sources of the temperature data used by CIRRUS to produce AHDD are the NOAA weather observation stations located at the Bay County Water Treatment

Plant and the Ocala Water Treatment Plant. The temperature recordings from these stations will also be used to calculate the AHDD required for the daily input into the billing system. The company has formalized an arrangement with both weather stations to provide daily temperature recordings by fax transmission to the WFNG Panama City office.

The company's Gas Management Department staff (Russ Hall) will be responsible for converting the temperature data to HDD. The WFNG Information Systems and Billing Department will be responsible for entering the daily AHDD into the billing system. The HDD data will be checked for reasonableness to eliminate obvious recording errors. The company has access to several other weather data sources which can be used to cross-check the local data. If an obvious irregularity in the data is identified, the company will contact CIRRUS directly. Milt Brown at CIRRUS has agreed to assist in resolving any difficulties the company might experience in obtaining valid temperature data, or in identifying appropriate data substitutions from neighboring stations if a daily report is not available.

The company's gas management staff will maintain hard copy records of the daily temperature recordings received by fax from the Ocala and Panama City NOAA weather stations. If daily HDD are received from CIRRUS to replace missing or irregular local data, the CIRRUS information will also be retained. The temperature readings and the resultant HDD calculations will be maintained in an Excel database. All of the AHDD records, including a copy on disk of the Excel database, will be available for Commission inspection and audit.

Heat Sensitivity Factors (HSF) and Baseload Factors (BLF)

In concept, developing a weather normalization adjustment is relatively straightforward. There are three fundamental steps. One, quantify the variation in temperature from normal levels over a given period of time. Two, determine the increase or decrease in a customer's gas consumption resulting from a change in weather conditions. And three, eliminate from the adjustment the amount of gas the customer uses for non-weather sensitive purposes. The weather data discussed above allows temperature variations to be quantified, satisfying step one. The remaining steps are addressed in the WFNG methodology by determining heat sensitivity factors (HSF) and base load factors (BLF) for the applicable rate classes.

The calculation method selected to evaluate heat sensitivity also produces base loads. The company reviewed several methods of computing both HSF and BLF. Ultimately, a series of least squares regression calculations were performed that correlated therm consumption per customer to heating degree days. Separate calculations were performed for each rate class using consumption and weather

data appropriate for the respective customer class. The output coefficients of these regressions defined the HSF and BLF.

The initial regressions were produced on Excel. However, limitations in output diagnostics, statistical testing, graphics production and forecasting capabilities lead to a review of other software. The company identified a software package (Forecast Pro) that appeared appropriate for a variety of forecasting and statistical analysis activities, including the development of coefficients for their weather normalization program. WFNG purchased the Forecast Pro software from Business Forecast Systems, Inc., 68 Leonard Street, Belmont, MA, 02178.

Forecast Pro produced the regression coefficients which defined the HSF and BLF for each rate class. The company elected to use this software package for a number of reasons. The diagnostic features inherent in the software were useful in analyzing the validity of the coefficients produced by the company's models. The graphics capability clearly indicated historical data anomalies that required research and adjustment. Use of the model also allowed the company to backcast consumption levels as predicted by the regression coefficients. The results of these backcasts were compared to actual historical data as a means of measuring the reliability of the coefficients. In addition, the software is useful in predicting customer growth, supply requirements and other business forecasting applications not directly related to weather normalization.

As noted above, the company was interested in identifying heat sensitivity for the residential and small commercial rate classes in both of its operating divisions. The seasonal consumption patterns earlier identified in Tables 7-10 required quantification on a per customer basis. The heat sensitivity factor used in the OrCOM billing system would need to predict therm consumption increases or decreases for a given customer in a respective rate class, based on changes in heating degree days. For the purposes of the regression analysis, a change in consumption during the winter period could be defined as dependent on changes in an explanatory or independent variable, the weather as identified by HDD.

A dynamic regression procedure produces an equation that models the relationship of the dependent variable (in this case therm consumption) to its own past and that of the explanatory variable (in this case HDD). Historic values for both the dependent and independent variables must be provided as inputs to the model. Statistical forecasting techniques project future occurrences by fitting quantitative models to statistical patterns from the past. Historic records of the variables to be forecast are critical to the output. In general, forecast accuracy is dependent upon the degree to which the model can detect and extract statistical patterns from the historic data.

If the model is used for forecasting purposes, a forecast of the independent variable is also required. Since the company was backcasting over a defined historical period with known weather variables, no independent variable (HDD) forecast was necessary. This point is worth restating. The Forecast Pro regression calculations were used to produce the HSF and BLF coefficients. In periods of abnormal weather these coefficients are used in the company's billing system to estimate consumption levels that would have occurred under normal weather conditions. Forecast Pro was useful in reviewing the accuracy of the coefficients developed by the model in predicting consumption over an historic period where weather and actual consumption levels are known.

A separate regression model was developed for each rate class in each of the company's operating divisions. The historical data used in the regressions were imported into Forecast Pro from an Excel database. The historical data included the two terms critical to the regressions: the Actual Sales Degree Days (the independent variable) and the Use per Customer per Day (the dependent variable). The Forecast Pro regressions correlate these terms over the historical period. The output coefficients for the variable terms from the respective models form the basis for determining the resulting HSF's and BLF's.

Attachments J, K, L and M provide three items important in understanding the regression calculations performed by the company.

1. The regression analysis summary results and diagnostic statistics.
2. The Excel spreadsheets containing the company's historical data.
3. Graphs of the actual and predicted use per customer curves.

Attachment J includes each item for the Panama City residential rate class; Attachment K the Panama City small commercial rate class; Attachment L the Ocala residential rate class; and Attachment M the Ocala small commercial rate class.

A review of the Excel spreadsheets titled " Data Input For Linear Regression" provides insight into the methodology used to produce the HSF's and BLF's. The following discussion outlines the major steps in developing the data inputs for the regression calculations.

Forecast Pro requires at least two years of data to build a seasonal model. Obviously, a minimum of two samples for each month are needed to distinguish seasonality from one time irregular patterns. Three or more years are preferred. The company used five fiscal years (1991-1995) of historical data in its residential regressions, and three fiscal years (1993-1995) of data in the small commercial regressions. Data for the small commercial rate class does not exist prior to July, 1992, the date the class was created. All of the data was compiled on a fiscal year basis.

- Therm consumption data from Tables 7-10 was compared to the customer data from the same Tables to derive monthly use per customer. The consumption data in the Tables were compiled from sales statistics reports for a given revenue month.

- The consumption data records for the residential and small commercial rate classes were not available on a calendar month basis due to the effects of cycle billing. Conversely, the HDD data was reported by calendar month. A method of matching the sales and HDD data over the same period was needed. As described above, the company had compiled daily weather data for the past thirty years to develop normal HDD. The actual HDD for the past five fiscal years in both Panama City and Ocala were extracted from the database. Attachments N and O include the CIRRUS AHDD for these five fiscal years.

- The company's revenue months are defined by its billing cycle periods. A billing cycle is a collection of meter reading routes, generally grouped by geographic location. The routes within a cycle are read on a monthly schedule. There are seventeen billing cycles in the Panama City division (cycles 1-17), and thirteen billing cycles in the Ocala division (cycles 51-63). Tables 14 and 15 provide the FY 1996 meter read schedules for the respective divisions. An average number of meter read days for each month was determined based on the 1996 schedule. Since there is little variation in the read schedule from year to year, the 1996 schedule was used to represent meter read days for each of the historic years. The MRD column on the data input sheet in Attachments J - M displays a repeating pattern for each fiscal year.

- The AHDD for each day over the five year period were compiled in an Excel spreadsheet. The AHDD were then matched to the actual days in a billing cycle based on the meter reading schedule. The resultant degree days were termed "Actual Sales Degree Days" because they corresponded to the period over which the therm sales occurred. Tables 16-20 display ASDD in the Panama City division for the 1991-1995 fiscal years. Tables 21-25 display the same data for Ocala.

- The ASDD total for each month was divided by the average number of meter read days for the month to establish a daily average SDD total. These totals are labeled SDDPMRD on the data sheets. The SDDPMRD is the independent variable in the regression calculations.

- The monthly therm sales per customer was also divided by the meter read days for given months to derive a daily use per customer. These totals are labeled UPC on the data sheets. The UPC is the dependent variable in the regression calculations.

