

National Fuel Gas Distribution Corporation Pennsylvania Division Gas Transportation Operating Procedures Manual

August 1, 20182019

TABLE OF CONTENTS

			PAGE
A.	INTRODU	CTION	A-1
	1.	Brief Description of Manual Contents	A-1
	2.	Disclaimers	A-1
	3.	Manual Update Procedure	A-1
D			D 1
В.		V OF COMPANY	B-1
	1.	Company Profile	B-1
	2.	Table of Organization	B-2
	3.	Gas Operations Organization	B-2
	4.	Transportation Customer and Marketer Support Personnel/Services	B-2
	5.	Territory	B-3
C.	GENERAL	RULES AND GAS DELIVERY MANAGEMENT PROCEDURES	C-1
	1.	Nominations	C-1
	2.	Nomination Timeline	C-1
	3.	Intraday Nominations	C-2
	4.	City Gate Receipt Points	C-2
	5.	Sources of Gas Supply	C-2
	6.	Natural Gas Supplier Licensing	C-2
	7.	Customer Classification	C-2
-			
D.		VERY MANAGEMENT PROCEDURES FOR SMALL AGGREGATI	
SUPP	PLIER (SATS	Enrollment	D-1 D-1
	1. 2.		D-1 D-2
	2. 3.	Historical and Customer Data Information Requests	D-2 D-2
	5. 4.	Daily Delivery Quantities (DDQ) Upstream Capacity Calculation	D-2 D-3
	4. 5.	Imbalance Resolution	D-3 D-9
	5. 6.	Storage Procedures	D- 12 13
	0. 7.	Billing Service	D- <u>1215</u> D-15
	7. 8.	Dual Bill Option	D-13 D-18
	8. 9.	SATS Supplier Application Process	D-18
). 10.	Supplier Exit from Market/Inactive SATS Closure	D-18
	10.	Supplier Billing	D-19
		suffice 2 mile	2 17
E.	GAS DELI	VERY MANAGEMENT PROCEDURES FOR DAILY METERED	
		TRANSPORATION (DMT) SERVICE	E-1
	1.	Initiation of Transportation Service	E-1
	2.	Enrollment	E-1
	3.	Daily Delivery Quantities (DDQ) and Imbalance Responsibility	E-1
	4.	Telemetering	E-1
	5.	Overdelivery and Underdelivery Resolution	E-2
F.	GAS DEL I	VERY MANAGEMENT PROCEDURES FOR MONTHLY METEREI	ONATURAL GAS
		IGS) SERVICE	F-1
5011	1.	MMNGS Supplier Application Process	F-1
	2.	MMNGS Groups/TSS Pools	F-1
	3.	Enrollment	F- <u>+2</u>
	<i>4</i> .	Daily Delivery Quantities (DDQ)	F-2
	5.	City Gate Delivery Requirements	F-4
	<i>6</i> .	Daily City Gate Imbalance Charges	F-4
	7.	Month-End Burner Tip Imbalance Reconciliation	F-5
	8.	Imbalance Nominations	F-5
	9.	Supplier Exit from Market/Inactive MMNGS Closure	F-5
	10.	Upstream Capacity Verification	F-6

I

1

l

1

TABLE OF CONTENTS - Continued

G.	PRODUCTI	ON POOL OPERATOR PROCEDURES	G-1
	1.	General	G-1
	2.	Setup Procedures & Parameters	G-1
	3.	Production Pool Excess Imbalances	G-2
	4.	Receipt Facility Measurement	G-3
	5.	Gas Quality: BTU Content	G-3
	6.	Gas Quality: Water Vapor Content	G-4
	7.	Production Retest Notification & Fees	G-4
	<u>8.</u>	Renewable Natural Gas	G-5
	<u>9.</u>	Renewable Natural Gas - Pre-Interconnection Testing	<u>G-6</u>
	<u>10.</u>	Renewable Natural Gas – RNG Periodic Testing	G-7
	<u>11.</u>	Renewable Natural Gas – RNG Interconnect Shut-Off and Restart Procedures	G-7
	<u>12.</u>	Renewable Natural Gas – RNG Testing Procedures	G-8
	<u>13.</u>	Renewable Natural Gas - Continuous Monitoring of Upgrading Process Integrity	<u>G-9</u>
			TT 1
H.		CATIONS PROTOCOLS	H-1
	1.	Maintenance of NGS Contact Person Information	H-1
	2.	Distribution Contact Person Information	H-1
	3.	Distribution Website	H-2
	4.	Electronic Data Interchange	H-3
	5.	Distribution Electronic Bulletin Board	H-4
	6.	Operational Teleconferences	H-4
	7.	Regular Meetings	H-4
I.	OPERATIO	NAL FLOW ORDERS (OFO) AND OTHER ORDERS/ALERTS	I-1
	1.	System Alerts	I-1
	2.	System Maintenance Orders	I-1
	3.	Operational Flow Orders	I-2
	<i>4</i> .	Guidelines for Instituting an OFO	I-2
	5.	OFOs Applicable to MMNGS Service	I-2
	6.	OFOs Applicable to DMT Service	I-3
	7.	OFOs Applicable to SATS Service	I-3
J.	SUDDI EME	ENTAL CREDITWORTHINESS CRITERIA	J-1
J.			J-1 J-1
	1. 2.	Applicability Supplier/Guarantors	J-1 J-1
		11	
	3.	Direct Customers	J-2
	4.	Major Change in Risk	J-2
	5.	Security Instruments	J-2
APPE	ENDICES		

FORMS & NOTIFICATIONS	
NFGDC Upstream Agency Consent Form	FSN-1
NFGDC Supplier Acknowledgement Form	FSN-2
Market Pool/Production Pool Request Form	FSN-3
System-Wide Supplier Choice Application (for SATS Service)	FSN-5
Monthly Metered Natural Gas Supplier Application and Credit Application	FSN-8
Customer Consent Form	FSN-11
Customer Consent to a Change of NGS Notification - Examples	FSN-12
Small Aggregation Transportation Supplier Gas Supply Affidavit	FSN-14
Utility Account Reclassification Certification Form – Residential to Commercial	FSN-15
Utility Account Reclassification Certification Form – Commercial to Residential	FSN-16

TABLE OF CONTENTS - Continued

AC DE	ACR-1 DEF-1	
No	n-EDI DATA EXCHANGE PROTOCOLS	DEP-1
ST	ANDARD-FORM AGREEMENTS	
1.	Producer Interconnection Agreement	SFA-1
2.	DMT Transportation Service Agreement	SFA- 15<u>16</u>
3.	Monthly Metered Natural Gas Supplier Service Agreement	SFA- 19 20
4.	Small Aggregation Transportation Supplier Service Agreement	SFA- 25 26
5.	Billing Service Agreement for Consolidated Billing Service	SFA- 36<u>37</u>
6.	Billing Service Agreement for Consolidated Billing Service - Affidavit	SFA- <mark>54</mark> 55
7.	National Fuel System Administrator Security Process Agency Agreement	SFA- 57<u>56</u>
<u>8.</u>	Renewable Natural Gas Interconnection Agreement	SFA-59
9.	Data Security Agreement	SFA-80

A. <u>INTRODUCTION</u>

1. Brief Description of Manual Contents

This Gas Transportation Operating Procedures Manual ("GTOP" or "Manual") or Operational Procedures Manual identifies the procedures, protocols and business practices for transportation service on the National Fuel Gas Distribution Corporation ("Company", "NFGDC" or "Distribution")¹ system. Included will be Communications Protocols to be used by Distribution, its customers and Natural Gas Suppliers (NGS) providing gas service to transportation customers. Within this manual, the terms "Marketer", "Aggregator", "Shipper", "Supplier" and "Agent" will be used from time to time. In general, these terms are equivalent to NGS and could be used interchangeably.

The terms "Direct Customer", "End User" and "Customer" generally refer to end user transportation customers, who may or may not nominate their own gas supplies for transportation. "Stand-Alone Transporter" is another term that historically has been used to describe an end user transportation customer. In practice, the most frequent gas supply/transportation arrangement consists of a Marketer/Agent (NGS) placing nominations for a pool of end user transportation customers. Additionally, the terms "Production Pool Agent" and "Production Pool Operator" describe an entity that aggregates individual production meters into a pool for nomination purposes.

Within the context of Distribution's aggregation program, an NGS may also be referred to as an "Aggregator", "Shipper" and/or "Supplier". The overlapping use of these terms or any of the above terms is not intended to create confusion but is more of recognition of terms commonly used in past and current practice. Prospectively, Distribution will strive to incorporate industry standard terminology. Regrettably, this transition will probably lead to some confusion from time to time. Parties should contact Distribution whenever terminology needs to be clarified.

Regardless of an individual party's role, all entities involved in the transportation process should have the critical information and data necessary to fulfill their respective responsibilities and to minimize errors. Transportation service is available to all customers in Distribution's service territory. Because of the growth in transportation volumes over the past few years, Distribution, its transportation customers, and NGSs have new expectations and responsibilities and good communications are increasingly important.

Throughout this manual there will be references to Distribution's Website, for which the URL is:

http://nationalfuelgas.com/marketers/default.aspx

Most selections will be no more than a few mouse clicks from the above link.

This manual is not intended for residential or small commercial customers. Information is available to customers via the Distribution Supplier Choice phone number (800) 595-7510 as well as on the Distribution website at:

http://nationalfuelgas.com/utility.aspx

Additional customer contact information and phone numbers are also available on the website at:

http://nationalfuelgas.com/ForBusiness/pa/choosing_a_supplier.aspx

2. Disclaimers

Those obtaining copies of this manual from the internet are responsible for the maintenance and monitoring of any changes. Notices of changes will be placed on the internet for convenience. Distribution assumes no responsibility should the manual holder fail to download notices in a timely manner.

Procedures contained in this manual not set forth in Distribution's tariff are subject to change upon thirty (30) days' notice. If there are inconsistencies between any procedures contained in this manual and Distribution's tariff, the tariff shall control.

3. Manual Update Procedure

Updates to the Manual are distributed, via email, to the active Natural Gas Suppliers on Distribution's system, the state agencies involved in Distribution Restructuring (Docket No. R-00994785) and any other parties that identify themselves as interested parties. The GTOP is also posted on Distribution's website (http://nationalfuelgas.com/marketers/New_Format/PaManual.aspx). Updates are posted to this site in both clean and redlined format. Additionally, a posting summarizing the changes contained within the update, and the effective date for the changes is posted on this site. Parties right to protest changes proposed to the Manual if the changes are in violation of Distribution's tariff or the Natural Gas Choice and Competition Act, 66 Pa. C.S.Ch.22.

¹ The terms Company, Distribution and NFGDC should be read as interchangeable as referenced within the GTOP, including the contracts included in the GTOP Appendices.

B. <u>OVERVIEW OF THE COMPANY</u>

1. Company Profile

• Corporate

National Fuel Gas Company (NYSE: NFG), incorporated in 1902, is a diversified energy company with its headquarters in Buffalo, New York. NFG's assets are distributed among five business segments: Exploration and Production, Pipeline and Storage, Utility, Energy Marketing and Gathering.

• Exploration and Production

Seneca Resources Corporation explores for, develops and purchases natural gas and oil reserves in California and Appalachia, including the Marcellus Shale.

• Pipeline and Storage

National Fuel Gas Supply Corporation ("NFGSC") provides interstate natural gas transmission and storage for affiliated and non-affiliated companies through an integrated gas pipeline and storage system that covers nearly 2,300 miles from southwestern Pennsylvania to the New York-Canadian border at the Niagara River.

Empire Pipeline provides interstate natural gas transmission for affiliated and non-affiliated companies, including large industrial customers, utilities and power producers in New York, through a gas pipeline system that extends throughout Western and Central New York, over 245 miles from the New York-Canadian border at the Niagara River to interconnections with the Millennium Pipeline near Corning, New York and Marcellus Shale producers in North-Central Pennsylvania and east to the Syracuse, NY area.

• Utility

Distribution sells or transports natural gas to over 740,000 customers through a local distribution system located in western New York and northwestern Pennsylvania. The major areas served include Buffalo, Niagara Falls and Jamestown in New York, and Erie and Sharon in Pennsylvania.

• Energy Marketing

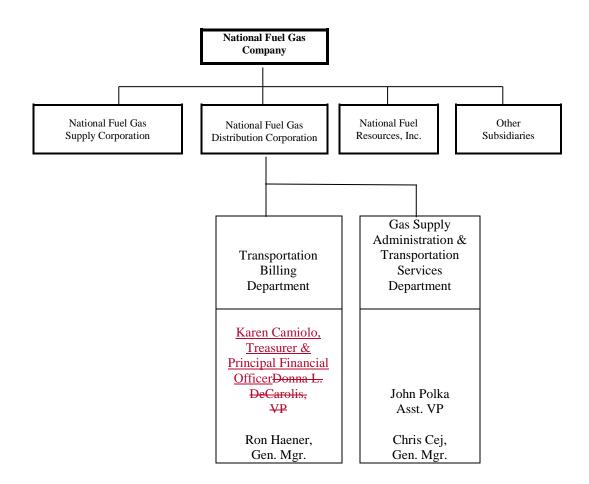
National Fuel Resources, Inc. is a natural gas marketer and licensed Natural Gas Supplier that provides natural gas to industrial, commercial, public authority and residential customers throughout New York and Pennsylvania.

Gathering

NFG's business segments include *National Fuel Gas Midstream Corporation*, a subsidiary formed to build, own and operate gas processing and pipeline gathering facilities in the Appalachian region.

2. Table of Organization

For purposes of this GTOP, Distribution's corporate organizational chart is as follows:



3. Gas Operations Organization

The Gas Supply Administration Department manages Distribution's gas planning, purchase, upstream asset and system dispatch functions. The Asst. Vice President with responsibility over Gas Supply Administration is John Polka. Questions concerning upstream capacity are handled by Gas Supply Administration and should be directed to Ken McAvoy at (716) 857-7960 or McAvoyK@natfuel.com . Supplier communications relating to operations, however, should be directed to Joanne Maciok, as more fully described below.

4. Transportation Customer and Marketer Support Personnel/Services

The "**Transportation Services Department**" is Distribution's "one-stop" service organization to provide information and support to business parties involved with various aspects of transportation.

The following are the phone numbers and e-mail addresses of the persons to whom questions may be directed:

Types of Questions	Person	Phone Number	<u>e-mail Address</u>
Billing & Meter Reading	TSD Billing	(716) 857-7432	TSD-Billing@natfuel.com
Nominations, Gas Scheduling & Operations	Dan Czechowicz	(716) 857-6917	CzechowiczD@natfuel.com

Marketer Relations & General Issues

Joanne Maciok

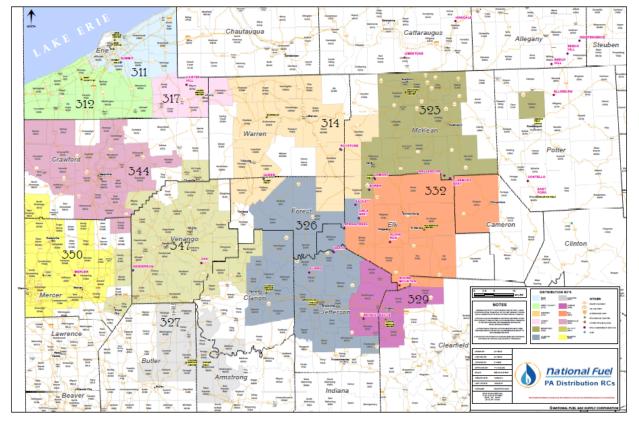
(716) 857-7670

MaciokJ@natfuel.com

The general phone number for the Transportation Services Department is (716) 857-7432.

The Transportation Services Department is primarily intended to deal with Pool Operators, Agents, NGSs and Direct Customers (an end user transportation customer that acts as its own supplier). Most transportation customers will interface with Distribution in the same manner as they did when they were sales customers. Residential and small commercial customers should continue their interaction with the Distribution Consumer Business Call Centers. For questions concerning Gas Service or Billing Inquiries, residential and small commercial customers may contact Distribution at (800) 365-3234. Likewise, larger transportation customers should interface with Distribution through their Energy Services Department representative.

5. Territory



C. <u>GENERAL RULES AND GAS DELIVERY MANAGEMENT PROCEDURES</u>

1. Nominations

Distribution utilizes a pathed nomination model with a central delivery point (CDP). Transportation to end-users takes place on an Mcf basis. The "Gas In" nomination is used to nominate gas from the National Fuel Gas Supply Corporation (NFGSC) city gate or Local Production Pools to the CDP. NFGSC city gate receipts are nominated on a Dth basis and converted to Mcf using a monthly BTU factor based upon the actual city gate BTU, lagged by two months. The BTU factors are posted on the Distribution Website. A shrinkage factor is also applied to the volumes on the Gas In nomination. Production Pools receipts are nominated in terms of Mcf or for those who think in terms of energy, a BTU of 1000 is presumed for conversion purposes.