Regression models are typically built in a series of iterations. An initial model is constructed, generally with a limited number of terms. The model is diagnosed and variables are added or subtracted to improve its performance. The company produced over one hundred regression calculations in reviewing the residential rate classes, each with a different set of variables. Approximately sixty regressions were performed on the small commercial rate classes. These iterations were conducted in an attempt to improve the historic fit of the model in relation to actual data. The addition of terms to null out or smooth anomalies in the base use per customer data was effective in improving overall model statistical performance. However, the company was concerned that it was unable to appropriately explain several of the variable terms.

The historic data exhibited certain months where sales volumes increased or decreased at rates inconsistent with the degree days. Most of these events were easily explained (the annual spring break; billing delays during the July, 1994 CIS conversion). Some were not. The company recognized that some of the historical data inconsistency, especially in the Ocala division, was attributable to past (but since corrected) irregular meter read schedules. Other The company and the Commission staff separately analyzed the sensitivity of the HSF's and BLF's produced by the regression coefficients. It was determined that the change in the coefficients resulting from the statistical improvement in the models was not significant. In short, the impact on a customer's billing adjustment was minimal. Therefore, the regressions produced by the company include a minimal number of regressors and minimun efforts to clean-up the historical data.

The Forecast Pro regression outputs and diagnostic statistics are included in Attachments J - M. The adjusted R-squares for the residential rate classes are in the high ninety percent range. In contrast, the small commercial classes have an adjusted R-square in the low eighty percent range. The historical commercial data is more irregular than the residential data. In part, this can be explained by the lack of homogeneity in the commercial class compared to the residential class. The usage characteristics of commercial customers are diverse and therefore difficult to model with precision. In addition, only three years of historical data on the small commercial class was available to the company. Nonetheless, given the minimal impact on customers of small changes in the HSF's and BLF's, the coefficients are appropriate for weather adjustment purposes.

The following calculations utilize the regression outputs to produce the HSF and BLF for each rate class in both divisions.

Panama City Residential
Attachment J

- Average meter read days per cycle (MRD) = 30.6

  Constant coefficient from the regression = 0.4590
  SDDPMRD coefficient from the regression = 0.1099

- Baseload Factor = Constant x MRD (0.4590 x 30.6 = 14.05)
- Heat Sensitivity Factor = SDDPMRD coefficient (0.1099)

Panama City Small Commercial
Attachment K

- Average meter read days per cycle (MRD) = 30.6

  Constant coefficient from the regression = 9.7769
  SDDPMRD coefficient from the regression = 0.48715

- Baseload Factor = Constant x MRD (9.7769 x 30.6 = 299.17)
- Heat Sensitivity Factor = SDDPMRD coefficient (0.4872)

Ocala Residential
Attachment L

- Average meter read days per cycle (MRD) = 30.85

  Constant coefficient from the regression = 0.5373
  SDDPMRD coefficient from the regression = 0.2346

- Baseload Factor = Constant x MRD (0.5373 x 30.85 = 16.58)

Heat Sensitivity Factor = SDDPMRD coefficient (0.2346)

- Average meter read days per cycle (MRD) = 30.85

Constant coefficient from regression	= 9.314
SDDPMRD coefficient from regression	= 0.7884
Lag Variable coefficient from regression (UPC[-1]	= 0.31099
Last Use Per Customer data point from input data	= 13.178

- Baseload Factor = (Constant + UPC[-1] x LUPC) x MRD
  (9.314 + 0.31099 x 13.178) x 30.85 = 413.91)
- Heat Sensitivity Factor = SDDPMRD coefficient (0.7884)

Note: This regression included a lagged variable, UPC[-1], that impacts the entire data set. The lag variable indicates that the previous month's Use Per Customer has an effect on the current month's Use Per Customer. The Baseload Factor has been adjusted accordingly.

IV. Test of Customer Information System Billing Procedure

As previously noted, the company's OrCOM Customer Information System includes a weather normalization billing component. The company's Information Systems and Billing Department was charged with the task of testing the OrCOM weather normalization billing protocol. Steve Overstreet, IS Director for the company, developed a test plan to accomplish the following objectives:

- Ensure the weather normalization component originally purchased with the OrCOM billing software was fully operational, and compatible with the current updated versions of the company's billing software.
- Develop a clear understanding of the procedures required to activate and maintain weather normalization as a standard function in the company's monthly billing process.
- Produce test runs that enable the company to conduct a process review of the required billing procedures, examine sample bills and identify the content and quality of report data available on weather normalization from the OrCOM system.

Mr. Overstreet spent a considerable amount of time working directly with OrCOM software engineers and training specialists to develop an understanding of the weather normalization component. He conducted two independent tests of the software. The first utilized a test data base function that is a standard feature in the OrCOM billing system. OrCOM provides the ability to extract a small number of files (fifty is typical) from the existing active customer data base. These files

can be copied and used to test billing system changes and train system users without affecting the active customer files. Several such tests were conducted to ensure that we understood the mechanics of the weather normalization procedure, and that it, in fact, worked.

A second test, significantly more involved than that described above, was also conducted. The company was interested in testing weather normalization on a set of its historical files. In addition, we desired to test a larger data set encompassing an entire month of actual meter readings. Mr. Overstreet contracted with OrCOM to develop this test. The company paid OrCOM $3000.00 to produce the test software, and assist in running the test procedures. The test was designed to implement weather normalization for the month of January, 1995 in the Panama City residential rate class.

The OrCOM software allowed us to extract the historical data files and simulate weather normalization procedures. The company was able to gain insight into the system, print sample billings, and produce the standard reports that summarize the effects of weather normalized billing on our customer base. Utilizing the query function in OrCOM, we were also able to develop and test customized reports. In addition, this test allowed us to compare the revenue effects of weather normalization as produced by the billing system to those produced by our internal spreadsheet calculations. We were able to validate the spreadsheet computations, and gain confidence that our forecasts of revenue impacts were accurately predicting results within reasonable variances of actual results.

The company's test projects confirmed that the billing system now in place at West Florida Natural Gas will produce a weather normalized bill. The procedures to implement weather normalization, and seasonally terminate it, have been identified. A review of the customized portions of the company's billing code has been completed to ensure complete compatibility with the standard weather normalization component. The reports available through the system have been shared with Commission staff. A group of the basic monthly billing reports summarizing weather normalization activity for the Panama City residential test is included as Attachment P.

V. Projected Company and Ratepayer Impacts

The company produced several analyses of the potential effects of implementing weather normalization. A series of spreadsheet models were developed to calculate both margin revenue and customer billing impacts. The models utilize the Heat Sensitivity and Base Load Factors developed by the regression calculations described earlier. The revenue month weather normals were

derived in manner consistent with the development of Actual Sales Degree Days. Tables 26 and 27 provide normal heating degree days by meter read cycle for each division. The computation formula in the models is identical to the weather normalization formula proposed in the company's tariff rider. The models computations are not as sophisticated as those in the OrCOM billing system. The models are unable to match revenue months and degree days with the exactness of the OrCOM system. However, the use of actual and normal Sales Degree Days over a revenue month billing period in the model has eliminated much of the variability.

The models were used to backcast weather normalized margin revenue and customer billing impacts for the past two fiscal years and forecast potential impacts for the current year. The following information summarizes the results of these analyses. Actual to normal weather comparisons are provided. The Revenue Adjustment category is the company's margin revenue increase or decrease as the results of weather normalization. This data is presented by rate class for each Division. The Average/Customer category is the total per customer billing amount increase or decrease related to weather normalization for the entire year. It represents the net billing amount per customer for the six months weather normalization billing is active. An average monthly billing amount can be determined simply by dividing the Average/Customer category by six. The Attachments referenced below provide the actual calculations, including monthly totals for margin revenue and average customer bill adjustments. The analyses project gross margin effects and do not account for tax effects on the company.

Backcast with Actual Weather FY 1994-95
Attachment Q

This analysis looks back at the 1994-95 Fiscal Year and evaluates what would have occurred if the company had implemented weather normalized rates for the residential and small commercial classes during that period. Weather conditions were approximately 17% warmer than normal which would have resulted in the company collecting an additional $295,910 in margin revenue.

• Actual Weather	Panama City 1337	Ocala 651
• Normal Weather	Panama City 1543	Ocala 858

	Panama City		Ocala		Consolidated	
	Revenue Adj.	Avg/Customer	Revenue Adj.	Avg/Customer	Revenue Adj.	Avg/Customer
Residential	$106,410	$ 6.67	$148,423	$15.09	$254,833	$11.15
Small Com	$ 20,466	$15.33	$ 20,631	$25.54	$ 41,097	$19.38
Total	$126,876		$169,054		$295,930	

The backcast analysis also allowed the company to compare the actual therm consumption for the affected rate classes with the consumption predicted by the weather normalization factors. The actual annual consumption for FY 1994-95 varies 1% to 4% from the forecast consumption.

Backcast with Actual Weather FY 1995-96
Attachment R

This analysis looks back at the 1995-96 Fiscal Year and evaluates what would have occurred if the company had implemented weather normalized rates for the residential and small commercial classes during that period. Weather conditions were approximately 33% colder than normal which would have resulted in the company refunding $604,590 in margin revenue.

• Actual Weather	Panama City 1979	Ocala 1219
• Normal Weather	Panama City 1543	Ocala 858

	Panama City		Ocala		Consolidated	
	Revenue Adj.	Avg/Customer	Revenue Adj.	Avg/Customer	Revenue Adj.	Avg/Customer
Residential	($235,244)	($14.63)	($286,754)	($26.91)	($521,998)	($19.83)
Small Com	($ 44,170)	($32.66)	($ 38,422)	($45.54)	($ 82,592)	($38.33)
Total	($279,414)		($325,176)		($604,590)	

As noted above, the backcast analysis allowed the company to compare the actual therm consumption for the affected rate classes with the consumption predicted by the weather normalization factors. The actual annual consumption for FY 1995-96 varies 1% to 12% from the forecast consumption.

Forecast FY 1996-97
Attachment S-1,2,3

This analysis looks forward at the 1996-97 Fiscal Year and evaluates what may occur if the company implements weather normalized rates for the residential and small commercial classes. Three forecasts were prepared, analyzing three potential weather conditions. The first analysis (Attachment S-1) assumes normal weather, and produces no revenue adjustment. The model correctly displays that effect. The second analysis (Attachment S-2) assumes weather 20% colder than normal, which would result in the company refunding $374,479 in margin revenue. The third analysis (Attachment S-3) assumes weather 20% warmer than normal, which would result in the company billing an additional $374,479 in margin revenue. The following chart displays the results detailed in

Attachment S-2 (20% colder weather). The results for Attachment S-3 (20% warmer weather) are identical in amount, the obvious exception being the amount is billed instead of refunded.

• Normal Weather	Panama City	1543	Ocala	858
• 20% Colder	Panama City	1852	Ocala	1030
• 20% Warmer	Panama City	1234	Ocala	687

Attachment S-2 (20% Colder than Normal)

	Panama City		Ocala		Consolidated	
	Revenue Adj.	Avg/Customer	Revenue Adj.	Avg/Customer	Revenue Adj.	Avg/Customer
Residential	($179,334)	($10.85)	($142,677)	($12.95)	($322,011)	($11.85)
Small Com	($ 33,352)	($24.23)	($ 19,116)	($21.92)	($ 52,468)	($25.75)
Total	($212,686)		($161,793)		($374,479)	

Earnings and Rate of Return Impacts

In addition to the revenue impact analyses described above, the company performed several high level reviews of the overall effects of weather normalization on earnings and rates of return. The results of these computations are summarized in Attachment T.

VI. Implementation and Administrative Issues

Reporting Requirements

Attachment P includes the standard weather normalization billing reports that the company will produce each month. All of these reports will be maintained on file, and can be provided to the commission at any time. The reports include summary statistics by rate class for each division on the following items:

- Total WNA accounts billed.
- Number of estimated, minimum and closing WNA bills.
- Total WNA therms billed.
- Customers, therms, revenue and WNA factors by billing cycle.
- Actual Heating Degree Days.
- Normal Heating Degree Days.
- Meter Read Dates.

- Number of days in the billing period.
- Heat Sensitivity Factors.
- Base Load Factors.
- Customers, therms, WNA factors and amounts billed off cycle.

The company will incorporate revenues resulting from the Rider in its quarterly Earnings Surveillance Reports. These revenues will be reported in the same manner as the company's Firm Rate Adjustment revenues. The company's earnings for Surveillance Report purposes, including the Return On Equity calculations, will be computed with and without weather normalization revenues. Accompanying each Surveillance Report will be a separate report detailing customer numbers, sales volumes, revenues, actual heating degree days and normal heating degree days for each month of the quarterly reporting cycle. This data will be provided for both company divisions and on a consolidated basis.

The report query function in the company's OrCOM CIS package provides substantial flexibility to develop customized data inquiries. Should the Commission require information that is not included in the standard report features described above, the company may be able to provide it through the query function.

Annual Normal Heating Degree Day Adjustment

The company proposes to maintain thirty year rolling average NHDD totals for Panama City and Ocala. At the end of each company fiscal year, NHDD totals for the preceding twelve months will be extracted from the CIRRUS data base as described on page 13 of this Appendix. The existing NHDD data base contained in Attachments G and H will be updated. The new NHDD will be added as year thirty in the data base and the existing year one data will be deleted. The company will file with the Commission the updated NHDD totals, along with a copy of the CIRRUS data and the company's calculations. The updated NHDD will be submitted to the Commission no later than sixty days prior to the beginning of the next weather normalization billing period. (Submittal prior to September 1st, with the WNA period beginning with the revenue month of November)

Annual HSF and BLF Adjustment

At the end of each fiscal year the company will tabulate the actual therm consumption and number of customers per rate class. This data, along with the annual HDD update, will be used to recalculate the regressions that derive HSF's and BLF's for each rate class. The recalculation of the adjustment factors will be conducted according to the process identified in Section III of this Appendix. The updated factors will be provided to Commission staff for review no later than August 1st of each year. If an adjustment to the existing factors in

the tariff rider is necessary, the company will file tariff revisions no later than September 1st.

Annual Validation of NOAA and CIRRUS AHDD

It is the company's intent to validate the AHDD on a daily basis, as described on page 14 of this Appendix. However, as an additional verification of the data quality, at the end of each fiscal year the company will obtain the official CIRRUS AHDD and compare the totals to those used in the OrCOM billing system. It is unlikely any significant differences will be identified. The Commission staff compared the CIRRUS "quality controlled" AHDD with the HDD derived from the NOAA temperature data over a thirty year period. After the NOAA data was truncated, the variation was substantially less than one per cent. If a monthly variation above two per cent is identified, the company will notify the Commission.

Customer Notification

The company plans to prepare and distribute a bill stuffer explaining the weather normalization tariff rider. The bill stuffer is scheduled to appear in the October, 1996 billings. In addition, a shorter explanation of weather normalization will appear as a message on the bills in November and December. A training program for all of the company's customer service representatives is scheduled for September, prior to the October bill stuffer.

Customer Bill Format

Attachment U provides several examples of the company's current bill format with the inclusion of a weather normalization line item. These bills were printed during the OrCOM system test described earlier.

West Florida Natural Gas Company
Weather Normalization Rider
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West Florida Natural Gas Company
Weather Normalization Rider
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APPENDIX C

Attac...ent Q

West Florida Natural Gas Company
Panama City Division
Backcast of Weather Normalization Impacts to Base Rate Margin Revenue
Comparison of Calculated Therms to Actual
Fiscal Year 1994-95

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Customer Class Residential		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		14943	14905	14980	15103	15289	15532	15644	15696	15673	15618	15511	15446	15366
BASE LOAD	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	
ACTUAL DEGREE DAY		0	0	0	2	41	167	404	441	195	77	9	0	1337
HSF	0.1099	0	0	0	0	0.1099	0.1099	0.1099	0.1099	0.1099	0.1099	0	0	
30 YR NORM DEG DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	0.269172	0.328968	0.002768	-0.062304	0.140594	0.186130	0.000000	0.000000	
BASE RATE	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	0.087548	0.107003	0.000900	-0.020264	0.045728	0.060569	0.000000	0.000000	
ACTUAL REVENUE		$68,286	$68,341	$68,455	$69,017	$82,081	$163,694	$297,141	$319,415	$181,658	$114,244	$70,882	$70,585	$1,583,798
CALCULATED THERMS		209949	210118	210469	212197	283108	503288	913578	982061	558518	351249	217930	217016	4669480
ACTUAL THERMS		207317	198257	231283	196389	295707	501688	908635	900448	600254	410344	252928	214407	4917655
NORMALIZED REV		$68,286	$68,341	$68,455	$69,017	$116,867	$217,548	$297,963	$299,515	$207,198	$135,554	$70,882	$70,585	$1,690,209
REVENUE ADJUSTMENT		$0	$0	$0	$0	$34,786	$53,854	$822	($18,901)	$25,540	$21,310	$0	$0	$106,410
AVG WNA PER CUSTOMER						$1.62	$3.47	$0.05	($1.27)	$1.63	$1.36			$6.87