The "Gas Out" nomination is used by Daily Metered Transportation (DMT) Market Pool operators to transport gas from the central delivery point to each customer's burner tip. Suppliers utilizing Monthly Metered Natural Gas Supplier Service (MMNGS) and/or Small Aggregation Transportation Supplier Service (SATS) do not directly nominate to individual burner tips because a nomination to the aggregation of all burner tips in the aggregation pool is implicit within the aggregation service.

Marketers and Direct Customers (or their agents) place nominations utilizing Distribution's Internet-based Transportation Scheduling System (TSS). Distribution provides on-site nominations coverage from 7:30 A.M. to 5:00 P.M. on normal business days. Off-site after-hours and weekend nomination coverage is also available by leaving a message on the Help Desk phone (716) 857-7232. The call will be returned by an on-call analyst.

For both DMT and MMT service, customers should communicate projected consumption information to their suppliers so that gas is nominated on a Gas In-Gas Out basis. The tolerances provided on both services do not imply an absolute right to consume gas without delivering gas into the system nor to deliver gas into the system without any consumption.

2. Nomination Timeline (All times listed are Eastern Clock Time)

TIMELY NOMINATION

Regular nomination to flow beginning the next gas day, placed by 2:00 PM to become effective at 10:00 AM on the next calendar day.

EVENING NOMINATION

Intraday nomination to flow beginning the next gas day, placed by 7:00 PM to become effective at 10:00 AM on the next calendar day.

INTRADAY 1 NOMINATION

Intraday nomination to adjust flow for the current gas day, placed by 11:00 AM to become effective at 3:00 PM on the same calendar day.

INTRADAY 2 NOMINATION

Intraday nomination to adjust flow for the current gas day, placed by 3:30 PM to become effective at 7:00 PM on the same calendar day.

INTRADAY 3 NOMINATION

Intraday nomination to adjust flow for the current gas day, placed by 8:00 PM to become effective at 11:00 PM on the same calendar day.

Note: In general, scheduled intraday quantities will be calculated based upon the effective flow time for the intraday nomination and the hourly flow of gas already scheduled for the same gas day up to the effective flow time (commonly referred to as the "Elapsed Prorated

Scheduled Quantity" or "EPSQ"), as well as the information exchanged with the confirming party. For example, an Intraday 1 nomination to decrease flow cannot be scheduled for a total daily quantity less than what has been scheduled to flow for the first five (5) hours of the day. With the addition of the Intraday 3 cycle, effective flow start times from the Intraday 1 and Intraday 2 cycles increase the complexity of the calculations. See the Market Pool Manual on the NFGDC website for Intraday nomination scheduling examples.

3. Intraday Nominations

Distribution accepts intraday "Gas In" and "Gas Out" nominations for MMNGS, DMT and SATS pools. Primarily, intraday nominations should be made to reestablish supplies to Distribution pools lost due to upstream cuts.

Nominating parties are reminded that timely nominations on normal business days provide the best opportunity to schedule gas. Additional details regarding intraday nominations are available in the Market Pool Manual located on the Distribution website.

4. City Gate Receipt Points

Distribution is directly connected to several interstate pipelines via several interconnections with NFGSC, itself an interstate pipeline. There are five designated receipt points from NFGSC into Distribution in Pennsylvania:

Point Name	Description
1. NFGDC – PA	(GENERAL CITY GATE)
2. NFGDC – ECTL	(ERIE CONTROL)
3. NFGDC – CAP	(WHEATLAND LOOP)
4. NFGDC – MERC	(MERCER STATION)
5. NFGDC – IR	(ISLAND RUN)

5. Sources of Gas Supply

When NFGSC delivers gas at the city gate for any transportation customer, the origin of the gas may be Pennsylvania. In the daily allocation process between NFGSC and Distribution, NFGSC specifies the volumes of gas delivered to MMNGS Groups on Distribution as either 1) Interstate or 2) Intrastate – PA production.

When Distribution receives gas directly into its system, the origin is by definition Intrastate. Up to 105% of a daily metered production pool's historical consumption may be scheduled to customers under any transportation service (see Section G for further details).

6. Natural Gas Supplier Licensing

An NGS must be licensed by the Pennsylvania Public Utility Commission ("PA PUC" or "Commission") to participate in Distribution's Pennsylvania transportation program unless it meets the exemption requirements provided for in the Natural Gas Competition Act.

7. Customer Classification

Distribution relies upon a Customer's service classification to determine the Rate Schedules under which a customer may receive sales and/or transportation service. Additionally, the service classification impacts the application of sales tax as well as a customer's priority during a Gas Emergency. For accounts with non-separately metered residential and commercial consumption, Distribution employs a 50% rule; the account will be classified based upon the predominant % of square footage (excluding common areas) associated with each type of consumption.

Distribution obtains the information to classify accounts at the time of service application. To the extent this information has become outdated, Customers should use the Reclassification Certification forms (illustrative copies shown in Appendices of this GTOP) to request a change in classification. Additionally, Customers that can elect their service classification (as described in the tariff) should use this form to request a change in classification. If accepted by Distribution, the account reclassification will become effective at the beginning of the customer's next billing cycle.

The reclassification forms (in fillable PDF format) will be posted on Distribution's web site.

D. <u>GAS DELIVERY MANAGEMENT PROCEDURES FOR SMALL AGGREGATION</u> <u>TRANSPORTATION SUPPLIER (SATS) SERVICE</u>

1. Enrollment

The enrollment process for Aggregation Customers is controlled by the SATS tariff and applicable regulations. Suppliers should familiarize themselves with 52 Pa. Code §59.91 through §59.99 - STANDARDS FOR CHANGING A CUSTOMER'S NATURAL GAS SUPPLIER. The general enrollment process may be summarized as follows. Suppliers may enroll customers for service commencing with the SATC Customer's meter reading in any month. Service to the SATC Customer shall begin at the start of the customer's billing cycle, after enrollment confirmation has been provided. Enrollment shall occur electronically, however, each SATS Supplier will be obligated to keep on file written or oral evidence of each customer's enrollment with that Supplier, which evidence shall be available for Distribution review at any time, upon 24 hours' notice. Distribution will provide the SATC Customer with a letter confirming enrollment. If the SATC Customer notifies Distribution within five (5) days of issuance of the confirmation letter that it does not wish to be served by the SATS Supplier, the enrollment for the SATC Customer will be rescinded.

Procedures are in place to ensure residential SATC Customers receive adequate prior notice of termination of gas supply services. The procedures must provide that notifications be sent by the SATS Supplier to the residential SATC Customer(s) and to Distribution at least 15 days before discontinuation of supply service to allow residential SATC Customers the opportunity to pay the overdue bill. Customers will only be transferred from a SATS Supplier to Distribution upon the "Control Date" for such customer, as such is established by Distribution.

Once a Supplier enrolls a Customer during a billing cycle, Distribution will respond via EDI to subsequent enrollment requests from other Suppliers with a message indicating the Customer already has a pending enrollment with another Supplier. Consistent with Pennsylvania's last-in enrollment conventions, the pending enrollment may be cancelled and replaced with a pending enrollment with a subsequent Supplier. Additionally, the last-in enrollment process may be used up to three days before the Control Date in cases where the Customer's current Supplier wishes to continue serving the Customer. Following the Control Date, Suppliers should follow the usual enrollment procedures to create a pending enrollment for the following billing cycle.

Before submitting a "Last-In" Enrollment, Distribution recommends that the requesting Supplier contact the Customer, explain the circumstances and affirm that the Customer wishes to be served by the requesting Supplier. If a Customer does not wish to be served by the requesting Supplier, under §59.97 - Customer Dispute Procedures, the Customer may dispute the last-in enrollment. Potentially, the Customer could allege "slamming" which would lead to an investigation under Chapter 56 dispute procedures. Ultimately, if a Customer files a complaint with the PUC and the Supplier is found to have engaged in slamming, under Pennsylvania's "zero-tolerance" policy for slamming, the Supplier could be fined and/or lose its Natural Gas Supplier License.

For SATS Suppliers exiting the program and who intend to no longer serve SATC Customers, in addition to those protections noted above, such Exiting Suppliers shall provide written notice to its SATC Customers and Distribution sixty (60) days before it exits. The notice shall include information regarding the SATC Customers' ability to choose another SATS Supplier, assurances service will be provided by Distribution and information regarding payment of their first bill.

Should an SATC Customer no longer wish to be served by its SATS Supplier, it may contact the Supplier who should then inform Distribution of the impending service discontinuation. Additionally, an SATS customer may directly contact Distribution Call Center to affect a discontinuance of service. In either case, the SATS Supplier will receive an electronic notification/confirmation from Distribution and the Customer will return to sales service at the start of the customer's next billing cycle. Finally, an SATC Customer may discontinue service with its current SATS Supplier by beginning service with a new SATS Supplier.

Electronic enrollment of customers, including requests to terminate service to an SATC customer, takes place via EDI. The SATS Supplier should contact the Transportation Services Billing Help Desk at (716) 857-7432 for training and orientation. The customer's nine-digit Contract Account Number is required to process enrollment transactions. Detailed technical documentation is available in Appendices of this GTOP. Suppliers should also check the secured section of the Distribution Website for the most recent updates to the technical documentation.

National Fuel Gas Distribution Corporation

In cases where an SATS Supplier wishes to enroll an applicant for service (i.e. a party that is not currently receiving gas service but has applied to do so) directly into the Supplier's pool, an EDI enrollment transaction should be used to establish an "Instant Connect". If submitted in advance of service initiation, the applicant to receive transportation service and NGS commodity service without first receiving service as a Distribution retail sales customer for at least one billing period.

Consistent with 52 Pa. Code § 111.14, Suppliers that engage in door-to-door marketing are required to provide Distribution with general, nonproprietary information about the door-to-door sales and marketing activity no later than the morning of the day that the sales and marketing activities begin. Distribution will use this information only for acquainting its customer service representatives with sales and marketing activity occurring in its service territory so that they may knowledgably address customer inquiries. Suppliers should provide their door-to-door plans via email to <u>TSD-Billing@natfuel.com</u>

2. Historical and Customer Data Information Requests

Requests for Historical and Customer Data Information are processed via EDI. The SATS Supplier must have permission from the customer to access such data. The customer's Contract Account Number is required to access information from a specific account. Customers have the right to restrict Supplier access to certain information.

SATS Suppliers should contact Transportation Services for training and orientation. Detailed technical documentation is available from the Distribution Website.

a. Eligible Customer List

Pursuant to the Pennsylvania Public Utility Commission's Final Order for Interim Guidelines For Natural Gas Distribution Company Eligible Customer Lists at Docket No. M-2012-2324075, the Company provides a list of utility customers eligible to shop for competitive natural gas supplies to licensed NGSs. The Eligible Customer List (ECL) information, which will be updated monthly, includes name, address, contract account number, consumption/usage data and other service related attributes.

ECL data format information is provided on the "Billing File Layouts and File Transfer Instructions" webpage at:

http://nationalfuelgas.com/marketers/tech_docs/markfile.aspx

The ECL will be accessible to NGSs as one of the Supplier / Customer Download Files under the Secure Transactions (password required) section of the Company's Services For Marketers, Producers & Suppliers web page. The password required to access the ECL is the same password used to access other Supplier / Customer Download Files.

3. Daily Delivery Quantities (DDQ)

The DDQ is the amount of gas supply required to be delivered by the SATS Supplier at the Distribution city gate by the customer or the customer's natural gas supplier. Distribution will determine, based upon each SATC Customer's historical load profile and/or estimates of consumption, an SATC aggregation group's projected normalized consumption for a given period; either monthly, weekly, or daily. Consumption estimates may be adjusted in response to meter readings, as available, weather forecasts and for the difference between actual weather and forecasted weather. Based upon this projected consumption, Distribution will determine each SATC customer's DDQ and, by summing all DDQs of the customers in the aggregation group, calculate the SATS Supplier's ADDQ. The resulting quantity may be adjusted for both prior period imbalance rollover and shrinkage and then converted to Dth at the city gate. ADDQ information shall be posted by Distribution through the TSS prior to the start of the month and by 10:00 AM each business day during the month, or through such other medium, as Distribution deems appropriate. Distribution provides detailed DDQ data files in the Secure Transactions section of the Services for Marketers, Producers and Suppliers area of Distribution's website.

A SATS Supplier must deliver at least 98% of its ADDQ or daily city gate underdelivery charges will be applied. There are no charges for daily City Gate overdeliveries of up to two (2) percent of the applicable ADDQ, however, any such overdeliveries in excess of two (2) percent of the applicable ADDQ may be rejected by the Company in its sole discretion.

If an NGS has specific knowledge that a customer or SATS group's projected consumption will be different than anticipated, it may request a change in the specified ADDQ. Such requests should be submitted via TSS prior to 1:30 PM, on the business day prior to the gas day the change is requested to take effect. In the event of an emergency situation where TSS is unavailable, such requests may be written up and submitted via email, to all three of the following: <u>MaciokJ@natfuel.com</u>, <u>CzechowiczD@natfuel.com</u>, <u>TSSsupport@natfuel.com</u>. The "DDQ/PDQ Email Change Request" form is available on the NFGDC website at:

http://nationalfuelgas.com/marketers/TSS/ManualsAndForms/DDQ_PDQChangeRequest.pdf

The request should specify the amount by which the ADDQ should be changed as well as provide justification for the change. Distribution shall not be liable for the difference between the projected consumption and the consumption determination by Distribution.

To the extent that Distribution requires that SATS Suppliers to meet ADDQ requirements utilizing specific segments of capacity and specific pipeline transfer points allocated through Tariff Rate Schedule SATS Sections C2, C3 and/or C4, it shall issue a System Alert. Please refer to the Operational Flow Orders (OFO) And Other Orders/Alerts section of this manual for any applicable operational restrictions.

4. Upstream Capacity Calculation

The following calculation is meant to serve as an illustration of how capacity is allocated for a given SATS aggregation group and how cost would be applied to such an allocation. While based upon a sampling of typical customer data, it by no means represents a guarantee of an actual allocation. Such allocation will depend upon the actual customers in an aggregation group.

The capacity allocation is based upon a peak day calculation. The most recent consumption history for a group of customers is normalized. This means that actual weather is factored out of the consumption quantities and replaced with normal weather resulting in normalized consumption. The *Monthly Base Load* [D] is determined by averaging July and August consumption. The *Daily Base Load* [E] is determined by multiplying the *Monthly Base Load* by 5 months to determine the *Winter Base Load* [G] and then dividing by 151 days. The *Winter Heat Load* [H] is determined by subtracting the *Winter Base Load* [G] from the *Winter Load* [F] consumption. The *Heat Load per degree-day* factor [J] is then calculated dividing the winter heat load by the number of degree-days that occur during the normal winter [I].

The *Extreme Peak Day Requirement* [K] is calculated by multiplying the number of degree days on extreme peak day as identified in Distribution's annual section 1307F proceeding times the heat load per degree day factor and adding it to the daily base load. The *Supplier Peak Day Requirement* [L] is calculated by multiplying the *Extreme Peak Day* degree-day total less 12 degree days times the *Heat Load per degree-day* factor and adding it to the *Daily Base Load*. These quantities are grossed up by the Distribution shrinkage rate and converted to dekatherms in order to calculate the city gate requirement. The difference between the two quantities will be supplied through a *Peak Balancing Service* [R] provided by Distribution.

For the *Supplier Peak Day Requirement*, 54% of the peak day requirement is met through EFT deliveries of ESS withdrawals. The NFGSC EFT and ESS services are provided to suppliers through the capacity release process. 46% of peak day is met by NGS deliveries into the upstream (of NFGSC) capacity release delivered through additional Company released EFT capacity.

The ESS Maximum Storage Quantity (MSQ) [V] is determined by multiplying Maximum Daily Withdrawal Quantity (MDWQ) which is equal to the peak day ESS/EFT delivery quantity by 46.678. The Maximum Daily Injection Quantity (MDIQ) is equal to the storage capacity divided by 170. The Supplier's Upstream Capacity Requirement ("UCR") or Released Transmission Capacity delivery quantity into NFGSC [Y] is determined by grossing up the Upstream of NFGSC city gate requirement [T] by NFGSC shrinkage.

An example applying rates applied to the capacity quantity calculations is displayed below. The capacity calculations are shown on the following page:

8, 471<u>575</u>	Dth
\$3. <mark>8647</mark> 8501	\$/Dth
\$ 392<u>396</u>,854<u>175</u>.48<u>29</u>	\$
4, 574-<u>716</u>	Dth
\$2. 595 4 <u>6061</u>	\$/Dth
\$ <u>142147,456484.3241</u>	\$
213 220, 505 133	Dth
\$0. 0403<u>0404</u>	\$/Dth
\$ 103<u>106</u>,251<u>720</u>.02<u>48</u>	\$
3, 928 - <u>890</u>	Dth
\$ <u>87</u> . 9412 . <u>6443</u>	\$/Dth
\$4 21<u>356</u>,4<u>52835</u>.4<u>0-92</u>	\$
\$1, 060<u>007</u>,014<u>216</u>.2210	\$
	\$3.86478501 \$392396,854175.4829 4,574.716 \$2.59546061 \$142147,456484.3241 213220,505-133 \$0.04030404 \$103106,251720.0248 3,928-890 \$87.9412-6443 \$421356,452835.40-92

UPSTREAM CAPACITY COST ANALYSIS based upon rates effective <u>8</u>2/1/20189

² This rate equals the weighted average demand cost of upstream capacity and generally, may change each August 1st as a result of an Order on the Company's Annual 1307(f) filing or as a result of a quarterly filing.