Attac ent Q

West Florida Natu... Gas Company
Panama City Division
Backcast of Weather Normalization Impacts to Base Rate Margin Revenue
Comparison of Calculated Therms to Actual
Fiscal Year 1994-95

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Customer Class Small Commercial		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		1294	1292	1288	1294	1310	1339	1353	1357	1356	1343	1335	1335	1325
BASE LOAD	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	
ACTUAL DEGREE DAY		0	0	0	2	41	167	404	441	196	77	9	0	1337
HSF	0 4872	0	0	0	0	0 4872	0 4872	0 4872	0 4872	0 4872	0 4872	0	0	
30 YR NORM DEG DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
RATE ADJ FACTOR		0 000000	0 000000	0 000000	0 000000	0 088272	0 124190	0 001445	-0 033605	0 056249	0 055257	0 000000	0 000000	
BASE RATE	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	
RATE ADJ AMT		0 000000	0 000000	0 000000	0 000000	0 011345	0 020340	0 000237	-0 005504	0 009212	0 009050	0 000000	0 000000	
ACTUAL REVENUE		$63,403	$63,305	$63,110	$63,403	$68,436	$83,451	$109,860	$114,293	$87,693	$74 037	$65,412	$65,412	$921,817
CALCULATED THERMS		387126	386528	385331	387126	417855	509533	670776	697843	535433	452052	399392	399392	5628386
ACTUAL THERMS		361995	396498	380714	329012	384290	453134	656893	570129	581522	524133	392792	398233	5381345
NORMALIZED REV		$63,403	$63,305	$63,110	$63,403	$73,177	$93,815	$110,018	$110,452	$92,626	$78 128	$65,412	$65,412	$942,263
REVENUE ADJUSTMENT		$0	$0	$0	$0	$4,741	$10,364	$159	($3,841)	$4,933	$4,091	$0	$0	$20,446
AVG WNA PER CUSTOMER						$3 62	$7 74	$0 12	($2 83)	$3 64	$3 05			$15 33

Attachment Q

West Florida Natural Gas Company
Ocala Division
Backcast of Weather Normalization Impacts to Base Rate Margin Revenue
Comparison of Calculated Therms to Actual
Fiscal Year 1994-95

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Customer Class Residential		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		9264	9277	9302	9394	9512	9764	9908	10072	10133	10105	10036	10051	9735
BASE LOAD	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	
ACTUAL DEGREE DAY		0	0	0	0	6	56	209	258	100	23	0	0	651
HSF	0.2346	0	0	0	0	0.2346	0.2346	0.2346	0.2346	0.2346	0.2346	0	0	
30 YR NORM DEG DAY		0	0	0	2	42	142	235	231	144	55	8	0	859
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	0.462936	0.682599	0.092407	-0.079913	0.260074	0.343964	0.000000	0.000000	
BASE RATE	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	0.150570	0.222015	0.030055	-0.025992	0.084589	0.111874	0.000000	0.000000	
ACTUAL REVENUE		$49,957	$50,028	$50,162	$50,659	$55,761	$84,089	$211,670	$252,241	$131,724	$71,878	$54,121	$54,201	$1,126,492
CALCULATED THERMS		153587	153813	154227	155753	171441	289282	650793	775529	404994	220993	166397	166646	3463464
ACTUAL THERMS		139036	172311	127611	294555	284417	159298	634156	768377	426017	244729	158872	160196	3569573
NORMALIZED REV		$49,957	$50,028	$50,162	$50,659	$81,575	$158,314	$231,230	$232,083	$165,982	$96,601	$54,121	$54,201	$1,274,915
REVENUE ADJUSTMENT		$0	$0	$0	$0	$25,814	$84,225	$19,560	($20,157)	$34,258	$24,723	$0	$0	$148,423
AVG WNA PER CUSTOMER						$2.71	$8.58	$1.97	($2.00)	$3.38	$2.45			$15.09

West Florida Natural Gas Company
Ocala Division
Backcast of Weather Normalization Impacts to Base Rate Margin Revenue
Comparison of Calculated Therms to Actual
Fiscal Year 1994-95

Attachment Q

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Customer Class Small Commercial		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		789	787	787	789	789	809	820	828	824	810	805	798	796
BASE LOAD	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	
ACTUAL DEGREE DAY		0	0	0	0	6	56	209	258	100	23	0	0	651
HSF	0.7884	0	0	0	0	0.7884	0.7884	0.7884	0.7884	0.7884	0.7884	0	0	
30 YR NORM DEG DAY		0	0	0	2	42	142	235	231	144	55	8	0	858
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	0.066960	0.148471	0.035234	-0.033517	0.070927	0.058556	0.000000	0.000000	
BASE RATE	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	0.010967	0.024317	0.005771	-0.005489	0.011616	0.009590	0.000000	0.000000	
ACTUAL REVENUE		$52,131	$51,995	$51,995	$52,131	$54,113	$60,652	$77,750	$83,665	$66,468	$57,267	$54,571	$54,097	$716,833
CALCULATED THERMS		318297	317469	317469	318297	330403	370326	474721	510837	405826	349660	333198	330300	4376803
ACTUAL THERMS		429371	204329	280329	349184	342671	387052	538274	538068	422054	366594	313168	298649	4469743
NORMALIZED REV		$52,131	$51,995	$51,995	$52,131	$57,737	$68,657	$80,469	$80,861	$71,180	$60,621	$54,571	$54,097	$737,464
REVENUE ADJUSTMENT		$0	$0	$0	$0	$3,623	$8,005	$2,739	($2,804)	$4,714	$3,353	$0	$0	$20,631
AVG. WNA PER CUSTOMER						$4.59	$11.13	$3.34	($3.39)	$5.72	$4.14			$25.94

West Florida Natural Gas Company
Panama City Division
Backcast of Weather Normalization Impacts to Base Rate Margin Revenue
Fiscal Year 1995-96

Attachment R

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Customer Class Residential		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		15409	15395	15410	15508	15767	15949	16064	16098	16086	16273	16164	16096	15852
BASE LOAD	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	
ACTUAL DEGREE DAY		0	0	0	5	125	306	518	459	309	210	47	0	1979
HSF	0.1099	0	0	0	0	0.1099	0.1099	0.1099	0.1099	0.1099	0.1099	0	0	
30 YR NORM DEG DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	-0.154344	-0.096074	-0.175303	-0.090268	-0.153544	-0.281748	0.000000	0.000000	
BASE RATE	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	-0.050200	-0.031248	-0.057017	-0.029360	-0.049940	-0.091639	0.000000	0.000000	
ACTUAL REVENUE		$70,415	$70,351	$70,420	$70,868	$142,517	$247,131	$371,000	$337,666	$251,233	$196,669	$73,864	$73,555	$1,975,691
CALCULATED THERMS		216496	216300	216511	217887	438176	759820	1140661	1038174	772430	604671	227100	226149	6074376
ACTUAL THERMS		212833	198918	219424	187400	399665	743629	1159618	1011442	789380	549334	329603	212011	6013457
NORMALIZED REV		$70,415	$70,351	$70,420	$70,868	$120,520	$223,389	$305,963	$307,186	$212,658	$141,256	$73,864	$73,555	$1,740,447
REVENUE ADJUSTMENT		$0	$0	$0	$0	($21,997)	($23,743)	($65,037)	($30,480)	($38,575)	($55,411)	$0	$0	($235,244)
AVG. WNA PER CUSTOMER						($1.40)	($1.49)	($4.05)	($1.89)	($2.40)	($3.41)			($14.83)

West Florida Natural Gas Company
Panama City Division
Backcast of Weather Normalization Impacts to Base Rate Margin Revenue
Fiscal Year 1995-96

Attachment R

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Customer Class Small Commercial		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTALRVG
CUSTOMERS		1291	1290	1279	1279	1320	1335	1344	1356	1361	1376	1368	1368	1331
BASE LOAD	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	
ACTUAL DEGREE DAY		0	0	0	5	125	306	518	459	309	210	47	0	1979
HSF	0.4872	0	0	0	0	0.4872	0.4872	0.4872	0.4872	0.4872	0.4872	0	0	
30 YR NORM DEG DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	-0.052807	-0.045283	-0.100028	-0.049365	-0.072673	-0.115562	0.000000	0.000000	
BASE RATE	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	-0.008649	-0.007416	-0.016383	-0.008085	-0.011902	-0.018927	0.000000	0.000000	
ACTUAL REVENUE		$63,256	$63,208	$62,669	$62,669	$77,846	$87,971	$121,433	$116,102	$100,253	$90,501	$67,015	$67,015	$989,938
CALCULATED THERMS		386228	385929	382638	382638	475311	598186	741443	708890	612120	552575	409177	409177	6044317
ACTUAL THERMS		425664	393094	356004	325598	357805	558549	614660	649584	808324	761881	454773	402019	6111255
NORMALIZED REV		$63,256	$63,208	$62,669	$62,669	$73,736	$83,535	$109,287	$110,371	$92,967	$80,042	$67,015	$67,015	$945,769
REVENUE ADJUSTMENT		$0	$0	$0	$0	($4,111)	($4,436)	($12,147)	($5,731)	($7,286)	($10,458)	$0	$0	($44,170)
AVG. WNA PER CUSTOMER						($3.11)	($3.32)	($9.04)	($4.23)	($5.35)	($7.60)			($32.86)