Capacity Analysis SATS Customer

Normal DD Normalized Load	Jan 117(<u>165810</u> 161228		Mar 911 4 <u>186</u> 122381	Apr 543 <u>94711</u> 82412		Jun 61 <u>40455</u> 21307		Aug 1 <u>35375</u> 1646		Oct 379 <u>79329</u> 59057		Dec 1012 <u>149833</u> 138631	Total 6147 <u>1108304</u> 9 2877 1
Monthly Base Load	(Average of July Daily Base Lo			[G/151]	16357<u>34805</u> 542<u>1152</u>	D E	Mcf/Month Mcf/Day		17158<u>36580</u> 569<u>1211</u>		Dth/Month Dth/Day		
Normalized Winter I		Jan, Feb, Mar, Nov &	Dec)		660784 <u>712507</u>	F	Mcf		693162<u>748845</u>		Dth		
	Winter Base L Winter Heat L			[D*5] [F-G]	81785174025 578999 <u>538482</u>	G H	Mcf Mcf		<u>85792182900</u> 607370 <u>565945</u>		Dth Dth		
Peak Day Requireme	Winter DD (Ja	n, Feb, Mar, Nov & I	Dec)		4773	I							
	Heat Load/DD			[H/I]	121<u>112</u>.38	J	Mcf/DD		127<u>119</u>		Dth/DD		
	Extreme Peak		74	****	9518 9500.7 <u>6</u>	К	Mcf		9985		Dth		
	Supplier Peak	Req. Storage Requirement	62	**** [K-L]	80638146.07 14551353.79	L M	Mcf Mcf	[M*O]	8458<u>8562</u> 1527 1423	Q	Dth Dth		
	Extreme Peak	Storage Requirement		[K -L]	1433<u>1333</u>.79	IVI	WICI	[M*0]	1327<u>1423</u>	Q	Dth		
	NFGDC Retai BTU Factor	nage			0.15% 1. 049	N O			Peak Balancing S	arvice			
	BTO Pactor				<u>051</u>	0			Feak Balancing 3	Sei vice			
	City Gate Req	uirement		[K*O/(1-N)]	10000	Р	Dth	[Q/(1-N)]	1529<u>1425</u>	R	Dth		
Capacity Requireme	nts at City Gate												
	C.1.	Released ESS/EFT	· • • •	NEGGG		54<u>55</u>%	4574 <u>4716</u>	S	Dth				
	C.2. C.3.	Released Transmiss Upstream Co. Retai		of NFGSC		46<u>45</u>% 0%	3897<u>3859</u> 0	T U(1)	Dth Dth				
	C.4.	SATS Supplier Prov				0%	0	U(2)	Dth				
						[P-R]	8471<u>8575</u>						
		Peak Balancing Ser	vice			[R]	<u>15291425</u> 10000		Dth				
C.1. Storage Capacit	C.1. Storage Capacity Assignment Calculation												
0 1		MSQ				[S*46.678]	213505220113	v	Dth				
		MDWQ				[S] [V/170]	4574 <u>4716</u>	W X	Dth Dth				
		MDIQ				[V/1/0]	1256<u>1295</u>	Λ	Dui				
Upstream Pipeline C	Upstream Pipeline Capacity Assignment into NFGSC												
	C.1. C.2.	Released ESS/EFT Released Transmiss	ion Unstream	of NEGSC		[T/.9921]	#N/A 3928 3890	Y	Dth				
	C.2. C.3.	Upstream Co. Retai		or mose		[U(1)/. 9921]	<u>3928<u>3890</u> 0</u>	Z(1)	Dth				
	C.4.	SATS Supplier Prov				[U(2)/. 9921]	0	Z(2)	Dth				

a. Upstream Capacity – Company Provided Capacity

Except where a Supplier provides its own capacity pursuant to the conditions set forth in Rate Schedule SATS of the Company's Tariff, extreme peak day requirements are met through a capacity release of the Company's pipeline capacity upstream of NFGSC and the release of associated EFT transportation capacity on NFGSC which is not included in transportation rates. All such capacity (the "Slice of the System") shall be released to SATS Suppliers, and SATS Suppliers shall take such released capacity, at the maximum rate under the pipeline's FERC gas tariff. The actual pipeline capacity path upstream of NFGSC to be released to the Supplier by the Company shall be designated by the Company from its available capacity. The Company will attempt to accommodate a Supplier's request for particular capacity on a first-come, first-served basis.

As an alternative to the above, the Company may designate an alternative capacity path(s) from its available capacity. The capacity release rate for the pipeline capacity path released to the Supplier shall be equal to the weighted average demand cost of upstream capacity ("Weighted Average Cost"), however, capacity released on NFGSC will be released at the maximum rate under NFGSC's FERC gas tariff.

The Company designates a capacity path on Tennessee Gas Pipeline with primary receipt points in Zone 0 and primary delivery points in Zone 4 as the alternate capacity path from southwestern gas supply basins into market area pipeline and storage capacity. Alternative paths may change from time-to-time, as operating conditions permit and as they are available or unavailable due to use by the Company to supply its retail sales customer or other SATS Suppliers to serve their SATC customers. The Company will post a listing of the alternative capacity path(s) designated, including the associated quantity of capacity, on its web site.

Whether the capacity released is under the Slice of the System option or a designated alternative capacity path option, all Suppliers will be in direct control of pipeline transmission and storage capacity; i.e. they will be customers of the pipeline via the FERC capacity mechanism with a slice of storage and a slice of transmission capacity.

Under either option, should a Supplier have a request for a specific receipt point(s), the Company will attempt to accommodate a Supplier's request for particular capacity on a first-come, first-served basis. Additionally, the Company will attempt to maintain the Supplier's capacity release path from month-to-month and year-to-year, based upon Supplier request and availability of the capacity requested.

In an effort to provide Suppliers with an opportunity to gain access to their requested receipt points for the following heating season, Suppliers may submit requests for a specific receipt point(s) and quantities by the close of Normal Business Hours on April 1st each year ("April 1 Requests"). Such requests should identify whether the Supplier requests the Slice of the System or Weighted Average Cost capacity option. Supplier requests should be submitted to Distribution's Gas Supply Administration Department, [contact: Ken McAvoy, (716) 857-7960, McAvoyK@natfuel.com]. Supplier access to specific receipt point(s) is subject to availability and amendment of Distribution's upstream contracts by the upstream pipeline(s). The following "first-come, first-served" procedures will apply:

- Allocation of receipt point capacity rights for the upcoming heating season will take place during the five business days following July 1st. Supplier requests submitted during Normal Business Hours on or between April 2nd and the June 30th deadline will be processed on a first-come, first-served basis (i.e. priority will be given to requests with the earlier calendar date), however, April 1 requests will have priority over requests submitted on or between April 2nd and June 30th.
- 2. Where a tie between two or more requests exists, priority will be given to Suppliers currently allocated the same point adjusted for the lesser of the UCR (for customers served as of July 1st) or the requested amount of capacity. Otherwise, available receipt point capacity will be allocated in proportion to the lesser of each Supplier's UCR or the requested amount of capacity. In all cases, to the extent a Supplier places a higher priority on other requested receipt points, the UCR request applicable to the contested point will be reduced accordingly.
- 3. Assignment of receipt point capacity at a given point does not guarantee that future incremental capacity will be made available to a Supplier at that point nor does it confer priority over another Supplier seeking

capacity at that point. For planning purposes, Distribution will not unreasonably reject any receipt point request that can reasonably be supported by load growth projected between the request submission date and November 1st; however, priority will be given to Suppliers with actual load requirements over those with projected load requirements.

In any month prior to November, Suppliers may request capacity at the point(s) to be allocated on November 1 to the extent it is available. Such requests will be allocated each month on a first-come, first-served basis based upon the Supplier's UCR calculated the month of the request. To the extent a Supplier places a higher priority on other requested receipt points, the UCR applicable to the point will be reduced accordingly. So long as the Supplier requests the same point and has sufficient customer requirements, the point allocation will roll from month-to-month except for November.

Suppliers and/or other parties may accept upstream capacity releases/assignments, i.e. act as Upstream Agents, for other SATS Suppliers. The SATS Supplier utilizing an Upstream Agent must submit an Upstream Agency Consent Form and Affidavit (see Appendices). Upstream Agents must provide Distribution with contact information, as necessary, for nomination, and other related purposes. Distribution may require Upstream Agents to provide a copy of a redacted contract with the Upstream Agent to demonstrate that the Upstream Agent is obligated to meet the SATS Supplier's load.

Distribution is not obligated to accept any party as an Upstream Agent if it is less creditworthy than the SATS Supplier(s) for whom such party intends to accept capacity releases/assignments. Acceptance of a party as an Upstream Agent is on a month-to-month basis and is contingent upon satisfaction of creditworthiness requirements and provision of any security.

When a Supplier elects to utilize an Upstream Agent to manage its upstream transportation and storage capacity, the Supplier remains ultimately responsible for meeting storage levels described herein and in the tariff. For example, when an Upstream Agent fails to deliver a Supplier's DDQ, it is as if the Supplier itself failed to meet the DDQ requirement.

b. Upstream Capacity – Supplier Provided Capacity

As a voluntary alternative to Company provided upstream capacity, a Supplier may seek to provide its own upstream capacity to meet its UCR subject to the conditions of the tariff and 66 Pa. C.S.§2204 (d)(5). To avoid creating stranded costs related to capacity held by the Company, Suppliers must coordinate their capacity planning process with the Company's process. At the beginning of each September, the Company will post notice on its web site of the quantity of any capacity terminations that will be occurring at the close of the upcoming winter period and prior to the beginning of the following winter period. Through this notice, the Company will issue a request for proposals to qualified Suppliers under the tariff to determine if the Company should terminate, renew, or replace such capacity, in whole or in part. In order to have its capacity considered, the Supplier must submit a proposal by the deadline specified in the notice, generally about a month after the date the notice was posted.

The quantity of Company upstream capacity that Suppliers may seek to replace is limited by the amount of noncritical capacity held by the Company. The posted notice will include a listing of capacity contracts, including the associated quantity of capacity that the Company determines to be of critical status.

The Company will terminate, not renew, or otherwise extend a proportionate share of the capacity contract if:

- (1) Suppliers demonstrate that they will provide comparable firm capacity to serve the Company's core customers,
- (2) The Suppliers agree to assign such comparable capacity at the contracted price to the Company upon Company request if such capacity is required to meet supply requirements of SATC Customers due to the termination of the SATS Supplier pursuant to the tariff or if the Supplier has reduced the level of delivery requirements from the previous periods requirements, and
- (3) The Commission approves such comparable capacity.

Comparable capacity must have firm rights for at least the seven (7) winter months (October through April), and such capacity must have primary delivery rights into available primary receipt rights on NFGSC held by the Company. Further, it must have firm capacity rights sufficient in volume and duration (with renewal rights) to serve the customers to be served by the SATS Supplier. Such capacity should also have primary receipt point(s) at points acceptable to Distribution, generally, industry recognized "liquid" trading points. If approved by the Commission, such Supplier capacity will be used to offset any Supplier requirements that would otherwise be satisfied by Company provided upstream capacity.

The Company will notify Suppliers if their proposals are feasible and/or otherwise generally acceptable to the Company by November 1st. Such notice will include non-binding projections of the quantity of Supplier provided capacity that might be accepted as well as any modifications necessary to align the Supplier's proposal with Company requirements.

Suppliers may propose capacity quantities in excess of their current SATC customer requirements. For planning purposes, Distribution will not unreasonably reject any receipt point request that can reasonably be supported by load growth projected between the request submission date and October 1st of the following winter period; however, priority will be given to Suppliers with actual load requirements over those with projected load requirements. When the Company ultimately determines the contracts and quantities to be filed with the Commission, the Company will only file the UCR calculated as of April 1st.

Proposed Supplier capacity must have primary delivery points into NFGSC that align with points where Distribution has primary EFT receipt capacity. If Suppliers propose alternate delivery points, Distribution will attempt, to the extent operationally feasible, to accommodate Supplier requests by seeking to transfer its primary EFT receipt point capacity to such points. Supplier requests will be processed on a first-come, first-served basis, i.e. priority will be given to requests with the earlier calendar date, however, requests submitted prior to February 1st will be treated as if submitted on February 1st.

Suppliers must indicate to Distribution by March 1st of the specific capacity they intend to use to satisfy their upstream requirements for the following October through April winter period. Suppliers are required to submit for approval by the March 1st deadline copies of upstream contracts³ indicating:

- Upstream pipeline
- Firm, non-recallable contract number
- Contract term that includes the seven (7) winter months (October April)
- Contract quantity maximum flow rate (Dth/day)
- Primary receipt point(s) at "liquid" points acceptable to Distribution
- Primary delivery point(s) at Distribution approved interconnects into EFT receipt capacity

On March 15th, the Company will notify Suppliers of accepted proposals and quantities to be proposed for April 1st filing. To the extent Suppliers proposed primary delivery point capacity in excess of corresponding available EFT receipt point capacity (after EFT primary receipt point changes, if any, are made), the following tie-breakers will guide the allocation of such capacity:

- First to Suppliers allocated the same receipt capacity at the conclusion of the previous seven (7) winter months adjusted to lesser of the Supplier's UCR as of April 1st or the requested amount of capacity.
- Second to Suppliers in proportion to the lesser of each quantity necessary to serve each Supplier's UCR as of April 1st or the requested amount of capacity.

In either case, to the extent a Supplier places a higher priority on other requested receipt points, the quantity requested at the contested receipt point will be reduced accordingly.

The Company will file the acceptable Supplier proposals, including the April 1st UCR quantities, with the Commission by April 1st. On the first day of the month following a Commission Order approving the Supplier

³ Suppliers may redact confidential information.

provided capacity, Supplier requirements that would otherwise be satisfied by Company provided upstream capacity will be offset by the Supplier provided capacity.

The table below identifies a general timeline and benchmarks:

Approximate Date	Action
September 1, Year 0	Company Posts Notice Requesting Comparable Capacity
	Proposals from Suppliers.
October 1, Year 0	Suppliers submit capacity proposals including the quantity to be provided.
November 1, Year 0	Company formally notifies Suppliers if their proposals are
	feasible or, if not, what modification(s) are necessary.
February 1, Year 1	Last date for Suppliers to submit feasible capacity requests for changes in Distribution's primary EFT receipt points to the Company.
March 1, Year 1	Suppliers submit contracts and/or evidence of option to contract to Company for review.
March 15, Year 1	Company notifies Suppliers of accepted proposals and quantities to be proposed for April 1 filing.
April 1, Year 1	Company submits filing to Commission identifying details of Supplier proposals, including applicable capacity quantities.
Prior to October 1, Year 1	Commission issues Order identifying which capacity is approved as an alternative to Company provided capacity. If doing so will not result in stranded costs for the Company, Distribution will either begin offsetting the quantity of Company provided capacity up to the amount of approved Supplier provided capacity for releases effective the 1 st of the next month.
October 1, Year 1	The Company begins offsetting the quantity of Company provided capacity up to the amount of approved Supplier provided capacity.

Suppliers approved to provide their own upstream capacity must submit a new proposal each year in order to keep their capacity active for the subsequent seven winter months. Generally, the quantity of capacity approved for a Supplier will carry forward from year to year, however, the quantity will be reduced if the quantity necessary to serve the Supplier's UCR as of April 1st is less than the amount approved from the Order on the previous year's April 1st quantity.

5. Imbalance Resolution

BURNER TIP IMBALANCES

Imbalances are calculated by subtracting the aggregated burner-tip consumption from the quantity of gas delivered after adjustment for line losses into an aggregation pool during a month. If gas delivered exceeds burner-tip consumption, then a surplus or "Surplus Imbalance" exists. The corresponding imbalance position is "long". If gas delivered is less than burner-tip consumption, then a deficit or "Deficiency Imbalance" exists. The corresponding imbalance is "short".

The Company will resolve month end burner tip imbalances through cash out as set forth in Rule 30 of the tariff based upon a pricing mechanism as set forth in Rule 29 of the tariff. These tariff sections are summarized below. Limited exceptions to the month end cash out mechanism are as follows:

- Where specified in the Company's tariff
- Company suspension of the cash-out mechanism

In reference to the last exception, the Company does not anticipate that it would routinely be implemented, if ever, and would not be undertaken or administered arbitrarily. The Company envisions that a suspension could occur in response to an industry event, man-made or natural, resulting in circumstances under which resolution of imbalances via cash-out would be detrimental to the integrity of the Company's system. For example, if an earthquake occurred damaging facilities that provide access to gas supply at Tennessee Gas Pipeline's Zone 4 200 Line pool, the Company might suspend the cash out mechanism if it would help to ensure that other gas supplies are delivered to serve customers. Should the cash out be suspended, the Company will post notice on its web site as soon as practicable and no later than the beginning of imbalance trading, and imbalances would be resolved through the rollover mechanism.

CASH OUT INDEX

The Daily Index price is SNL Natural Gas Index ("SNL") for Tennessee Gas Pipeline's Zone 4 200 Line pool plus associated variable transportation costs to Distribution's city gate for each Dth of gas cashed out. For non-business days when no price is published, the price from another day for which a price was published will be utilized, consistent with industry conventions.

The Average Monthly Index, as applicable to month end imbalances for all transportation services, will be the average of each day's Daily Index during the month.

CASH OUT PRICING MATRIX

To resolve a Surplus Imbalance, the Company will purchase a volume of gas from the Imbalance Holder to reduce the imbalance volume to zero ("Cash Out Purchase"). To resolve a Deficiency Imbalance, the Company will sell a volume of gas to the Imbalance Holder to reduce the imbalance volume to zero ("Cash Out Sale"). The actual cash out volumes will be based upon ending imbalance volume following application of prior period adjustments and exchange of imbalances as described below. The cash out pricing tiers are as follows:

Tier	Transaction	Imbalance Position	Rate
Surplus Pricing Tier 3	Purchase	>20 % long	60 % of Index
Surplus Pricing Tier 2	Purchase	15% to 20 % long	85 % of Index
Surplus Pricing Tier 1	Purchase	5% to 15 % long	90 % of Index
Market Pricing Tier	Purchase or Sale	5 % long to 5% short	100% of Index
Deficiency Pricing Tier 1	Sale	5% to 15% short	110% of Index
Deficiency Pricing Tier 2	Sale	15% to 20% short	115% of Index
Deficiency Pricing Tier 3	Sale	>20% short	140% of Index

The Monthly Index price applicable to cash out activity will be posted on Distribution's web site prior to Imbalance Trading each month.

IMBALANCE RESOLUTION/CASH OUT PROCESS

The Imbalance Holder is the Customer, Supplier or Marketer responsible for imbalance resolution as described in the Rate Schedules under which the Company provides service. Typically, the SATS Supplier or MMNGS Market Pool Operators are Imbalance Holders. An Imbalance Holder's Month End Imbalance is the burner tip imbalance calculated pursuant to the terms of each Service Classification under which the Company provides service to the Customers for which the Imbalance Holder bears imbalance responsibility. The process for determining imbalances and cash out responsibility is as follows:

1. Imbalances are calculated for the calendar month just completed at the Market Pool level. Total Monthly Consumption ("TMC"), as measured or estimated is subtracted from the sum of allocated transportation receipt volumes from city gate deliveries, local production pool receipts and local production excess volumes, reduced for shrinkage (allowance for losses incurred in the process of delivery).

- a. An Imbalance Holder's Initial System Imbalance Volume ("ISIV") imbalance will be computed by summing the imbalances from all the market pools for which it bears imbalance responsibility and assigning the ISIV to a "Zero Pool", e.g. PNFGS00, for imbalance trading and billing purposes.
- 2. In addition to having an imbalance within the range 5% long to 5% short, an Imbalance Holder may be assigned to the Market Pricing Tier through one of two safe harbors:
 - a. The Company will sum the ISIV and TMC for all Imbalance Holders into system totals. A System Imbalance Position ("SIP") will be computed by dividing the system total ISIV by the system total TMC and converting the quotient into a percentage. If the SIP is within the range 5 % long to 5% short, then all Imbalance Holders will be assigned to the Market Pricing Tier.
 - b. For customer pools where the Company assigns an ADDQ, if the Imbalance Holder's total receipt volumes are within 2% of the total monthly ADDQ for each pool, the Imbalance Holder will be assigned to the Market Pricing Tier. For customer pools where the Company does not assign an ADDQ, the TMC for each customer pool will be substituted for the ADDQ.
- 3. Absent qualifying under a safe harbor provision, an Imbalance Holder's ISIV will be categorized as follows:
 - a. If the ISIV is greater than zero, then the Imbalance Holder has a Surplus Imbalance with an initial long position.
 - b. If the ISIV is less than zero, then the Imbalance Holder has a Deficiency Imbalance with an initial short position.
 - c. A measure of the Imbalance Holder's imbalance position is calculated by dividing its ISIV by its TMC and converting the quotient into a percentage.
 - d. Based upon its initial system imbalance position, the Imbalance Holder will be assigned to an initial pricing tier.
- 4. Before the start of imbalance trading, an Imbalance Holder's Pre-Trading System Imbalance Volume ("PSIV") will be calculated by applying prior period adjustments, if any, to its ISIV. The Imbalance Holder's pre-trading imbalance position is calculated by dividing its PSIV by its TMC and converting the quotient into a percentage.
 - a. If the resulting imbalance percentage moves closer to zero, the Imbalance Holder will be assigned to a pre-trading pricing tier based upon the adjusted percentage.
 - b. If the resulting imbalance percentage moves further from zero, the Imbalance Holder will be assigned to a pre-trading pricing tier equal to the initial pricing tier.
 - c. If the direction of imbalance reverses (Surplus Imbalance to Deficiency Imbalance or Deficiency Imbalance to Surplus Imbalance), the pre-trading pricing tier assigned to the Imbalance Holder will be the Market Pricing Tier.

IMBALANCE TRADING

The Company will provide Imbalance Holders with the means to exchange Month End Imbalances. Trading sessions will typically be scheduled to begin on the 10th business day following the end of the month (approximately on the 15th of the month). Morning and afternoon trading sessions will be conducted over a three business day period. Notice of any delay or alteration of the trading schedule will be posted on the Company's web site. Upon request of the Imbalance Holder, the Company will provide other Imbalance Holders with information regarding the Imbalance Holder's imbalance status for the month.

Each trade must improve an Imbalance Holder's imbalance position, i.e. the resulting imbalance volume must be closer to zero. In no event will the Company process trades that worsen an Imbalance Holder's imbalance volume. The Imbalance Holder's post-trading or Final System Imbalance Volume ("FSIV") will be calculated by adding the volumes from its trades to the PSIV.

POST-TRADING RESOLUTION AND APPLICATION OF CASH OUT TIERS

An Imbalance Holder's post-trading imbalance position is calculated by dividing its FSIV by its TMC and converting the quotient into a percentage. The Imbalance Holder's post-trading imbalance position will be used to determine the post-trading imbalance tier for cash out, however, the post-trading imbalance tier will not be worse than pre-trading imbalance tier.

If the volumetric range of the Imbalance Holder's Market Pricing Tier for a month is significantly smaller or otherwise inconsistent with that occurring during the normal course of business, the Company may override the post-trading imbalance tier calculation for that month and assign the Imbalance Holder to the Market Pricing Tier. Examples of such circumstances are:

- a. During the initial month in which an Imbalance Holder has an imbalance resulting from service under an eligible Service Classifications as described above.
- b. During the final month in which an Imbalance Holder has an imbalance resulting from service under an eligible Service Classifications as described above.

Finally, if the absolute value of an Imbalance Holder's FSIV is less than 1000 Mcf, it will be assigned to the Market Pricing Tier.

The Imbalance Holder will be cashed out at the tiers, beginning at the tiers furthest from the Market Pricing Tier until the imbalance volumes within all the tiers are reduced to zero. The Market Pricing Tier will be cashed out after all other tiers have been cashed out.

Cash Out Sales and Cash Out Purchases will be reflected on the next bill issued by the Company to the Imbalance Holder following the conclusion of trading sessions.

Examples showing application of the cash out mechanism to various imbalance scenarios are posted on Distribution's web site under the heading Imbalance Information at:

http://nationalfuelgas.com/marketers/Pa_SATS/SATSpage.aspx

IMBALANCE ROLLOVER PROCEDURES

The purpose of this section is to provide certainty in the procedures that would apply if the cash-out were suspended, that is, to make clear that imbalances would be resolved through the rollover mechanism if the cash out mechanism were suspended.

In the unlikely event that the Company suspended the cash out mechanism, an Imbalance Rollover process would be applied at the Market pool level. Under this methodology, any SATS or MMNGS deficiency or surplus is applied to the next following month, as operating conditions permit, as an addition to, or deduction from, the ADDQs calculated for that month. In practice, this has meant that January imbalances, for example, are applied to March ADDQs.

Circumstances might exist where Distribution elects to defer adjusting ADDQs. Operating conditions under which Distribution may elect to not adjust ADDQs to address rollover imbalances would include those that resulted in ADDQs inconsistent with underlying market demand. Distribution would post notice of such an election on its web site.

For example, a negative imbalance from March would usually be resolved by increasing Supplier ADDQs for May. If it is determined that the magnitude of the ADDQ increase would result in ADDQs larger than system operations could accommodate, Distribution might suspend the ADDQ increase for any portion of a month, e.g. a day(s), a weekend(s) or the entire month, until a month during which system operations permitted cancellation of the suspension. During the suspension, the rollover imbalance would continue to grow or shrink in accordance with the usual variances between ADDQs and actual customer demand. Suppliers could also request cash out of their imbalance when the suspension of the cash out mechanism is concluded.

6. Storage Procedures

Initial Assignment of ESS Storage Capacity

In a month a SATS Supplier begins to serve SATC customers, Suppliers will be provided with an initial assignment of ESS storage capacity to meet the Supplier's requirements for the upcoming winter period. Thereafter, approximately fifteen days prior to the start of each month, the Company will calculate the quantity of ESS storage capacity released to match the SATS Supplier's winter requirements of the SATC Customers in the Supplier's Aggregation Group(s). The Company will adjust the assignment for the Aggregation Group upward or downward, effective for the beginning of the month.

Additional Assignment of ESS Storage Capacity

If additional Customers join a Supplier's Aggregation Group(s) or the normalized load requirements of the Customer(s) in the Supplier's Aggregation Group(s) increase, Distribution will release additional capacity as required to match the SATS Supplier's revised winter requirements. Storage inventory will be transferred, as a percentage of the additional released capacity, as follows:

Capacity transfer Month Beginning	Transfer Percentage	Capacity transfer Month Beginning	Transfer Percentage
Month Deginning		wonth beginning	
April	0.00	October	80.00
May	0.00	November	95.00
June	12.00	December	90<u>86</u>.00
July	29.00	January	75<u>68</u>.00
August	46.00	February	50<u>45</u>.00
September	63.00	March	28.00

In addition, the Supplier will be required to pay Distribution for storage gas transferred and all taxes and pipeline fees associated with moving or transferring the storage gas to the Supplier. Distribution will inform the Marketer/capacity holder of the transfer requirements approximately ten days before the beginning of the month and will make best efforts to coordinate transfers taking place on the first of the month.

The storage gas transfer rate shall be the sum of (1) the higher of Distribution's fiscal year weighted average cost of gas (including all pipeline demand and storage costs), or the Market Price of gas for the first day of the month which shall be determined by reference to the SNL Natural Gas Index for Tennessee Gas Pipeline's Zone 4 200 Line pool plus all transportation costs to Distribution's city gate, plus (2) the Demand Transfer Recovery Rate ("DTR rate"). The DTR rate shall equal the per Mcf System Average Unrecovered Demand Charge revenue beginning in the month of April through the initial month that storage capacity is released to the Supplier. The System Average Unrecovered Demand Charge fixed demand costs beginning the month of April through the initial month that storage capacity is released to the supplier.

The Storage Gas Transfer rate and DTR rate are posted monthly on the Distribution Website. All revenues received from such storage gas transfers shall be credited as revenues for the recovery of purchased gas costs as specified in Rider A of the Distribution tariff. When, in the sole judgment of Distribution, operational conditions do not warrant transfers of storage gas, notice shall be issued on the Distribution Website or other media advising Suppliers of a temporary suspension in storage release services.

Reduction in Assignment of ESS Storage Capacity

If Customers leave a Supplier's Aggregation Group(s) or the normalized load requirements of the Customer(s) in the Supplier's Aggregation Group(s) decrease, the quantity of storage capacity released to match the SATS Supplier's revised winter requirements will decrease. The SATS Supplier shall have the following options:

- 1. The Supplier may transfer the remaining storage gas to a third party, subject to applicable pipeline requirements and charges.
- 2. The Supplier may retain the storage gas in the Supplier's remaining storage capacity.
- 3. The Supplier may transfer the storage gas to the Company at the lesser of:
 - (a) 95% of the Company's lowest monthly weighted average commodity cost of gas during the previous storage injection period (April through October), plus all transportation costs to the Company's City Gate; or
 - (b) 95% of the Market Price of gas for the first day of the month which shall be determined by reference to the SNL Natural Gas Index for Tennessee Gas Pipeline's Zone 4 200 Line pool plus all transportation costs to the Company's City Gate.

The Supplier shall be responsible for all taxes and pipeline fees associated with moving or transferring the storage gas to the Company.

Distribution presumes that Suppliers prefer to either retain their inventory or transfer gas to third parties. If a Supplier does want to transfer storage gas to the Company, a request for the Company to purchase storage gas must be submitted via email to the following email addresses: <u>MaciokJ@natfuel.com</u>, <u>CzechowiczD@natfuel.com</u>, <u>TSSsupport@natfuel.com</u>. Such requests should be submitted at least two (2) business days prior to the start of the month. The inventory transfer must be completed within the first week of the month.

Other Monthly Adjustments to Assignment of ESS Storage Capacity

Suppliers may act as upstream capacity agents for other SATS Aggregators and Direct Customers. As agency relationships change from month to month, Distribution will adjust storage capacity quantities accordingly. The Supplier acquiring ("Acquiring Supplier") the capacity is responsible for meeting the applicable monthly inventory percentage. Should the Acquiring Supplier reach an arrangement whereby the original Supplier agrees to transfer inventories injected on behalf of the customers and/or aggregation groups being acquired to the Acquiring Supplier, then such volumes will offset the purchase requirement resulting from additional assignment of ESS storage capacity. Both the original and Acquiring Suppliers should notify Transportation Services of their intent in writing, via email, to the following email addresses: MaciokJ@natfuel.com, CzechowiczD@natfuel.com, TSSsupport@natfuel.com. Such requests should be submitted at least two (2) business days prior to the start of the month. The inventory transfer must be completed within the first week of the month. Should the transfer not be allocated, then the Acquiring Supplier will be required to purchase the transfer quantity from Distribution as specified above.

The original Supplier may, in anticipation of obtaining new customers, request that it retain storage capacity equal to or less than the quantity which migrated to the Acquiring Supplier. Should Distribution, in its sole judgment, determine that a capacity release is feasible, a capacity release for the additional storage capacity (and associated NFGSC EFT capacity) will be effected.

Return of Storage Capacity upon SATS Agreement Cancellation or Termination

If a Supplier's SATS Agreement is canceled or terminated, Distribution may recall ESS storage and associated EFT transmission capacity that has been released to the Supplier. Distribution shall have the right but not the obligation to purchase the remaining storage gas at the lesser of (a) 95% of Distribution's lowest monthly weighted average commodity cost of gas during the previous injection period (April through October), plus all transportation costs to Distribution's city gate and a proportionate share of storage demand capacity charges on such volumes since April 1; or (b) 95% of the Market Price of gas for that day which shall be determined by reference to the SNL Natural Gas Index for Tennessee Gas Pipeline's Zone 4 200 Line pool for the first day of the month plus all transportation costs to Distribution's city gate and proportionate storage demand capacity charges on such volumes since April 1. The SATS Supplier shall be responsible for all taxes and pipeline fees associated with moving or transferring the storage gas to Distribution.

Storage Transfer Nominations

National Fuel Gas Distribution Corporation

When the Supplier transfers gas to or from Distribution, the Transportation Services Department will contact the Supplier to facilitate nomination of the storage transfer within NFGSC. Suppliers must submit corresponding nominations and/or confirmations to NFGSC to effectuate the transfer. When Suppliers nominate storage transfers that do not involve Distribution, they should deal directly with NFGSC.

Storage Inventory Requirements

Suppliers must maintain a storage inventory level no less than:

May 31 st	12%
June 30 th	29%
July 31st	46%
August 31 st	63%
September 30 th	80%
October 31st	95%
November 30 th	90<u>86</u>%
December 31st	75<u>68</u>%
January 31st	50<u>45</u>%
February 28 th (29 th)	28%

When a Supplier elects to utilize an Upstream Agent to manage its storage capacity, the Supplier remains ultimately responsible for meeting storage levels described herein and in the tariff. For example, when an Upstream Agent fails to meet an EOM percentage level, it is as if the Supplier itself failed to meet the requirement.