Attachment R

West Florida Natural Gas Company
Ocala Division
Backcast of Weather Normalization Impacts to Base Rate Margin Revenue
Fiscal Year 1995-96

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Customer Class Residential		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		10113	10077	10095	10230	10477	10592	10657	10652	10626	10760	10685	10701	10472
BASE LOAD	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	
ACTUAL DEGREE DAY		0	0	0	0	63	177	360	254	214	133	17	0	1219
HSF	0.2346	0	0	0	0	0.2346	0.2346	0.2346	0.2346	0.2346	0.2346	0	0	
30 YR NORM DEG DAY		0	0	0	2	42	142	235	231	144	55	8	0	858
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	-0.160402	-0.142707	-0.289635	-0.070986	-0.245080	-0.384809	0.000000	0.000000	
BASE RATE	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	-0.052171	-0.046416	-0.094204	-0.023088	-0.079712	-0.125159	0.000000	0.000000	
ACTUAL REVENUE		$54,536	$54,342	$54,439	$55,167	$107,017	$200,327	$350,116	$264,203	$230,565	$167,182	$57,621	$57,707	$1,853,219
CALCULATED THERMS		167674	167077	167375	169613	329029	615918	1076452	812307	708884	514010	177158	177423	5082919
ACTUAL THERMS		154981	139554	136915	139106	334108	585418	955422	696791	624739	401730	209901	172141	4552806
NORMALIZED REV		$54,536	$54,342	$54,439	$55,167	$89,851	$171,739	$248,710	$245,448	$174,058	$102,849	$57,621	$57,707	$1,366,465
REVENUE ADJUSTMENT		$0	$0	$0	$0	($17,166)	($28,588)	($101,406)	($18,755)	($56,507)	($64,333)	$0	$0	($286,754)
AVG. WNA PER CUSTOMER						($1.64)	($2.70)	($9.52)	($1.76)	($5.32)	($5.98)			($26.91)

West Florida Natur.. Gas Company
Ocala Division
Backcast of Weather Normalization Impacts to Base Rate Margin Revenue
Fiscal Year 1995-96

7/9/96 1:34 PM

Customer Class Small Commercial		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		798	797	800	782	833	843	846	848	850	837	832	825	824
BASE LOAD	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	
ACTUAL DEGREE DAY		0	0	0	0	63	177	360	254	214	133	17	0	1219
HSF	0.7884	0	0	0	0	0.7884	0.7884	0.7884	0.7884	0.7884	0.7884	0	0	
30 YR NORM DEG DAY		0	0	0	2	42	142	235	231	144	55	8	0	858
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	-0.036506	-0.050374	-0.140828	-0.029606	-0.094346	-0.119095	0.000000	0.000000	
BASE RATE	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	-0.005979	-0.008250	-0.023061	-0.004849	-0.015452	-0.019505	0.000000	0.000000	
ACTUAL REVENUE		$54,097	$54,029	$54,232	$53,012	$63,266	$76,435	$96,664	$85,340	$81,076	$71,768	$56,368	$55,893	$801,479
CALCULATED THERMS		330300	329886	331128	323678	386288	466892	590206	521068	495027	433922	344166	341269	4893830
ACTUAL THERMS		297861	315121	285378	290695	462820	489620	568297	522200	508449	407532	364979	319630	4833582
NORMALIZED REV		$54,097	$54,029	$54,232	$53,012	$60,957	$72,584	$83,041	$82,814	$73,426	$62,604	$56,368	$55,893	$763,057
REVENUE ADJUSTMENT		$0	$0	$0	$0	($2,310)	($3,850)	($13,623)	($2,527)	($7,649)	($8,464)	$0	$0	($38,422)
AVG WNA PER CUSTOMER						($2.77)	($4.57)	($16.10)	($2.98)	($9.00)	($10.12)			($45.54)

Attachment S-1

West Florida Natural Gas Company
Ocala Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
Normal Weather Forecast
Fiscal Year 1996-97

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Customer Class Small Commercial		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		825	824	827	809	860	870	873	875	877	863	858	851	851
BASE LOAD	413 91	413 91	413 91	413 91	413 91	413 91	413 91	413 91	413 91	413 91	413 91	413 91	413 91	
ADD MOD FACTOR	1 00													
ACTUAL DEGREE DAY		0	0	0	2	42	142	235	231	144	55	8	0	858
HSF	0 7884	0	0	0	0	0 7884	0 7884	0 7884	0 7884	0 7884	0 7884	0	0	
30 YR NORM DEG DAY		0	0	0	2	42	142	235	231	144	55	8	0	858
RATE ADJ FACTOR		0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	
BASE RATE	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	
RATE ADJ AMT		0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	
ACTUAL REVENUE		$55 912	$55 844	$56 047	$54 827	$62 916	$74 890	$85 669	$85 429	$75,739	$64,608	$58,183	$57,708	$767,772
CALCULATED THERMS		341383	340909	342210	334760	384149	457259	523077	521606	462446	394479	355249	352351	4809938
NORMALIZED REV		$55 912	$55 844	$56 047	$54 827	$62 916	$74 890	$85 669	$85 429	$75,739	$64,608	$58,183	$57,708	$767,772
REVENUE ADJUSTMENT		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
AVG WNA PER CUSTOMER						$0 00	$0 00	$0 00	$0 00	$0 00	$0 00			$0 00

Attachment S-1

West Florida Natural Gas Company
Ocala Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
Normal Weather Forecast
Fiscal Year 1996-97

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Customer Class Residential		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		10493	10457	10475	10610	10857	10972	11037	11032	11006	11139	11085	11081	10852
BASE LOAD	16 58	16 58	16 58	16 58	16 58	16 58	16 58	16 58	16 58	16 58	16 58	16 58	16 58	
ADD MOD FACTOR	1 00													
ACTUAL DEG E DAY		0	0	0	2	42	142	235	231	144	55	8	0	858
HSF	0 2346	0	0	0	0	0 2346	0 2346	0 2346	0 2346	0 2346	0 2346	0	0	
30 YR NORM DEG DAY		0	0	0	2	42	142	235	231	144	55	8	0	858
RATE ADJ FACTOR		0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	
BASE RATE	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	
RATE ADJ AMT		0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	
ACTUAL REVENUE		$56 583	$56 389	$56 486	$57 214	$93,107	$177,895	$257,570	$254,196	$180,277	$106,478	$59,668	$59,754	$1,415,616
CALCULATED THERMS		173968	173371	173670	175908	286263	546947	791915	781540	554271	327372	183452	183717	4352393
NORMALIZED REV		$56 583	$56 389	$56 486	$57 214	$93,107	$177 895	$257,570	$254 196	$180,277	$106 478	$59,668	$59,754	$1,415,616
REVENUE ADJUSTMENT		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
AVG WNA PER CUSTOMER						$0 00	$0 00	$0 00	$0 00	$0 00	$0 00			$0 00

West Florida Natural Gas Company
Panama City Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
Normal Weather Forecast
Fiscal Year 1996-97

Attachment S-1

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Customer Class Small Commercial		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		1318	1317	1306	1306	1347	1362	1371	1383	1388	1403	1395	1395	1358
BASE LOAD	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	299 17	
ADD MOD FACTOR	1 00													
ACTUAL DEGREE DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
HSF	0 4872	0	0	0	0	0 4872	0 4872	0 4872	0 4872	0 4872	0 4872	0	0	
30 YR NORM DEG DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
RATE ADJ FACTOR		0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	
BASE RATE	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	0 16378	
RATE ADJ AMT		0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	
ACTUAL REVENUE		$64 596	$64 547	$64 008	$64 008	$75,263	$95,450	$111,510	$112,596	$94 835	$81,633	$68,355	$68,355	$965,155
CALCULATED THERMS		394407	394108	390817	390817	459536	582796	680850	687482	579038	498429	417356	417356	5892994
NORMALIZED REV		$64 596	$64 547	$64 008	$64 008	$75,263	$95,450	$111,510	$112,596	$94,835	$81,633	$68,355	$68,355	$965,155
REVENUE ADJUSTMENT		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
AVG. WNA PER CUSTOMER						$0 00	$0 00	$0 00	$0 00	$0 00	$0 00			$0 00