Any deficiency more than 2% below the required monthly minimum storage inventory level will be automatically adjusted by Distribution to meet the required level. The Supplier will be charged per Mcf for such automatic adjustment at the higher \$7.00 per Mcf or the Market Price of gas for the last day of the inventory month which shall be determined by reference to the SNL Natural Gas Index for Tennessee Gas Pipeline's Zone 4 200 Line pool plus all transportation costs to Distribution's city gate. For any deficiency within 2% of the required monthly minimum storage inventory level, the Supplier will be charged per Mcf for such adjustment at the DMI for that day plus all transportation costs to the Company's City Gate, unless the Company, subject to operating conditions, determines that such deficiencies need not be adjusted.

While there is no specific month end storage inventory requirement for either March or April, Suppliers need to work with the service design and NFGSC tariff requirements to ensure that they are able to meet the May 31 requirement.

By accepting release of storage capacity for SATS service, the Supplier grants Distribution with the permission necessary to allow Distribution to obtain access to the Supplier's storage balance information for inventory transfer and monitoring described above, including cases where the Supplier utilizes an Upstream Agent.

7. Billing Service

Distribution provides a "rate ready" billing service to all SATS Suppliers on Distribution's system. For bills to qualified SATC customers, Supplier receivables are purchased by the Company under a Purchase of Receivables (POR) program. Each Supplier must provide Distribution with specific data necessary to bill on behalf of the marketer. The Supplier has the option of having their logo appear on the "Supplier portion" of the bill. The Supplier logo must be submitted in 300 dpi or higher, black and white or 16 color gray scale and be a non-web graphic.

The billing service is not intended to be a full-blown billing and accounting service but it does include the following features:

- Specified Rate for the Commodity (Rate times Volume)
- Specified percent off Distribution total bundled bill

- Specified percent off Distribution commodity
- Budget Plan
- For non-POR, late payment charge, according to either a given percent of late charge or a fixed fee late charge
- Supplier name, address, phone number(s), website, logo and up to 480 character bill message
- Payment (remittance) processing for Distribution and the Supplier
- Customer payments are distributed between Distribution and the Supplier, with Distribution paid first
- Over-payments remain on the Distribution ledger
- Credit that exceeds Distribution billing is automatically transferred to Supplier charges
- Wire transfers move money collected by Distribution for the Supplier to the Supplier's bank either daily or weekly, depending on the total to be moved.

Structured ASCII files are available to transfer information through Distribution's website to accommodate:

- Miscellaneous data changes
- Supplier level billing and payment information

Suppliers must have their own accounting system to fully process the data provided via EDI or contained within the files. Data provided by Distribution should be loaded or entered into Supplier business systems so that in-house tracking of revenues and receivables can take place. Suppliers are responsible for reporting and paying all taxes associated with their bills.

Suppliers may provide an effective date for a rate change, e.g. the 1st calendar day of an upcoming month or have rate changes take effect on the next regularly scheduled bill cycle date. Suppliers must provide rates to Distribution no later than four business days prior to the effective date requested. Rates received after this date but prior to preparation of the bill will be accepted on a "best efforts" basis. If the effective date is other than the next regularly scheduled bill cycle date, the new rate will be prorated based upon the effective date within the billing cycle. In either case, there is no provision to change a rate once a bill has been issued. Without instructions otherwise, rates (or percentage instructions) remain unchanged from month to month.

Rates should be submitted to Transportation Services by email to <u>TSD-Notify@natfuel.com</u>. The rates must be submitted as an Excel workbook attachment to the email. The format for the workbook consists of eight columns with a header row consisting of eight columns. In addition to the header row, a row should be provided for each Rate Code for which a rate change is being submitted. An example is shown below:

	Rate						Zero
Marketer	Effective		Rate		Commodity	Total Bill	Percent
ID	Date	Rate Code	(\$ per ccf)	Prorate?	Discount	Discount	Indic
999999	11/28/2012	1A	0.987654	Y			

Alternatively, a sample file may be obtained by contacting Transportation Services.

The subject line of the e-mail should be "Marketer Rate Change Request for" followed by the name of the Supplier. A confirmation that the rate change request will be sent via email within 2-3 hours (during the business day) to the sender and all cc's on the request. If such confirmation is not received, it is advised to contact Transportation Services to verify the request was received for processing.

A report of the rate changes processed will be available as report M2 – Marketer Rate Change Verification Report in the secured section of Distribution's website:

http://nationalfuelgas.com/marketers/scripts/contents.asp

The report will be available each business day by approximately 12:15 PM and will list all of the rates that were entered that day. It is the Supplier's responsibility to verify that its rate changes have been entered correctly. Since it is not possible to change rates retroactively, it is critical to be sure rates are correct prior to billing. Any

corrections must be made by 4:00 PM on the effective date - notify Transportation Services immediately by email and/or phone if any corrections are necessary. Be sure to get confirmation that the corrections have been processed.

Note: To avoid potential confusion, if a rate is not changing, do not submit the same rate with a new effective date. Submitted rate changes where the rate does not actually change cannot be processed and therefore will not appear on the rate change verification report.

In emergency cases when email is not available, rates may be faxed to (716) 857-7479. Questions concerning Distribution's Billing Service may be addressed by contacting TSD Billing at (716) 857-7432. The Transportation Services Department is responsible for Supplier relations, including contracts, training and dispute resolution (billing issues).

On bills prepared by Distribution, the sales tax billed to a Customer for delivery charges (to the extent applicable) depends upon the customer type (residential versus non-residential); any % reductions for partial residential usage; or other exemptions. At the time of customer enrollment, Distribution indicates whether it has any sales exemptions on file that it uses for billing. If this information changes, Distribution provides notification of the change to NGSs. When Distribution's Billing Service is used, NGSs are responsible for determining any exemptions applicable to their charges on the bill and providing the effective tax rates⁴ when enrolling the customer.

NGSs should be advised that Distribution's customer-specific exemptions are not transferrable. The NGS is responsible for obtaining its own exemption documentation from the Customer. NGSs do not need to obtain customer level exemption documentation for class-specific exemptions, i.e. the residential exemption from state sales tax. Additionally, NGSs do not need to obtain exemptions applicable to delivery charges billed by Distribution.

a. Budget Plan

Distribution's billing service includes budget billing plans ("Budget Plans") for NGS customers. Both supply and delivery charges are consolidated into one Budget Plan rather than having separate Budget Plans for supply (NGS charges) and delivery (Distribution charges). NGSs may add current customers to Budget Plans or add new customers at the time of enrollment. Payments to NGSs for customers participating in the POR program will be based upon the billed amount rather than the previous practice of basing the payment upon the supplier budgeted amount

b. Purchase of Receivables

Under the POR program, Distribution will purchase SATS Supplier accounts receivables for the following customers taking service under Distribution's SATC Rate Schedule ("SATC POR Customers"):

- (1) Residential customers,
- (2) Small Commercial and Public Authority customers with annual consumption less than 250 Mcf per year,
- (3) Small Commercial and Public Authority customers with annual consumption between 250 and 1,000 Mcf per year, and
- (4) Small Volume Industrial customers with annual consumption less than 1,000 Mcf per year.

Under the POR program, the Company will purchase Supplier accounts receivables for SATC POR Customers without recourse, except for unpaid charges that exceed the otherwise applicable utility charges. The Company will be permitted to terminate service to SATC POR Customers for failure to pay the lesser of: (1) the actual bill including the Supplier charges, or (2) otherwise applicable Distribution charges had the customer obtained supply from the Company. The lesser of calculation is based upon the rates in effect during the time that the customer accrued an unpaid balance.

⁴ Because sales tax is set at the state level, NGSs are responsible, in the absence of an exemption, for providing the current sales tax rate (6%) when enrolling customers. An example of an exception would be a case where the customer was 50% exempt; a 3% tax rate should be provided by the NGS when enrolling the customer.

In order to calculate the "lesser of" amount, Distribution will start with the most recent bill and continue reviewing earlier billing periods until the unpaid balance has been exceeded by the sum of billed amounts or the supplier was no longer supplying commodity for the customer, whichever comes first ("Billing Review Period"). For each billing month of the Billing Review Period, the actual bill (that includes the supplier's commodity charges) is compared against what the customer would have paid had they been a Distribution Supplier of Last Resort customer. The total of all differences (credits or debits) for the Billing Review Period are included in the "lesser of" calculation. For partial recourse purposes, all customers who have an unpaid balance at the time of their final bill late payment date will have their unpaid bills go through the "lesser of" calculation. If the cumulative supplier based charges are greater than what Distribution would have charged the customer, the Company's charges will be deducted from the actual (supplier based) billed charges to yield the "lesser of" amount.

All Suppliers serving SATC POR Customers that elect utility consolidated billing will be required to participate in the POR program and will be required to enter into the Billing Service Agreement ("BSA") for Consolidated Billing Service provided in the GTOP Appendices. The BSA details the contractual obligations between Distribution and the Suppliers, including the mechanics of the billing service, provisions reflecting commercial law and practices, and procedures for bill collection and remittance to the Supplier, among other things.

8. Dual Bill Option

A customer may elect to receive a separate bill for gas supply from its NGS, so long as the NGS offers to bill separately. The NGS must contact the Transportation Services Department, in advance, to make the necessary arrangements so that Distribution's systems reflect the availability of this billing option.

The customer should contact its NGS to effect this election. The NGS should then switch the customer through EDI to a separate, distinct aggregation group including other customers receiving separate NGS bills. Distribution will provide meter readings or usage data to the NGS on the same schedule as it would if the Distribution Billing Service was being utilized.

In the event of a default or discontinuance by a SATS Supplier, the Company will charge the customer the rate agreed to by the SATS Supplier and the customer for the remainder of the billing period, provided that the Company either has available or is provided the agreed upon rate by the Supplier or the Commission, and the Company will recover any difference between its costs and the SATS Supplier rate charged to the customer solely from the SATS Supplier or its bond or other security. The format and protocols of obtaining such rate information will be determined by mutual agreement between Distribution and the NGS.

9. SATS Supplier Application Process

A licensed NGS interested in serving residential and small-volume transportation customers in Distribution's service territory is required to submit an application for SATS service. The SATS application form is included in the Appendices of this manual. Questions concerning the application form may be addressed by contacting Beverly Hogan at (716) 857-7950 or via email: <u>HoganB@natfuel.com</u>.

In order to qualify, each NGS will be evaluated for creditworthiness under the procedures set forth in Distribution's tariff. When required, payment of security deposits can be made by cash or other acceptable form of security such as a letter of credit or a parent guaranty in like amount. Upon approval by Distribution, the NGS becomes a SATS Supplier and is authorized to enroll new and existing customers in an SATC Group. If an NGS has not enrolled customers within one year of the initial application date, the Company will send email notice to the applicant that absent a request for a one-time, one-year extension, the application and any executed service agreements will be cancelled. Such cancellation will not prevent the NGS from reapplying for service in the future.

10. <u>Supplier Exit from Market/Inactive SATS Closure</u>

In the event a Supplier chooses to exit the Distribution's Transportation program, notification should be made via email to CzechowiczD@natfuel.com and MaciokJ@natfuel.com. Distribution asks that as much advanced notice as possible be provided so that an orderly exit plan can be established. In order to help facilitate this process, the following information should be included in this email:

National Fuel Gas Distribution Corporation

- Contact name, phone number, address, and email address
- Reason for the exit (change in marketing strategy, bankruptcy, other)
- Effective date of the exit

The following areas will need to be considered as part of this exit process:

- <u>Customer drops</u>
- Capacity release for the upcoming month
- ESS inventory balances
- ESS start of month and end of month storage inventory requirements
- Upstream agency
- Contract and agreement termination
- Daily delivery quantities
- <u>Other</u>

An SATS pool becomes "inactive" when all customers have been removed from the group. An SATS pool can become inactive for a number of reasons that may or may not result from termination of a NGS's SATS. A marketer may continue to operate on the system, but may choose to "inactivate" one or more of its SATS pools while continuing to operate at least one of their other pools. It is also possible that a marketer would no longer be operating on the system at all, i.e. they would have NO active pools. This situation could arise from the voluntary decision of the marketer, or from other factors (bankruptcy, discontinuance proceedings, etc.).

Since ongoing end user adjustments (e.g. consumption adjustments) can occur for six years, an inactive pool could have end user adjustment transactions impacting its imbalance volume for up to six years from the date the pool became inactive. Procedures set forth below help to ensure that "inactive" pool imbalances are properly accounted for. It should be noted that the majority of the adjustments on these accounts generally occur within the first few months after the pool becomes inactive.

INACTIVE SATS CLOSURE METHODOLOGY

- An SATS pool will be considered to be "inactive" for the first month that all customers have been removed from the SATS pool.
- Upon becoming inactive, all current and prior period imbalances as detailed on the TSS Group Imbalance Summary Listing (EGISL) will be combined into a cumulative, single month imbalance.
- Prior period end use adjustments will flow into current month processing.
- The NGS will continue to have the right to trade their monthly imbalance during the entire six-year period following the inactivation of their pool.
- The marketer will need to continue to maintain their TSS rights if they want to avail themselves of their right to trade imbalances. NGSs should contact the Transportation Services Department at (716) 857-7232 with any questions regarding TSS access rights.
- Distribution will automatically cash out any post trade/post nominated surplus or deficiency imbalance on each "inactive" SATS pool beginning with the first monthly processing after the pool becomes inactive regardless of whether Distribution is accepting cash out requests.
- In any month where Distribution cashes out the imbalance by selling gas, a bill will be generated for those and any other charges. The bill will be sent to the last known address and normal collection procedures will be utilized.
- In those months where Distribution cashes out the imbalance by purchasing gas, a check will be generated and mailed to the last known address.
- Reactivation of an inactive SATS group will be allowed.

11. Supplier Billing

Distribution issues invoices to Suppliers each month for items for supplier level charges such as, but not limited to, customer billing fees and imbalance resolution. To the extent monthly billing results in credits due to a Supplier, refunds will be issued on accounts that have a credit larger than \$500. If the credit balance is smaller, the funds will remain on the account and be applied toward the next bill. Refund requests need to be sent to

<u>TSD-Billing@natfuel.com</u> and include the credit amount, aggregator ID, bank institution name, routing number and account number.

E. <u>GAS DELIVERY MANAGEMENT PROCEDURES FOR DAILY METERED</u> <u>TRANSPORTATION (DMT) SERVICE</u>

1. Initiation of Transportation Service

New or existing customers may elect to receive transportation service under Rate Schedule DMT of Distribution's tariff. Customers inquiring about the service should contact the Energy Services Department at (814) 871-8271 to speak with a representative regarding the details of this service.

If the customer's facility is classified as serving essential human needs (residences, hospitals, nursing home, hotels, dormitories, etc.), it is mandatory that they contract for Priority Standby Service (PSB) as a condition of transportation service unless an Affidavit of Operable Alternate Fuel Capability is on file with National Fuel. PSB charges are assessed for all volumes transported and are in addition to transportation service charges. Please ensure that customers with essential human needs facilities are aware of this requirement prior to enrollment in transportation service. Details regarding Priority Standby Service, including the current rate, can be found in Rate Schedule PSB of National Fuel's tariff at www.nationalfuelgas.com/marketers/patariffs/Current.pdf. Questions regarding the applicability of PSB service or the affidavit or the PSB contract should be directed to the Energy Services Department at (814) 871-8271.

2. Enrollment

Suppliers enroll DMT Customers in Market Pools through the TSS. Distribution presumes that Suppliers have authorization from customers to add/or remove said customers to/from Market Pools. Customers may exist in only one pool at a time and Market Pools grandfather from month to month. Except for new Customers (as described below), additions and deletions must take place prior to the pool setup deadline for the upcoming calendar month. Should a DMT Customer be added into a Market Pool while it is enrolled in another Supplier's Market Pool, neither Market Pool will be validated for the next month's nominations until the enrollment status of the customer is changed to be in one, but not both, of the Market Pools. As a first step, the Suppliers should contact Transportation Services. The Supplier who has incorrectly included the DMT Customer in its Market Pool should remove the customer from its Market Pool. If the Suppliers cannot mutually resolve which Market Pool is correct, Distribution will contact the DMT Customer.

In cases where a DMT Supplier wishes to enroll an applicant for service (i.e. a party that is not currently receiving gas service but has applied to do so) directly into the Supplier's Market Pool at the time of account activation, a Customer Consent Form must be utilized. This form, included in the Appendices, permits the applicant to receive transportation service without first receiving service as a Distribution retail sales customer for at least one billing period.

3. Daily Delivery Quantities (DDQ) and Imbalance Responsibility

Given the daily reconciliation of deliveries versus usage, DMT Service is essentially self-regulating during non-OFO periods and therefore DDQ's are not applicable. Customers should communicate with their Suppliers so that nominations are placed on a "Gas In – Gas Out" basis, i.e. gas delivered into the system should match expected consumption. Even though DMT Customers are enrolled in Market Pools, customers are ultimately responsible for their individual imbalances. Sources of gas for DMT transportation service may come from firm or interruptible daily-metered sources.