Attachment S-1

West Florida Natural Gas Company
Panama City Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
Normal Weather Forecast
Fiscal Year 1996-97

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Customer Class Residential		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		15879	15865	15880	15878	16237	16419	16534	16568	16556	16743	16633	16568	16321
BASE LOAD	14 05	14 05	14 05	14 05	14 05	14 05	14 05	14 05	14 05	14 05	14 05	14 05	14 05	
ADD MOD FACTOR	1 00													
ACTUAL DEGREE DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
HSF	0 1099	0	0	0	0	0 1099	0 1099	0 1099	0 1099	0 1099	0 1099	0	0	
30 YR NORM DEG DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
RATE ADJ FACTOR		0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	
BASE RATE	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	0 32525	
RATE ADJ AMT		0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	0 000000	
ACTUAL REVENUE		$72,561	$72,497	$72,566	$73,014	$124,109	$229,965	$314,906	$316,146	$218,865	$145,334	$76,010	$75,701	$1,791,674
CALCULATED THERMS		223094	222897	223108	224485	381562	707042	968196	972008	672913	446838	233696	232746	5508805
NORMALIZED REV		$72,561	$72,497	$72,566	$73,014	$124,109	$229,965	$314,906	$316,146	$218,865	$145,334	$76,010	$75,701	$1,791,674
REVENUE ADJUSTMENT		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
AVG WNA PER CUSTOMER						$0 00	$0 00	$0 00	$0 00	$0 00	$0 00			$0 00

Attachment S-2

West Florida Natural Gas Company
Ocala Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
20% Colder Than Normal Weather Forecast
Fiscal Year 1996-97

7/9/96 12:54 PM

Customer Class Small Commercial		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		825	824	827	809	860	870	873	875	877	863	858	851	851
BASE LOAD	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	
ADD MOD FACTOR	1.20													
ACTUAL DEGREE DAY		0	0	0	2	50	170	282	278	173	66	9	0	1030
HSF	0.7884	0	0	0	0	0.7884	0.7884	0.7884	0.7884	0.7884	0.7884	0	0	
30 YR NORM DEG DAY		0	0	0	2	42	142	235	231	144	55	8	0	859
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	-0.014510	-0.040801	-0.058269	-0.057642	-0.041273	-0.018492	0.000000	0.000000	
BASE RATE	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	-0.002376	-0.006682	-0.009543	-0.009441	-0.006760	-0.003029	0.000000	0.000000	
ACTUAL REVENUE		$55,912	$55,844	$56,047	$54,827	$63,842	$78,075	$90,970	$90,654	$79,000	$65,825	$58,183	$57,708	$806,888
CALCULATED THERMS		341383	340969	342210	334760	389805	476719	555442	553512	482354	401911	355249	352351	4926665
NORMALIZED REV		$55,912	$55,844	$56,047	$54,827	$62,916	$74,890	$85,669	$85,429	$75,739	$64,609	$58,183	$57,708	$787,772
REVENUE ADJUSTMENT		$0	$0	$0	$0	($926)	($3,186)	($5,301)	($5,226)	($3,261)	($1,217)	$0	$0	($19,116)
AVG WNA PER CUSTOMER						($1.08)	($3.66)	($6.07)	($5.97)	($3.72)	($1.41)			($21.92)

West Florida Natural Gas Company
Ocala Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
20% Colder Than Normal Weather Forecast
Fiscal Year 1996-97

Attachment S-2

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Customer Class Residential		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		10493	10457	10475	10610	10857	10972	11037	11032	11006	11139	11065	11081	10852
BASE LOAD	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	
ADD MOD. FACTOR	1.20													
ACTUAL DEGREE DAY		0	0	0	2	50	170	282	278	173	66	9	0	1030
HS	0.2346	0	0	0	0	0.2346	0.2346	0.2346	0.2346	0.2346	0.2346	0	0	
30 YR NORM DEG DAY		0	0	0	2	42	142	235	231	144	55	8	0	858
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	-0.089109	-0.117763	-0.133288	-0.132843	-0.116288	-0.080180	0.000000	0.000000	
BASE RATE	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	-0.022478	-0.038302	-0.043352	-0.043207	-0.037813	-0.026079	0.000000	0.000000	
ACTUAL REVENUE		$56,583	$56,389	$56,486	$57,214	$100,019	$201,640	$297,181	$293,137	$204,462	$115,759	$59,668	$59,754	$1,558,293
CALCULATED THERMS		173968	173371	173670	175908	307515	619965	913700	901267	628630	355908	183452	183717	4791061
NORMALIZED REV		$56,583	$56,389	$56,486	$57,214	$93,107	$177,895	$257,570	$254,196	$180,277	$106,478	$59,668	$59,754	$1,415,616
REVENUE ADJUSTMENT		$0	$0	$0	$0	($6,912)	($23,745)	($39,611)	($38,941)	($24,185)	($9,282)	$0	$0	($142,677)
AVG. WNA PER CUSTOMER						($0.64)	($2.16)	($3.59)	($3.53)	($2.20)	($0.83)			($12.95)

Attachment S-2

West Florida Natural Gas Company
Panama City Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
20% Colder Than Normal Weather Forecast
Fiscal Year 1996-97

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Customer Class Small Commercial		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		1318	1317	1306	1306	1347	1362	1371	1383	1388	1403	1395	1395	1358
BASE LOAD	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	
ADD MOD FACTOR	1.20													
ACTUAL DEGREE DAY		0	0	0	7	103	317	486	487	290	138	23	0	1852
HSF	0.4872	0	0	0	0	0.4872	0.4872	0.4872	0.4872	0.4872	0.4872	0	0	
30 YR NORM DEG DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	-0.023980	-0.056722	-0.073632	-0.073734	-0.053513	-0.030583	0.000000	0.000000	
BASE RATE	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	-0.003927	-0.009290	-0.012060	-0.012076	-0.008764	-0.005009	0.000000	0.000000	
ACTUAL REVENUE		$64,596	$64,547	$64,008	$64,008	$77,112	$101,190	$120,373	$121,559	$100,197	$84,208	$68,355	$68,355	$898,507
CALCULATED THERMS		394407	394108	390817	390817	470828	617841	734968	742208	611775	514153	417356	417356	6098635
NOR MALIZED REV		$64,596	$64,547	$64,008	$64,008	$75,263	$95,450	$111,510	$112,596	$94,835	$81,633	$68,355	$68,355	$885,155
REVENUE ADJUSTMENT		$0	$0	$0	$0	($1,849)	($5,740)	($8,863)	($8,963)	($5,362)	($2,575)	$0	$0	($33,352)
AVG. WNA PER CUSTOMER						($1.37)	($4.21)	($6.46)	($6.48)	($3.86)	($1.84)			($24.23)

West Florida Natural Gas Company
Panama City Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
20% Colder Than Normal Weather Forecast
Fiscal Year 1996-97

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Customer Class Residential		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		15879	15865	15880	15978	16237	16419	16534	16568	16556	16743	16633	16566	16321
BASE LOAD	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	
ADD MOD FACTOR	1.20													
ACTUAL DEGREE DAY		0	0	0	7	103	317	486	487	290	138	23	0	1852
HSF	0.1099	0	0	0	0	0.1099	0.1099	0.1099	0.1099	0.1099	0.1099	0	0	
30 YP NORM DEG DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	-0.074446	-0.118747	-0.131955	-0.132023	-0.115722	-0.088517	0.000000	0.000000	
BASE RATE	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	-0.024213	-0.038622	-0.042919	-0.042941	-0.037639	-0.028140	0.000000	0.000000	
ACTUAL REVENUE		$72,561	$72,497	$72,566	$73,014	$134,092	$260,953	$362,776	$364,233	$247,507	$159,099	$76,010	$75,701	$1,971,008
CALCULATED THERMS		223094	222897	223108	224485	412273	802314	1115376	1119855	760975	489158	233698	232746	6059978
NORMALIZED REV		$72,561	$72,497	$72,566	$73,014	$124,109	$229,965	$314,906	$316,146	$218,865	$145,334	$76,010	$75,701	$1,791,674
REVENUE ADJUSTMENT		$0	$0	$0	$0	($9,982)	($30,987)	($47,870)	($48,087)	($28,642)	($13,765)	$0	$0	($179,334)
AVG WNA PER CUSTOMER						($0.61)	($1.89)	($2.90)	($2.90)	($1.73)	($0.82)			($10.85)

West Florida Natural Gas Company
Ocala Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
20% Warmer Than Normal Weather Forecast
Fiscal Year 1996-97

Attachment S-3

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Customer Class Small Commercial		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		825	824	827	809	860	870	873	875	877	863	858	851	851
BASE LOAD	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	413.91	
ADD MOD FACTOR	0.80													
ACTUAL DEGREE DAY		0	0	0	2	33	111	188	185	115	44	6	0	687
HSF	0.7884	0	0	0	0	0.7884	0.7884	0.7884	0.7884	0.7884	0.7884	0	0	
30 YR NORM DEG DAY		0	0	0	2	42	142	235	231	144	55	8	0	858
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	0.014943	0.044426	0.065956	0.065153	0.044986	0.019202	0.000000	0.000000	
BASE RATE	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	0.002447	0.007276	0.010802	0.010671	0.007368	0.003145	0.000000	0.000000	
ACTUAL REVENUE		$55,912	$55,844	$56,047	$54,827	$61,990	$71,704	$80,369	$80,203	$72,479	$63,391	$58,183	$57,708	$768,656
CALCULATED THERMS		341383	340969	342210	334760	378493	437809	490711	489701	442538	387047	355249	352351	4693221
NORMALIZED REV		$55,912	$55,844	$56,047	$54,827	$62,916	$74,890	$85,669	$85,429	$75,739	$64,608	$58,183	$57,708	$787,772
REVENUE ADJUSTMENT		$0	$0	$0	$0	$926	$3,186	$5,301	$5,226	$3,261	$1,217	$0	$0	$19,116
AVG WNA PER CUSTOMER						$1.08	$3.66	$6.07	$5.97	$3.72	$1.41			$21.92

Attachment S-3

West Florida Natural Gas Company
Ocala Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
20% Warmer Than Normal Weather Forecast
Fiscal Year 1996-97

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Customer Class Residential		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		10493	10457	10475	10610	10857	10972	11037	11032	11008	11139	11065	11081	10852
BASE LOAD	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	16.58	
ADD MOD. FACTOR	0.80													
ACTUAL DEGREE DAY		0	0	0	2	33	113	188	185	115	44	6	0	687
HSF	0.2346	0	0	0	0	0.2346	0.2346	0.2346	0.2346	0.2346	0.2346	0	0	
30 YR NORM DEG DAY		0	0	0	2	42	142	235	231	144	55	8	0	858
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	0.080193	0.154044	0.181734	0.180908	0.154944	0.095493	0.000000	0.000000	
BASE RATE	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	0.026083	0.050103	0.059109	0.058840	0.050396	0.031059	0.000000	0.000000	
ACTUAL REVENUE		$56,583	$56,389	$56,486	$57,214	$86,195	$154,149	$217,960	$215,255	$156,091	$97,196	$59,668	$59,754	$1,272,939
CALCULATED THERMS		173968	173571	173670	175908	265011	473940	670129	661813	479911	298835	183452	183717	3913725
NORMALIZED REV		$56,583	$56,389	$56,486	$57,214	$93,107	$177,895	$257,570	$254,196	$180,277	$106,478	$59,668	$59,754	$1,415,616
REVENUE ADJUSTMENT		$0	$0	$0	$0	$6,912	$23,746	$39,611	$38,941	$24,185	$9,282	$0	$0	$142,677
AVG WNA PER CUSTOMER						$0.64	$2.16	$3.59	$3.53	$2.20	$0.83			$12.96

West Florida Natural Gas Company
Panama City Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
20% Warmer Than Normal Weather Forecast
Fiscal Year 1996-97

Attachment S-3

7/9/96 1:07 PM

Customer Class Small Commercial		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		1318	1317	1306	1306	1347	1362	1371	1383	1388	1403	1395	1395	1358
BASE LOAD	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	299.17	
ADD MOD FACTOR	0.80													
ACTUAL DEGREE DAY		0	0	0	5	69	211	324	325	194	32	15	0	1234
HSF	0.4872	0	0	0	0	0.4872	0.4872	0.4872	0.4872	0.4872	0.4872	0	0	
30 YR NORM DEG DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	0.025188	0.063980	0.086348	0.086488	0.059826	0.032575	0.000000	0.000000	
BASE RATE	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	0.16378	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	0.004125	0.010479	0.014142	0.014165	0.009815	0.005335	0.000000	0.000000	
ACTUAL REVENUE		$64,596	$64,547	$64,008	$64,008	$73,414	$89,711	$102,646	$103,633	$89,473	$79,057	$68,355	$68,355	$931,802
CALCULATED THERMS		394407	394108	390817	390817	448245	547751	626733	632756	546300	482705	417356	417356	5689353
NORMALIZED REV		$64,596	$64,547	$64,008	$64,008	$75,263	$95,410	$111,510	$112,596	$94,835	$81,633	$68,355	$68,355	$965,155
REVENUE ADJUSTMENT		$0	$0	$0	$0	$1,849	$5,740	$8,863	$8,963	$5,362	$2,575	$0	$0	$33,352
AVG WNA PER CUSTOMER						$1.37	$4.21	$6.46	$6.48	$3.86	$1.84			$24.23

West Florida Natural Gas Company
Panama City Division
Projected Weather Normalization Impacts to Base Rate Margin Revenue
20% Warmer Than Normal Weather Forecast
Fiscal Year 1996-97

Attachment S-3

7/9/96 1:05 PM

Customer Class Residential		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	TOTAL/AVG
CUSTOMERS		15879	15865	15880	15878	16237	16413	16534	16568	16556	16743	16833	16568	16321
BASE LOAD	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	
ADD MOD FACTOR	0.80													
ACTUAL DEGREE DAY		0	0	0	5	69	211	324	325	194	92	15	0	1234
HSF	0.1099	0	0	0	0	0.1099	0.1099	0.1099	0.1099	0.1099	0.1099	0	0	
30 YR NORM DEG DAY		0	0	0	6	86	264	405	406	242	115	19	0	1543
RATE ADJ FACTOR		0.000000	0.000000	0.000000	0.000000	0.087468	0.155732	0.179286	0.179391	0.150571	0.104620	0.000000	0.000000	
BASE RATE	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	0.32525	
RATE ADJ AMT		0.000000	0.000000	0.000000	0.000000	0.028449	0.050652	0.058306	0.058347	0.048973	0.034028	0.000000	0.000000	
ACTUAL REVENUE		$72,561	$72,497	$72,566	$73,014	$114,127	$198,979	$267,036	$268,058	$190,223	$131,569	$78,010	$75,701	$1,612,340
CALCULATED THERMS		223094	222897	223108	224485	350890	611770	821016	824161	584852	404517	239698	232746	4957232
NORMALIZED REV		$72,561	$72,497	$72,566	$73,014	$124,109	$229,965	$314,906	$316,146	$218,865	$145,334	$78,010	$75,701	$1,791,674
REVENUE ADJUSTMENT		$0	$0	$0	$0	$9,982	$30,987	$47,870	$48,087	$28,642	$13,765	$0	$0	$179,334
AVG WNA PER CUSTOMER						$0.61	$1.89	$2.90	$2.90	$1.73	$0.82			$10.85

West Florida Natural Gas Company
Weather Normalization Impacts To Rate Of Return

	Fiscal Year 1994	Fiscal Year 1995	Fiscal Year 1996 **
Average Rate Base*	20,143,593	22,054,592	22,409,713
NOI*	2,239,130	1,941,323	2,063,368
Average Rate of Return*	11.12%	8.80%	9.21%
PSC Max Allowable Rate of Return	10.38%	9.84%	9.56%
WNA Margin Revenue Adjustment	(78,759)	295,911	(355,907)
WNA Tax Effect Revenue Adjustment	(48,689)	182,932	(220,022)
NOI with WNA Adjustment	2,190,441	2,124,255	1,843,346
Rate of Return with WNA Adjustment	10.87%	9.63%	8.23%

* Average Rate Base, NOI, and Rate of Return are PSC Adjusted
** Estimated results thru February 1996

RETURN TO

West Florida Natural Gas Co.
P O BOX 1460
PANAMA CITY FL 32402-1460

2/20/95	42.14
LATE FEE	PAST DUE
.00	.00
	TOTAL
	42.14

[redacted] 11648P 0220

BILLING ADDRESS
[redacted]