4. Telemetering

All meters associated with a DMT Customer account must be capable of being read remotely so that NFGDC can determine any imbalances resulting from differences between allocated deliveries and actual Customer usage on a daily basis. Telemetering is add-on electronic equipment, connected to customer (usually DMT) gas meter(s) by Distribution, which collects and stores hourly readings from the meter(s) and then sends those hourly readings to a Distribution telemetering computer system. The software determines hourly consumption and posts those readings and/or consumption in a variety of formats. The resulting information is posted to the Distribution Website in a secured location for retrieval via the Internet. Generally, telemetering information is available each morning between 11:00 a.m. and 1:00 p.m. for the previous gas day (ending at 10:00 a.m. on the current day).

The cost for telemetering components can range from about \$1,500 to \$5,000 per meter depending on the type of metering currently in place at the facility. This is a one-time, up-front charge, payable prior to installation.

The customer must supply a dedicated analog phone line or IP service to the meter location and must have the components listed as "Standard Requirements for Telemetering Capability", as posted on the Distribution Website. Operation, maintenance, and accuracy of the telemetering components are all the responsibility of Distribution.

When NFGDC is unable to obtain telemetered readings, the Company notification to the Marketer and its DMT customer shall be the identification of the Statement Basis on the daily Customer Transportation Statement as a usage estimate. It will then be the responsibility of the Marketer to obtain daily 10:00 AM meter readings from the DMT Customer and provide them to Transportation Services until such time that the problem with obtaining telemetered readings has been resolved. The customer reads should be e-mailed to all of the following: <u>TSSsupport@natfuel.com</u>, <u>MaciokJ@natfuel.com</u> and <u>CzechowiczD@natfuel.com</u>.

5. Overdelivery and Underdelivery Resolution

On a given day, if a DMT Customer receiving gas transported by the Company uses less than the amount of gas delivered (banked excess deliveries) the DMT Customer may use such banked gas as the first gas through the meter on the following day(s). Any banked gas remaining at the end of a month will be delivered as first gas through the meter on the first day of the subsequent month. Overdelivery charges, as specified in the tariff, are based on the single highest day banked volume for the month.

"Underdeliveries" are volumes of gas taken from the Company by a DMT Customer in excess of the sum of banked gas at the beginning of the day and the volume of gas delivered to the Company for the Customer's account on that day. Two percent of the Customer usage for the day that an underdelivery occurs may be offset by deliveries on subsequent days of that month. The remaining shortfall will be a sale of gas by the Company for that day and may not be recharacterized as transportation service under any circumstances. Any cumulative underdelivery remaining on the last day of the month will be cashed out as a tariff sale and will not be carried into the next month.

Please refer to Distribution's tariff for applicable rates. Applicable operational restrictions are referenced in the Operational Flow Orders (OFO) And Other Orders/Alerts section of this GTOP.

F. <u>GAS DELIVERY MANAGEMENT PROCEDURES FOR MONTHLY METERED NATURAL</u> <u>GAS SUPPLIER (MMNGS) SERVICE</u>

1. MMNGS Supplier Application Process

A licensed NGS interested in serving Monthly Metered Transportation (MMT) Customers in Distribution's service territory is required to submit an application for MMNGS service. The MMNGS application form is included in the Appendices of this manual. Questions concerning the application form may be addressed by contacting Beverly Hogan at (716) 857-7950 or via email: <u>HoganB@natfuel.com</u>. In order to qualify for MMNGS Service:

- Each NGS will be evaluated for creditworthiness under the procedures set forth in Distribution's tariff and then, if necessary, by the supplemental criteria specified in Section J of this GTOP. When required, payment of security deposits can be made by cash or other acceptable form of security such as a letter of credit or a parent guaranty in like amount.
- Each NGS will be evaluated for operational capability. Suppliers may be required to provide contracts for supplies and pipeline capacity from point of origin to the NFGDC city gate in order to prove their ability to provide customers with firm deliveries of gas.
- Each NGS must have a customer base with total usage of at least 5,000 Mcf per year.
- Each NGS must execute an MMNGS Service Agreement (included in the Appendices of this manual).
- If an NGS has not enrolled customers within one year of the initial application date, the Company will send email notice to the applicant that absent a request for a one-time, one-year extension, the application and any executed service agreements will be cancelled. Such cancellation will not prevent the NGS from reapplying for service in the future.

2. MMNGS Groups / TSS Pools

Upon approval by Distribution, the NGS becomes a MMNGS Supplier and is authorized to enroll new and existing MMT Customers in a MMNGS Group(s). In order to establish a MMNGS Group(s) the Supplier must submit a Market Pool/Production Pool Request Form. This form is available in the Appendices of this manual and on the NFGDC website at:

http://nationalfuelgas.com/marketers/TSS/ManualsAndForms/MPAMFORM.pdf

The Transportation Services Department will then issue an Aggregator ID number for each MMNGS Supplier, and an MMNGS Group Number and corresponding TSS Pool Name for each group that an MMNGS Supplier establishes. A TSS Pool is established for the purpose of scheduling deliveries of gas to the corresponding MMNGS Group via the Transportation Scheduling System (TSS).

a. Interstate and Intrastate Groups/Pools:

Gas supplies for serving customers on the NFGDC system in Pennsylvania come from either **Intrastate** sources of gas produced within the Commonwealth of Pennsylvania, or from **Interstate** sources originating outside of Pennsylvania. As a convenience to Suppliers that wish to market Pennsylvania production to their customers, customer pools may be designated as **Intrastate**. MMNGS Groups and TSS Pools may be designated as either **Interstate** or **Intrastate** at the time they are established. This designation cannot be changed for the life of the MMNGS Group.

Suppliers utilizing MMNGS Service do not directly nominate to individual burner tips because a nomination to the aggregate of all burner tips in the MMNGS Group is implicit within the aggregation service. Nominations for deliveries of gas supplies under MMNGS Service are made at the pool level in TSS and, therefore, deliveries from Interstate or Intrastate sources cannot be directly pathed to individual Customers.

3. Enrollment

The enrollment process for MMT Customers into MMNGS is controlled by Distribution's tariff and may be summarized as follows. Suppliers may enroll MMT Customers for service commencing with the MMT Customer's meter reading in any month. Service to the MMT Customer shall begin at the start of the Customer's billing cycle, after enrollment confirmation has been provided. Enrollment shall occur electronically via EDI, however, each MMNGS Supplier will be obligated to keep on file written or oral evidence of each Customer's enrollment with that Supplier, which evidence shall be available for Distribution review at any time, upon 24 hours' notice. Distribution will provide the MMT Customer with a letter confirming the enrollment. If the MMT Customer notifies Distribution within 5 days of issuance of the confirmation letter that it does not wish to be served by the MMNGS Supplier, the enrollment for the MMT Customer will be rescinded.

Procedures are in place to ensure residential MMT Customers receive adequate prior notice of termination of gas supply services. The procedures must provide that notifications be sent by the MMNGS Supplier to the residential MMT Customer(s) and to Distribution at least 15 days before discontinuation of supply service to allow residential MMT Customers the opportunity to pay the overdue bill. Customers will only be transferred from a MMNGS Supplier to Distribution upon the "Control Date" for such Customer, as such is established by Distribution.

Note that if the customer's facility is classified as serving essential human needs (residences, hospitals, nursing home, hotels, dormitories, etc.), it is mandatory that they contract for PSB as a condition of transportation service unless an Affidavit of Operable Alternate Fuel Capability is on file with National Fuel. PSB charges are assessed for all volumes transported and are in addition to transportation service charges. Please ensure that customers with essential human needs facilities are aware of this requirement prior to enrollment in transportation service. Details regarding Priority Standby Service, including the current rate, can be found in Rate Schedule PSB of National Fuel's tariff at www.nationalfuelgas.com/marketers/patariffs/Current.pdf. Questions regarding the applicability of PSB service or the affidavit or the PSB contract should be directed to the Energy Services Department at (814) 871-8271.

For MMNGS Suppliers exiting the program and who intend to no longer serve MMT Customers, in addition to those protections noted above, such Exiting Suppliers shall provide written notice to its MMT Customers and Distribution sixty (60) days before it exits. The notice shall include information regarding the MMT Customers' ability to choose another MMNGS Supplier, assurances service will be provided by Distribution and information regarding payment of their first bill.

Should an active MMT Customer no longer wish to be served by its MMNGS Supplier, it must contact the Supplier who should then inform Distribution of the impending service discontinuation. Additionally, an MMT Customer who is in pending status may directly contact Distribution Call Center to affect a discontinuance of service. In either case, the MMNGS Supplier will receive an electronic notification/confirmation from Distribution and the MMT Customer will return to Distribution at the start of the Customer's next billing cycle. Finally, an MMT Customer may discontinue service with its current MMNGS Supplier by beginning service with a new MMNGS Supplier.

Electronic enrollment of Customers, including requests to terminate service to an MMT Customer, takes place via EDI. The MMNGS Supplier should contact the Transportation Services Billing Help Desk at (716) 857-7432 for training and orientation. The Customer's Contract Account Number is required to process enrollment transactions.

In cases where a MMNGS Supplier wishes to enroll an applicant for service (i.e. a party that is not currently receiving gas service but has applied to do so) directly into the Supplier's pool, a Customer Consent Form may be utilized to document customer consent. This form, included in the Appendices, or an equivalent NGS form permits the applicant to receive transportation service without first receiving service as a Distribution retail sales customer for at least one billing period.

4. Daily Delivery Quantities (DDQ)

The DDQ is the amount of gas supply required to be delivered by the MMNGS Supplier at the Distribution city gate by the customer or the customer's natural gas supplier. Distribution will determine, based upon each MMT Customer's historical load profile and/or estimates of consumption, an MMNGS aggregation group's projected normalized consumption for a given period; either monthly, weekly, or daily. Consumption estimates may be adjusted in response to meter readings, as available, weather forecasts and for the difference between actual weather

National Fuel Gas Distribution Corporation

and forecasted weather. Based upon this projected consumption, Distribution will determine each MMT customer's DDQ and, by summing all DDQs of the customers in the aggregation group, calculate the MMNGS Supplier's ADDQ. The resulting quantity may be adjusted for both prior period imbalance rollover and shrinkage and then converted to Dth at the city gate. ADDQ information shall be posted by Distribution through the TSS prior to the start of the month and by 10:00 AM each business day during the month, or through such other medium, as Distribution deems appropriate. Distribution provides detailed DDQ data files in the Secure Transactions section of the Services for Marketers, Producers and Suppliers area of the Distribution's website. A standard file format for DDQ data is included in the Appendices of this manual.

City gate balancing requirements shall be the responsibility of the party that nominates supply deliveries on behalf of the MMT Customer, usually the MMNGS Supplier. If the MMNGS Supplier is not the customer, service under the MMT Rate Schedule shall be contingent on Distribution's receipt of the MMNGS Supplier's signed acknowledgement of the rules and regulations governing city gate balancing. The Supplier Acknowledgement form is included in the Appendices of this manual.

Distribution reserves the right to restrict the receipt of gas during critical periods to DDQ levels for MMT Customers. During such a period, the MMT Customer, or its Supplier, must deliver to the city gate the ADDQ on a daily basis within the appropriate tolerance bands. During all non-critical periods, Distribution may reject nominations exceeding the upper limit of the 95%-105% of ADDQ, as calculated by Distribution.

Consumption estimates will be adjusted in response to weather forecasts up to a maximum of 52 degree days and compensated for the difference between actual weather and previous weather forecasts. Distribution will determine each MMT Customer's DDQ based upon this projected consumption.

DDQ Exemptions

In cases where MMT Customers have a load profile that is not responsive to the factors Distribution uses to calculate DDQs or is otherwise indeterminate, e.g. an asphalt plant or dispatchable gas-fired electric generation, the customer may submit a request to Transportation Services to be exempted from the DDQ calculation. If the request is granted, the customer will be considered an "Exempt MMT Customer" and be placed in an "Exempt Market Pool" where it will be segregated from Market Pools containing customers subject to DDQ calculations.

When requested by Distribution, Exempt MMT Customers are required to provide Transportation Services, as soon as practicable, with their anticipated daily flow rates for the current, next and/or subsequent gas days over weekend/holiday periods. Distribution will customize the notification requirements to reflect the unique load characteristics of each customer and may require Exempt MMT Customers to provide anticipated hourly flow rates within each gas day. Provision of such information creates no obligations to provide service beyond those specified in the MMT tariff.

Even though the calculated DDQ will not be utilized, city gate balancing requirements shall be the responsibility of the party that nominates supply deliveries on behalf of the Exempt MMT Customer, usually the MMNGS Supplier. Distribution's expectation is that city gate deliveries will balance the Exempt MMT Customer's consumption and as such, intraday nominations should be utilized to minimize any potential imbalance.

Should an imbalance occur, the party that nominates supply deliveries on behalf of the Exempt MMT Customer should coordinate with Transportation Services to arrange imbalance resolution as soon as practicable but before the end of the month. The existence of an imbalance does not create a right to payback or relieve the imbalance; Distribution, in its sole discretion may agree to receive and to transport, during any twenty-four hour period, a volume in excess of the Exempt MMT Customer's expected consumption during the same twenty-four hour period. Market demand projections and the operational characteristics of Distribution's system will be taken into consideration for the determination of whether imbalance relief can be scheduled.

Distribution reserves the right to suspend, restrict or revoke the DDQ exemption at any time to the extent necessary to maintain reliability of its system, particularly during periods when System Alerts, System Maintenance Orders or Operational Flow Orders are in effect.

For month end imbalance calculation purposes, the Exempt MMT Customer's actual consumption will serve as a proxy for the DDQ. Month end imbalances from Exempt Market Pools will be processed under the same provisions applicable to other market pools.

DDQ Modification Procedure

An MMNGS Supplier (or any other Service Classification with city gate balancing governed by MMNGS) accepts Distribution's calculation of the DDQ and/or ADDQ. Distribution will provide detailed DDQ data files in the Secure Transactions section of the Services for Marketers, Producers and Suppliers area of Distribution's website. An MMNGS Supplier may request a change in the specified ADDQ if it has specific knowledge that a customer's or MMNGS Group's consumption will be different than anticipated. Such requests should be submitted via TSS prior to 1:30 PM on the business day prior to the gas day the change is requested to take effect. In the event of an emergency situation where TSS is unavailable, such requests may be written up and submitted via email to all three of the following: MaciokJ@natfuel.com, CzechowiczD@natfuel.com, TSSsupport@natfuel.com .

The "DDQ/PDQ Email Change Request" form is available on Distribution's website at:

http://nationalfuelgas.com/marketers/TSS/ManualsAndForms/DDQ_PDQChangeRequest.pdf

The request should specify the amount by which the ADDQ should be changed, as well as provide justification for the change. Distribution shall not be liable for the difference between the projected consumption and the consumption determination by Distribution.

5. City Gate Delivery Requirements

Receipt of natural gas at the city gate under this service classification shall be limited to the sum of the DDQs for all MMT Customers in a Supplier's MMNGS Group (the ADDQ). The Supplier must deliver or cause to be delivered at the city gate the ADDQ on each day of the month, within the tolerance band described below. Distribution will deliver to each individual MMT Customer its gas requirements and will provide daily city gate balancing services to the extent actual city gate deliveries differ from the ADDQ. Burner tip ("on-system") imbalances will be addressed as described below. Distribution is not obligated to accept any volumes nominated by Supplier in excess of a Group's ADDQ. City gate balancing requirements shall be the responsibility of the party that nominates supply deliveries on behalf of the Customer, usually the MMNGS Supplier.

In addition to NFGSC city gate deliveries, other sources of gas supply for MMNGS pools are as follows:

- Daily metered local Production Pools.
- Monthly metered local Production Pools.
- Up to 105% of the PDQ for daily and monthly metered Production Pools may be scheduled to MMNGS Groups.
- Imbalance Trades.
- Imbalance Rollovers.

Distribution will consider volumes scheduled to MMNGS pools from daily and monthly metered Production Pools as delivered for daily city gate balancing purposes.

6. Daily City Gate Imbalance Charges

For amounts delivered to the city gate by the Supplier that differ from the applicable ADDQ, the MMNGS Supplier will incur the following charges:

• Charges for Daily City Gate Underdeliveries

Except during Operational Flow Order ("OFO") periods, for city gate underdeliveries up to or equal to five (5) percent of the applicable ADDQ, there will be no charge.

National Fuel Gas Distribution Corporation

Except during OFO periods, for city gate underdeliveries in excess of five (5) percent of the applicable ADDQ, the charge for gas supplied by Distribution shall be equal to the rate for Deficiency Imbalance supplies under MMNGS posted on Distribution's web site.

Distribution has the option to terminate an MMNGS agreement for six months if the MMNGS Supplier delivers less than 95 percent of ADDQ for any 3 days in a 30-day period, or zero gas for any single day.

• Charges for Daily City Gate Overdeliveries

Except during OFO periods, for city gate overdeliveries nominated up to five percent of the applicable ADDQ, there will be no charge.