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

THIS BILL DUE UPON RECEIPT

SERVING COMPANY
PANAMA CITY
[redacted]
872-6100

CUSTOMER COPY
PLEASE BRING ENTIRE BILL WHEN PAYING IN PERSON
FOR INFORMATION CALL 8726100

ACCOUNT NUMBER	NAME AND SERVICE ADDRESS				BILLING DATE
[redacted]	[redacted]				1/31/95
PAST DUE DATE 2/20/95					NEXT SCHEDULED READING DATE 2/12/95
TOTAL AMOUNT DUE 42.14	METER NUMBER [redacted]	SERVICE PERIOD FROM 12/09	TO 1/11	CODE	METER READINGS PRESENT 3123 / PREVIOUS 3074
CCF USED 49 / BTU FACTOR 1.05800	THERMS USED 51.8	USER HISTORY LAST YEAR 1.6 / LAST YEAR 4.1	0034-0220 RS1 PC		00

GAS BASIC CHARGE		7.00
ENERGY CHARGE	51.8 THERMS @ .36978	19.15
WEATHER NORMALIZATION		1.70-
COST OF GAS CHARGE	51.8 THERMS @ .25113	13.01
FRANCHISE TAX - PANAMA CITY	37.47 @ .05000	1.87
UTILITY TAX - PANAMA CITY	28.01 @ .10000	2.80
ENERGY, FULL AND TAXES SUBTOTAL		43.84
TOTAL AMOUNT DUE		42.14

PANAMA CITY OFFICE LOCATED AT - 301 MAPLE AVENUE
OCALA OFFICE LOCATED AT - 316 SW 33RD AVENUE

RETURN TO

West Florida Natural Gas Co.
P O BOX 1460
PANAMA CITY FL 32402-1460

2/20/95	69.28
LATE FEE	PAST DUE
.00	.00
	TOTAL
	69.28

[redacted] 3221P 1250

BILLING ADDRESS

[redacted]

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PANAMA CITY
301
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FOR INFORMATION CALL 8726100

ACCOUNT NUMBER	NAME AND SERVICE ADDRESS				BILLING DATE
[redacted]	[redacted]				1/31/95
PAST DUE DATE 2/20/95					NEXT SCHEDULED READING DATE 2/05/95
TOTAL AMOUNT DUE 69.28	METER NUMBER [redacted]	SERVICE PERIOD FROM 12/02	TO 1/04	CODE	METER READINGS PRESENT 4860 / PREVIOUS 4778

CCF USED	BTU FACTOR	THERMS USED	AVER DAILY USE CURR YEAR	AVER DAILY USE LAST YEAR		
82	1.05800	86.8	2.6	4.5	0011-1250 RS1 PC	00

GAS BASIC CHARGE	7.00
ENERGY CHARGE 86.8 THERMS @ .36978	32.10
WEATHER NORMALIZATION	.72
COST OF GAS CHARGES 86.8 THERMS @ .25113	21.80
FRANCHISE TAX - PANAMA CITY 61.62 @ .05000	3.08
UTILITY TAX - PANAMA CITY 45.77 @ .10000	4.58
ENERGY, FUEL AND TAXES SUBTOTAL	68.56
TOTAL AMOUNT DUE	69.28

PANAMA CITY OFFICE LOCATED AT - 301 MAPLE AVENUE
OCALA OFFICE LOCATED AT - 316 SW 33RD AVENUE

RETURN TO

P O BOX 1460
PANAMA CITY FL 32402-1460

2/20/95	26.13
.00	.00

TOTAL 26.13

[redacted] 5333P 2020

BILLING ADDRESS

[redacted]

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SERVING COMPANY

PANAMA CITY
301
872-6100

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WHEN PAYING IN PERSON
FOR INFORMATION CALL 8726100

ACCOUNT NUMBER	NAME AND SERVICE ADDRESS				BILLING DATE
[redacted]	[redacted]				1/31/95
PAST DUE DATE 2/20/95					NEXT SCHEDULED READING DATE 2/12/95
TOTAL AMOUNT DUE 26.13	METER NUMBER [redacted]	SERVICE PERIOD FROM 12/09	TO 1/11	CODE	METER READINGS PRESENT 3689 / PREVIOUS 3663

CCF USED	STU FACTOR	THERMS USED	AVER DAILY USE CURR YEAR	AVER DAILY USE LAST YEAR		
26	1.05800	27.5	.9	.9	0031-2020 RS1 PC	00

GAS BASIC CHARGE	7.00
ENERGY CHARGE 27.5 THERMS @ .36978	10.16
WEATHER NORMALIZATION	.91-
COST OF GAS CHARGES 27.5 THERMS @ .25113	6.91
FRANCHISE TAX - PANAMA CITY 23.16 @ .05000	1.16
UTILITY TAX - PANAMA CITY 18.13 @ .10000	1.81
ENERGY, FUEL AND TAXES SUBTOTAL	27.04
TOTAL AMOUNT DUE	26.13

PANAMA CITY OFFICE LOCATED AT - 301 MAPLE AVENUE
OCALA OFFICE LOCATED AT - 316 SW 33RD AVENUE

RETURN TO

[redacted]

P O BOX 1460
PANAMA CITY FL 32402-1460

2/20/95	26.13
.00	.00
	TOTAL
	26.13

[redacted] 5333P 2020

BILLING ADDRESS

[redacted]

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SERVING COMPANY

PANAMA CITY
301
872-6100

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FOR INFORMATION CALL 8726100

ACCOUNT NUMBER	NAME AND SERVICE ADDRESS				BILLING DATE
[redacted]	[redacted]				1/31/95
PAST DUE DATE 2/20/95					NEXT SCHEDULED READING DATE 2/12/95
TOTAL AMOUNT DUE	METER NUMBER	SERVICE PERIOD FROM	TO	CODE	METER READINGS PRESENT	PREVIOUS
26.13	[redacted]	12/09	1/11		3689	3663

CCF USED	BTU FACTOR	THERMS USED	AVER DAILY USE CURR YEAR	LAST YEAR		
26	1.05800	27.5	.9	.9	0031-2020 RS1 PC	00

GAS BASIC CHARGE	7.00
ENERGY CHARGE 27.5 THERMS @ .36978	10.16
WEATHER NORMALIZATION	.91-
COST OF GAS CHARGES 27.5 THERMS @ .25113	6.91
FRANCHISE TAX - PANAMA CITY 23.16 @ .05000	1.16
UTILITY TAX - PANAMA CITY 18.13 @ .10000	1.81
ENERGY, FUEL AND TAXES SUBTOTAL	27.04
TOTAL AMOUNT DUE	26.13

PANAMA CITY OFFICE LOCATED AT - 301 MAPLE AVENUE
OCALA OFFICE LOCATED AT - 316 SW 33RD AVENUE

RETURN TO

West Florida Natural Gas Co.
P O BOX 1460
PANAMA CITY FL 32402-1460

2/20/95	70.76
LATE FEE	PAST DUE
.00	.00
	TOTAL
	70.76

[redacted] 4254P 0250

BILLING ADDRESS

[redacted]

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SERVING COMPANY

PANAMA CITY
301
872-6100

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PLEASE BRING ENTIRE BILL
WHEN PAYING IN PERSON
FOR INFORMATION CALL 8726100

ACCOUNT NUMBER	NAME AND SERVICE ADDRESS				BILLING DATE
[redacted]	[redacted]				1/31/95
PAST DUE DATE 2/20/95					NEXT SCHEDULED READING DATE 2/05/95
TOTAL AMOUNT DUE	METER NUMBER	SERVICE PERIOD FROM	TO	CODE	METER READINGS PRESENT	PREVIOUS
70.76	[redacted]	12/02	1/04		7761	7677
CCF USED / BTU FACTOR	THERMS USED	AVER DAILY USE CURR YEAR	LAST YEAR			
84 1.05300	88.9	2.7	4.2	0009-0250 RS1 PC		00

GAS BASIC CHARGE		7.00
ENERGY CHARGE	88.9 THERMS @ .36978	32.87
WEATHER NORMALIZATION		.74
COST OF GAS CHARGES	88.9 THERMS @ .25113	22.33
FRANCHISE TAX - PANAMA CITY	62.94 @ .05000	3.15
UTILITY TAX - PANAMA CITY	46.70 @ .10000	4.67
ENERGY, FUEL AND TAXES SUBTOTAL		70.02
TOTAL AMOUNT DUE		70.76

PANAMA CITY OFFICE LOCATED AT - 301 MAPLE AVENUE
OCALA OFFICE LOCATED AT - 316 SW 33RD AVENUE