City gate overdeliveries nominated in excess of five percent of the applicable ADDQ will be rejected by Distribution in its sole discretion.

Please refer to the Operational Flow Orders (OFO) And Other Orders/Alerts section of this manual for any applicable operational restrictions.

7. Month-End Burner Tip Imbalance Reconciliation

See infra Section D.5.

8. Imbalance Nomination

If Distribution determines that resolution of Burner Tip Imbalances via cash out is operationally infeasible and Imbalance Rollover procedures are in effect, when operating conditions permit, Distribution will post notice imbalances nomination procedures, to the extent such nominations can be accommodated.

9. <u>Supplier Exit from Market/Inactive MMNGS Closure</u>

In the event a Supplier chooses to exit the Distribution's Transportation program, notification should be made via email to CzechowiczD@natfuel.com and MaciokJ@natfuel.com. Distribution asks that as much advanced notice as possible be provided so that an orderly exit plan be established. In order to help facilitate this process, the following information should be included in this email:

- Contact name, phone number, address, and email address
- Reason for the exit (change in marketing strategy, bankruptcy, other)
- Effective date of the exit

The following areas will need to be considered as part of this exit process:

- Customer drops
- Contract and agreement termination
- Daily delivery quantities
- Other

An MMNGS Group becomes "inactive" when all MMT Customers have been removed from the group. An MMNGS Group can become inactive for a number of reasons that may or may not result from termination of a NGS's MMNGS Agreement. An NGS may continue to operate on the system, but may choose to "inactivate" one or more of its MMNGS Groups while continuing to operate at least one of their other groups. It is also possible that an NGS would no longer be operating on the system at all, i.e. they would have NO active groups. This situation could arise from the voluntary decision of the NGS, or from other factors (bankruptcy, discontinuance proceedings, etc.).

Since ongoing customer adjustments (e.g. consumption adjustments) can occur for six years, an inactive MMNGS Group could have customer adjustment transactions impacting its imbalance volume for up to six years from the

date the MMNGS Group became inactive. Procedures set forth below help to ensure that "inactive" MMNGS Group imbalances are properly accounted for. It should be noted that the majority of the adjustments on these accounts generally occur within the first few months after the MMNGS Group becomes inactive.

Inactive MMNGS Closure Methodology

- An MMNGS Group will be considered to be "inactive" for the first month that all MMT Customers have been removed from the MMNGS Group.
- Upon becoming inactive, all current and prior period imbalances as detailed on the TSS Group Imbalance Summary Listing (EGISL) will be combined into a cumulative, single month imbalance.
- Prior period End-use adjustments will flow into current month processing.
- The NGS will continue to have the right to trade their monthly imbalance during the entire six-year period following the inactivation of their MMNGS Group.
- The NGS will need to continue to maintain their TSS rights if they want to avail themselves of their right to trade imbalances. The NGS should contact the Transportation Services Department at (716) 857-7232 with any questions regarding TSS access rights.
- Distribution will automatically cash out any post trade/post nominated surplus or deficiency imbalance on each "inactive" MMNGS Group beginning with the first monthly processing after the Group becomes inactive regardless of whether Distribution is accepting cash out requests.
- In any month where Distribution cashes out the imbalance by selling gas, a bill will be generated for those and any other charges. The bill will be sent to the last known address and normal collection procedures will be utilized.
- In those months where Distribution cashes out the imbalance by purchasing gas, a check will be generated and mailed to the last known address.
- Reactivation of an inactive MMNGS Group will be allowed.

10. Upstream Capacity Verification

As specified in the tariff, MMT Customers shall arrange for supply to be delivered, either directly or by displacement, on a firm basis for the entire route from the point of production (or a liquid point of receipt) to the Company's distribution system. In order to implement this tariff provision, MMNGS Suppliers serving MMT Customers will continue to be required to utilize intermediate (NFGSC) firm capacity year round except where such customers are served with third party deliveries (i.e. local production) directly attached to Distribution's system. As such, Distribution will continue its practice, where applicable, of rejecting nominations serving MMT Customers that do not utilize firm transportation capacity at the city gate. On upstream pipelines, MMNGS Suppliers will be required to demonstrate that they possess firm transportation capacity (or purchase supplies from Suppliers with such capacity) back to a liquid receipt point during the winter months November through March.

Where local production is utilized, MMNGS Suppliers will be required to demonstrate firm purchase contracts with producers and/or Production Pool Operators at meters and/or pools demonstrating sufficient historical deliverability. In any case, each MMNGS Supplier will be required to demonstrate capacity for 100% of the total Daily Delivery Quantity for all of the customers within its market pool.

During normal winter operations, MMNGS Suppliers will be required to demonstrate possession of compliant capacity but will not be required to utilize such capacity. However, if Distribution declares a Critical Period, utilization of compliant capacity may be required.

During the winter months November through March, Distribution may individually contact MMNGS Suppliers to spot check compliance. If contacted, the MMNGS Supplier will be required to demonstrate that its upstream capacity on the day of the spot check is compliant with Distribution's requirements. If Distribution determines that a MMNGS Supplier's access to its firm capacity be restricted in any manner (e.g. upstream capacity released to another party on a non-recallable basis), such capacity will be considered noncompliant. Should the MMNGS Supplier's upstream capacity not be compliant the company may reject the nomination from the marketer and apply appropriate penalties that result from the marketer failing to meet city gate delivery requirements. Further, pursuant to the Company's tariff, the company may, depending on the circumstances, either (1) terminate the MMT Customer's transportation service; or (2) require that all customers receiving service from the MMNGS Supplier be required to install daily measurement equipment at customer expense or purchase standby service, if available, in order to continue receiving transportation service from the company.

G. PRODUCTION POOL OPERATOR PROCEDURES

1. General

Distribution has numerous gas production meters feeding directly into its distribution system. Approximately 15% of the gas flowing on Distribution's system comes from production within its Pennsylvania franchise area. A standard-form agreement that sets forth rules and regulations governing interconnection with producers of natural gas is included in the Appendices of this manual.

2. Setup Procedures & Parameters

For the purposes of nomination, production meters are organized into Production Pools at a logical pooling point. The Production Pools are classified as monthly or daily pools. While any meter is eligible for inclusion in a monthly pool, meters are eligible for inclusion in daily pools based upon the presence of telemetric measurement and availability of volumetric information to Distribution on a real-time basis. Market Pool Operators serving large volume daily market pools (e.g. consisting of DMT customers) may only nominate production receipts from Daily Production Pools. Market Pool Operators serving large volume monthly market pools (e.g. consisting of MMT customers) may nominate production receipts from either Daily Production Pools or Monthly Production Pools. Except as discussed below, Market Pool Operators serving small volume transportation market pools (i.e. consisting of SATC customers) may only nominate production receipts from Daily Production Pools.

Individual local production meters may be added to or deleted from existing Production Pools prior to the start of the coming month. Using TSS, Production Pool Operators must complete pool setup by noon on a day⁵ specified in a calendar posting on the Distribution web site. To establish a new Production Pool, the pool operator must first contact Transportation Services to name and create the pool within TSS.

As a measure of projected daily deliveries from a non-telemetered Production Pool, a Production Daily Quantity (PDQ) is calculated based upon historical production data. The first choice for the PDQ is the same month in the previous year (e.g. June/Current Year would be based upon June/Year Ago). The second choice is the last prior actual month (June/Current Year would be based upon April/Current Year). The third choice would be zero in the absence of the first two choices (or the production pool operator could provide an estimate). Receipt nominations by Market Pool Operators from Production Pools should total to 95%-105% of the PDQ on a daily basis. This is to ensure that the system operates in balance, i.e. on a gas-in, gas-out basis. Production Pool Operators are not to deliver gas into the system during the early part of the month in anticipation of nominations later during the month. Analogously, Market Pool Operators may not over nominate Production Pools early in the month in anticipation of increased production or reduced nominations later during the month. If total nominations on a daily basis exceed the high end of this tolerance band, Distribution will not schedule those nominations. Additionally, if total nominations on a daily basis are under the low end of this tolerance band, an internal nomination to a Distribution Market Pool may be placed resulting in a spot purchase by Distribution.

To accommodate changes in production operations that are not reflected in historical data, a Production Pool Operator may request a change to the PDQ calculated by Distribution. For example, a gathering system operator may inform Distribution that wells have been added to the gathering system or are shut-in. In either case, the volume of gas expected to flow may be different than the historical average daily production. Such requests will, upon approval by Transportation Services, become effective for the next Gas Day. Requests made after 1:30 PM become effective for the next following Gas Day upon approval by Transportation Services. A PDQ Override may be entered which would supersede the original PDQ. Such requests should be submitted via TSS prior to 1:30 PM on the business day prior to the Gas Day the change is requested to take effect. In the event of an emergency situation where TSS is unavailable, the request should be emailed to all three of the following: MaciokJ@natfuel.com, CzechowiczD@natfuel.com, TSSsupport@natfuel.com

⁵ Approximately seven (7) calendar days prior to the beginning of the next month.

Other rules applicable to Production Pools are as follows:

- Mixing of daily and monthly production meters in the same monthly Production Pool is permitted but monthly production meters are not permitted in daily Production Pools.
- Production Meters cannot be assigned to more than one Production Pool during a given month. If a meter is listed in more than one Production Pool, those Production Pools will be invalid (no nominations will be allowed against those pools) until such time as the issue of where the meter belongs is resolved.
- New local production meters may be added to a Production Pool during a month by contacting Transportation Services.

Further details on the day-to-day operations of Production Pools are contained within the TSS Production Pool Operator Manual available on the internet at:

http://nationalfuelgas.com/marketers/TSS/ManualsAndForms/TSSPRODPOOLMANUAL.pdf

3. Production Pool Excess Imbalances

When the volume of gas produced by the meters within a production pool exceeds the volumes scheduled for delivery to Market Pools, a positive or excess imbalance exists. Both Daily and Monthly Production Pools with production in excess of scheduled volumes are "balanced" to a zero-imbalance position.

Excess production from **monthly metered** production pools can be allocated to MMNGS pools or purchased by the Company but it cannot be allocated to DMT or SATS pools.

Excess production from **daily metered** production pools may be allocated under one of the following options each month:

Allocate all excess each day to DMT Market Pools.

- Excess will be distributed to DMT Customers in the following order:
 - 1. Suppliers may prioritize which DMT Customers are to receive excess on a percentage basis in TSS.
 - 2. Prorated based on allocated, scheduled, or nominated volumes to individual DMT Customers.
 - 3. Prorated based on DMT Customer usages.
 - 4. Prorated based on number of DMT Customers in the Market Pool.
- No excess will be available to MMNGS Groups.
- Production Pool Operators electing this option must do so in TSS at least one business day prior to the start of the month.
- Once elected, this option cannot be changed for the month.

Allocate all excess to MMNGS Groups at end of month.

• Production Pool Operators electing this option have until 7 days after the end of the month to elect this option via TSS.

Company purchase of all excess.

• Production Pool Operators electing this option have until 7 days after the end of the month to elect this option via TSS.

4. Receipt Facility Measurement

Measurement of gas is calculated following the recommendations of the ANSI/API 2530 "Orifice Metering of Natural Gas and Other Related Hydrocarbon Fluids" (A.G.A. Report No. 3) including the A.G.A. Manual for Determination of Supercompressibility Factors of Natural Gas or the A.G.A. Transmission Measurement Committee Report No. 8 "Compressibility and Supercompressibility for Natural Gas and Other Hydrocarbon Gases." If the receipt facility gas flow characteristics are such that calculations cannot be performed consistent with the above-mentioned recommendations due to a decline in production or other operational matters, Distribution shall have the right to turn off a meter until a replacement meter meeting the above specifications is installed.

Prior to executing its right to turn off a meter, Distribution shall notify the affected producer, in writing, identifying the meter(s) for which measurement calculations cannot be performed consistent with the above-mentioned recommendations. If the producer does not respond to notification, Distribution may shut off the meter 30 days after the date of such notification. If the producer responds within 30 days and agrees to installation of a suitable replacement meter(s), the meter(s) will continue to flow until at least 60 days after the date of the initial notification. Otherwise, Distribution may shut off the meter(s).

Within 60 days of the notification, if the producer identifies a Distribution approved contractor to perform meter installation(s) and an installation date(s) is set, the meter(s) will continue to flow until such installation takes place. If the producer does not identify a contractor to perform the installation(s) and/or agree to an installation date(s), Distribution may shut off the meter(s).

If Distribution delays or cancels an installation, it shall notify the producer at least one business day in advance. A new installation date will be determined within 30 days of cancellation but will not necessarily be set within this period. The meter will continue to flow through the agreed upon new installation date. If the producer does not agree to a new installation date within 30 days of cancellation, Distribution may shut off the meter with at least one business day of written notice to the producer.

If the producer cancels a meter installation, it shall notify Distribution at least one business day in advance. A new installation date will be determined within 30 days of cancellation but will not necessarily be set within this period. The meter will continue to flow through the agreed upon new installation date. If the producer does not agree to an installation date within 30 days of cancellation, Distribution may shut off the meter with at least one business day of written notice to the producer.

If a producer cancels a meter installation without notice, Distribution may shut off the meter with at least one business day of written notice to the producer. If a producer cancels a meter installation with notice more than twice, Distribution may shut off the meter with at least one business day of written notice to the producer. Distribution may, however, elect a different course of action to the extent it believes the circumstances were beyond the producer's control and the producer is still making a good faith attempt to install suitable measurement.

As a convenience, upon execution of a National Fuel System Administrator Security Process Agency Agreement (see GTOP Appendices), producers may enter displacement meter index readings online through a secure web site:

https://sbsprd.natfuel.com/psp/gmprd/nfsbsgm/sbsprd/c/nfom_gas_measurement.nfoc_gm_prod_rdg.gbl

A form of the agreement, along with associated instructions, is available from the Distribution's General Producer & Supplier Postings web page at:

https://nationalfuelgas.com/marketers/ProducerSupplierPostings/ProducerSupplierPostings.aspx

5. Gas Quality: BTU Content

The unit of measurement of heating value shall be the British Thermal Unit or BTU, as measured through chromatographic analysis, by a calorimeter, or by any other acceptable industry method for establishing heating value, and determined on an anhydrous (dry) basis. The Producer Interconnection Agreement (see Appendix 8) establishes a standard "heat" content range of 967 to 1100 BTUs for receipt of supplies into Distribution's system. Distribution may, but is not obligated to, accept any supplies that, as measured by Distribution or Distribution's agent, bear a heat content outside the standard range. While a BTU conversion factor of 1000 is presumed for

nomination purposes, any production gas with a BTU content of at least 967 will be allocated as if the BTU was 1000. When the BTU content falls below 967, if Distribution accepts such supplies, the volumes received will be adjusted to reflect the lower content. For example, 1000 Mcf with heat content of 965 BTU will be adjusted to 965 Mcf for allocation purposes. There is no corresponding upward adjustment when heat content exceeds 1000 BTU for transportation of local production gas.

6. Gas Quality: Water Vapor Content

NFG WATER VAPOR CONTENT CHART

(Vapor Content Values in lbs./mmcf)

NFGDC - Maximum Allowable Water Vapor Content in pounds per million cubic feet (lbs./MMCF) Updated: 6/25/2014 Pressure Gas/Ambient Temperature in Degrees Fahrenheit 43-47° 36-42° 48-51° (psig) Up to 35° F 52-57° 58-62° 63-67° 68-72° 73-77° 78-82° 83-87° 88-92 93-120^o Up to 30 31 - 35 36 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 70 gg 71 - 80 81 - 90 91 - 100 101-110 111-120 121-130 131-140 141-150 >150

Notes:

1.) If meter run has a temperature well, use gas temperature; otherwise, use ambient temperature, not taken in direct sunlight

2) Gas with water vapor content exceeding values indicated, or that is not merchantable, will be shut-in

3.) By its tariff, NFGDC may limit the quantity of water vapor contained within the gas it receives to no more than seven (7) lbs. per MMCF of gas

7. Production Retest Notification and Fees

The Producer Interconnection Agreement provides for testing of gas quality. Testing is coordinated through Distribution's Local Production Office in Erie, Pennsylvania. The point of contact for producer testing issues is:

Chuck Campbell Phone: (814) 871-8539 Fax: (814) 871-8672 Email: CampbellC@natfuel.com

The Local Production Office will coordinate the scheduling of the tests with Distribution's field personnel.

Where a test at an interconnection meter shows that the quality of gas does not meet Distribution's quality specification and/or is non-standard, Distribution will shut in the meter. The producer shall take corrective action and request a retest be performed by Distribution in order for the meter to be turned back on. The procedures below will apply in cases where the initial test requires that a production meter be shut off:

- 1. The Gas Quality Shut Off Notice will be faxed to the Local Production Office from the Distribution Servicenter that performed the meter inspection/quality testing.
- 2. The Local Production Office will notify the producer by telephone of the shut off and remind the producer to contact the Local Production Office to schedule a retest when the quality issue has been addressed.
- 3. The shut off history on the meter for the previous 24 months is reviewed:
 - a. To determine if any additional equipment or change in procedure is required before the meter is turned back online. Distribution will notify the producer if such equipment or procedural change is necessary.

b. To determine the fee associated with the retest.

There is a charge of \$150 per meter for each scheduled service call, up to three, within the last 24-month period. For additional service calls during the same period, the charge shall be \$250 per service call. Distribution has the right to shut off and remove the meter permanently if service calls are in excess of five during the 24-month period.

- 4. The producer will notify Distribution by telephone that it is ready for a retest, provide the details of how it plans to mitigate the gas quality matter and, if applicable, if it has installed any required equipment. If acceptable to Distribution, a retest will be scheduled. Otherwise, Distribution will identify deficiencies in the plan and when remedied, the producer should call to indicate it is ready for a retest.
- 5. The Local Production Office will generate the work order instructing the Servicenter to retest the meter. The Servicenter will schedule the retest appointment with the producer.
- 6. If the retest shows the quality of gas to be satisfactory, and the installed equipment, if applicable, is functional, the meter will be turned on. If these conditions are not met, then the meter will remain off and the above process will be repeated.
- 7. If the retest was performed by the close of business on the 5th business day after the day the producer notified Distribution that it was ready for a retest, the Local Production Office will send an invoice to the producer in the appropriate amount.
- 8. In the event that Distribution performs the retest after the 5th business day, such retest will be free of charge and no invoice will be issued.
- 9. If the producer fails to pay the invoice by the due date, the meter will be shut in and not turned on until payment is received for the invoiced retest. An additional \$150 turn on fee must be paid prior to scheduling the turn on.
- 10. If a producer fails to appear for its scheduled retest, the meter will remain shut in and an invoice will be sent to the producer. The producer must call the Local Production Office again to repeat the above process.

8. Renewable Natural Gas

Gas that that is produced from the anaerobic decomposition of organic material may be delivered into Distribution's system provided that it is effectively processed and upgraded into merchantable Renewable Natural Gas ("RNG"). Raw biogas is known to contain constituents such that it would not be considered merchantable and therefore would not be accepted into Distribution's system. In addition to meeting the generally applicable gas quality standards specified in Distribution's tariff, parties wishing to produce RNG for delivery into Distribution's system ("RNG Operators") are required to meet supplemental Renewable Natural Gas Quality Standards for Constituents of Concern ("COC") provided in an Renewable Natural Gas Interconnection Agreement ("RNG-IA"). RNG Operators wishing to produce RNG for delivery into Distribution's system are required to execute an RNG-IA as a condition of access. A standard form RNG-IA is included in the appendices of the GTOP.

that:

- Distribution may, but is not required to, accept RNG into its system if it determines, in its sole discretion,
 - (i) The RNG is free from bacteria, pathogens and any other substances injurious to utility facilities or people, or other constituents that would cause the gas to be unmarketable;
 - (ii) The RNG can be delivered into Distribution's existing high-pressure system at a point with sufficient flows and pressures to enable blending sufficient to ensure proper dilution of constituents;
 - (iii) Delivery of the RNG into Distribution's system will not jeopardize the integrity or normal operations of Distribution's system or otherwise adversely affect Distribution's customers; and
 - (iv) The RNG complies with any gas quality specifications including those set forth above and any additional specifications required by Distribution.

Distribution uses the Gas Technology Institute's Interconnect Guide for Renewable Natural Gas (RNG) in New York State as a guidance document for its procedures applicable to RNG. There are four sources of RNG that may be accepted into Distribution's system:

(i) Landfill
(ii) Dairy, Swine
(iii) Waste Water Treatment Plant ("WWTP")
(iv) Food Waste

In addition, wood-waste feedstock processed into RNG by a gasifier, or other Syngas, may also be accepted into Distribution's system.

While the threshold levels provided in the RNG-IA are intended to be applicable to all COC, testing of individual COC will vary by source of RNG. Distribution may, however, change which COC are tested based upon its experience or that of others in the gas industry as applicable to RNG. Further, Distribution may change the frequency or equipment used for testing based upon its experience or that of others in the gas industry as applicable to RNG. Finally, if a mixed feedstock is utilized by the Operator, Distribution may test for all COCs.

Additionally, if Distribution determines that it will accept an Applicant's RNG into its system, the Applicant shall pay for any initial and ongoing testing and/or monitoring of the RNG, as well as any baseline and/or ongoing monitoring of Distribution's system that Distribution, in its sole discretion, deems necessary, appropriate or convenient.

Hazardous waste landfills ("Hazardous Waste Landfills") include all contiguous land and structures, and other appurtenances and improvements, on the land used for the treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous waste. The facility may consist of one or more treatment, transfer, storage, resource recovery, disposal, or recycling hazardous waste management units, or combinations of these units. Distribution will not accept or transport RNG from Hazardous Waste Landfills, including landfills permitted by the Department of Toxic Substances Control. Before Distribution will interconnect with the RNG Operator's system, the RNG Operator must demonstrate and certify to Distribution's satisfaction that the biogas was not collected from a Hazardous Waste Landfill.

To ensure that raw biogas is effectively processed and upgraded into merchantable RNG, the following additional testing protocols will be administered

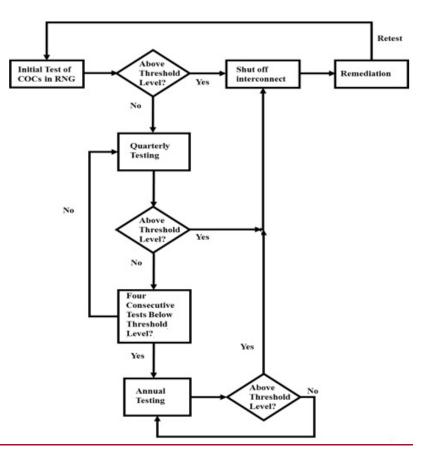
9. Renewable Natural Gas - Pre-Interconnection Testing

- (i) Prior to the delivery of RNG to Distribution, the RNG Operator shall conduct two tests over a two to four week period for the constituents identified in Exhibit B - Table 1 of the RNG-IA for the applicable RNG source.
- (ii) Pre-interconnection testing shall be performed by the RNG Operator using Distribution-approved independent certified third party laboratories qualified to perform testing in accordance with the following methods: EPA Method 29, EPA 200.8, EPA Method 8270, TO-15, TO-11A, as applicable. Distribution shall be notified of the RNG sampling and tests and have the option to observe the samples being taken. Test results will be shared with Distribution within five calendar days of the test results being received by the Operator.
- (iii) If any COCs are found to be above the threshold level during pre-interconnection testing, the RNG cannot be accepted by Distribution. The Operator shall make necessary modifications to lower applicable COC levels below the threshold level and restart pre-interconnection testing. If those pre-interconnection COC sample test results are below threshold levels, then the Operator is authorized to commence delivering RNG to Distribution's receipt point, specified in Exhibit A of the RNG-IA.

10. Renewable Natural Gas - RNG Periodic Testing

- (i) COC testing shall be conducted quarterly upon deliveries of approved RNG (at least once during every three-month period in which deliveries occur) or any time the RNG Operator changes feedstock.
- (ii) If four consecutive quarterly test results for all COC remain below threshold levels, subsequent periodic testing frequency may be reduced to once during every 12-month period in which deliveries occur.
- (iii) If testing demonstrates that any COC levels exceed threshold levels, then Distribution shall cease <u>RNG deliveries by shutting off the RNG interconnect, pursuant to Article 4 of the RNG-IA and the</u> <u>RNG Interconnect Shut-Off and Restart Procedures section below.</u>

(iv) The figure below demonstrates the testing protocols.



Flowchart for Initial and Periodic COC Testing

11. Renewable Natural Gas – RNG Interconnect Shut-Off and Restart Procedures

The RNG interconnect may be shut off when one or both of the following occur:

- (i) The RNG Operator or Distribution determines that a change in the biogas source at the facility or a change in the RNG Operator's process or treatment equipment will potentially increase the level of any COC over the previously measured baseline levels.
- (ii) COC sample results indicate that one or more COCs exceed their allowable concentration threshold levels.

If the RNG interconnect has been shut off, deliveries of RNG may be recommenced and continued only after the following occur:

- (i) The RNG Operator fulfills the requirements set forth in Article 4 of the RNG-IA. The Operator must conduct testing of the RNG at its own expense using Distribution-approved independent certified third party laboratories qualified to perform testing in accordance with the following methods: EPA Method 29, EPA 200.8, EPA Method 8270, TO-15, TO-11A, as applicable.
- (ii) Once deliveries of RNG resume, the RNG shall be subject to the periodic testing requirements set forth in the RNG Periodic Testing section above if the test indicates the following:
 - a. the RNG complies with the gas quality specifications contained in applicable tariffs, contract(s) or agreement(s); and
 - b. the levels of all COCs are below threshold levels. Thereafter, the Operator shall reevaluate COCs to determine if the RNG is eligible for less frequent testing.

<u>12. Renewable Natural Gas – RNG Testing Procedures</u>

The RNG Operator shall collect samples at the Interconnect receipt point identified in Exhibit A of the RNG-IA. Samples will be analyzed by Distribution-approved independent certified third party laboratories qualified to perform EPA 200.8 testing. Testing shall be by methods approved as, or considered to be, industry standard. Retesting shall be allowed to verify and validate the results. The cost of retesting shall be borne by the entity requesting the retest.

13. Renewable Natural Gas – Continuous Monitoring of Upgrading Process Integrity

Absent an agreement otherwise, the RNG Operator's continuous monitoring of and compliance with applicable gas quality specifications shall be used as an indicator that the upgraded equipment or process system is effectively conditioning and upgrading the biogas to acceptable RNG standards. If the indicator(s) used to continuously monitor RNG constituent levels indicates the RNG has not been sufficiently conditioned and upgraded, the RNG Operator may accelerate the RNG periodic testing schedule and initiate immediate testing. Accelerated periodic testing shall satisfy the recommended periodic testing requirements described in the RNG Periodic Testing section above.

H. <u>COMMUNICATIONS PROTOCOLS</u>

Communications Protocols are tools by which Distribution, NGSs, and other parties define and describe the type, form and frequency of communications necessary to successfully fulfill customer requirements in an operating environment of increased retail choice. Effective and consistent communications are critical in order to reduce errors, and provide all entities with the information necessary to properly fulfill their respective responsibilities, both in normal and emergency circumstances.

Much of the communication takes place via email and over the Internet. The Distribution Website and TSS are the primary forums for electronic communications. As such, NGSs and other parties involved in the nomination and/or scheduling of gas must have internet access and are required to regularly monitor the Website/EBB during business hours for any information that may affect the delivery of gas.

1. Maintenance of NGS Contact Person Information

Distribution maintains a complete database of contact personnel within each NGS and Direct Customer's company, including names, phone numbers, fax numbers, mailing addresses and e-mail addresses for various categories including:

- 24-hour emergency/OFO contacts
- Primary Contact
- General
- Legal/Contract Administration
- Capacity Release
- Imbalance Trader
- Trading Contact
- EDI contacts
- Retail sales contacts
- Billing contacts
- Marketing contacts
- Regulatory contacts
- Scheduling contacts
- Daily Market Pool Operator
- Credit contacts
- Media relations contacts

Distribution maintains this information within TSS to ensure that responsible parties can be contacted any time of the day or night. Critical Day Simulation Exercises are conducted to ensure that contact information for each of the Direct Customers, NGSs and Agents is accurate and up-to-date. These exercises may be conducted at least twice per year.

TSS permits each business party to maintain its contact information over the Internet under a secure format.

2. Distribution Contact Person Information

The contact names, phone & fax numbers and email addresses for Distribution are as follows:

General Information/Marketer Liaison:

(716) 857-7670	(716) 857-7479	MaciokJ@natfuel.com
number: (716) 857-7232		
(814) 871-8225	(814) 871-8008	SwartzfagerS@natfuel.com
	number: (716) 857-7232	number: (716) 857-7232

Billing contact:

TSD Billing	(716) 857-7432	(716) 857-7479	TSD-Billing@natfuel.com
Regulatory contact:			
Nathaniel Ehrman	(814) 871-8177	(814) 871-8061	EhrmanN@natfuel.com
Credit contact:			
<u>Steven KawalerskiBetty</u> KawalerskiSSzretterb@	<u>Szretter</u> (710) natfuel.comSzretterB@n	5) 857- 7616<u>7</u>570 atfuel.com	(716) 857-7479 <u>7439</u>
Media relations contact:	:		
Carly Manino	(814) 871-8199	(814) 871-8543	ManinoC@natfuel.com
GTOP contact:			
Michael NovakJoanne M NovakM@nati	<u>Maciok</u> (710 iuel.com MaciokJ@natfue	5) 857- 7884<u>7670</u> :l.com	(716) 857- 7254<u>7479</u>

The address for the Retail Sales and Media Relations contacts is:

National Fuel Gas Distribution Corporation Energy Services Department 1100 State Street Erie, PA 16501

The address for the other contacts is:

National Fuel Gas Distribution Corporation 6363 Main Street Williamsville, NY 14221-5887

3. Distribution Website

The Distribution Website also includes up-to-date information and announcements regarding procedural changes, system alerts, and other useful information relating to the regulatory process of unbundling. These announcements are included under a link entitled "<u>Announcements</u>" on the **Services for Marketers, Producers and Suppliers** web page at:

http://nationalfuelgas.com/marketers/default.aspx

Distribution makes available password-secured operational information to assist Suppliers and Customers in making adequate deliveries to Distribution's city gate (e.g. monthly and/or ADDQs). Other information available through the Website includes degree-day information, system alerts and operational flow orders, and daily consumption where daily meter reads are available.

Delimited ASCII flat files available on Distribution's web site supplement information Distribution provides via EDI; a list of these files and limited technical descriptions are provided in the Appendices of this manual. These files should not be confused with X12 EDI standards utilized elsewhere.

Distribution provides up-to-date listings of all licensed NGSs, Direct Customers and Energy Consultants operating in the service territory. A listing of all licensed NGSs and SATS Suppliers can be found on Distribution's Website at:

http://nationalfuelgas.com/marketers/SpecialBus/mktrlistSTBA.aspx

4. Electronic Data Interchange

Distribution requires NGSs to utilize EDI to exchange information concerning enrollments, customer information, usage and billing. Distribution utilizes EDI protocols approved by the New York Public Service Commission (NYPSC) issued Opinion 01-03 in Case 98-M-0667, as updated from time to time.

To conduct EDI transactions with Distribution, an NGS must first complete Testing and Certification covering a prescribed series of datasets and/or transactions with Distribution. Detailed information on EDI is publicly available on the NYPSC's website at:

http://www3.dps.ny.gov/W/PSCWeb.nsf/ArticlesByTitle/6806CF784702477285257EC4005698D8?OpenDocument

Distribution also provides an EDI web page that includes a links to an EDI Manual and Notices concerning EDI operations:

http://nationalfuelgas.com/marketers/EDI/aboutnfgdedi.asp

Each NGS will also be required to sign an EDI Trading Partner Agreement (TPA) prior to the exchange of EDI transactions. The form of TPA is that adopted by the North American Energy Standards Board, Retail Gas Quadrant Model Business Practice 6.1, on June 15, 2009 or as updated by NAESB from time to time. The form of TPA is available from NAESB through its web site <u>www.naesb.org</u>. Absent mutual agreement otherwise, to execute a TPA the NGS must provide its D-U-N-S®(Number) as the Legal Entity Common Code. The D-U-N-S®(Number) from a NGS's parent, subsidiary or any other affiliate will not be accepted.

The Transportation Services Department will initiate the process and administer the TPAs for Distribution. Changes to Marketer information contained within the NAESB TPA Exhibits, if any, must be submitted to Distribution in written form five (5) business days in advance of the intended effective date. The written form should be an original signed letter on company letterhead, signed by a company officer. A courtesy email to Beverly Hogan would also be appreciated. Changes to the Trading Partner Worksheet may be communicated via email to the EDI Support Team (see EDI Contacts below) and will be verified as a part of EDI Testing.

Many Suppliers utilize third-party EDI Vendors to process EDI transactions. Should a Supplier wish to change their EDI Vendor, some (possibly all) EDI Testing may need to be re-completed. To initiate a change in EDI Vendors, the Supplier should contact the Transportation Services Department (Attn. Beverly Hogan) in written form at least two (2) months in advance of the intended effective date in order to ensure sufficient lead time for EDI Testing. The written form should be an original signed letter on company letterhead, signed by a company officer. A courtesy email would also be appreciated.

Distribution has contracted with EC Infosystems for EDI Technical Support Services. With regard to the processing of EDI transactions, Suppliers who receive EDI services from EC Infosystems will not be afforded any advantage over, or be treated any differently than those who receive EDI services from other EDI Vendors.

Types of EDI Questions	Person	Phone Number	e-mail Address
Administrative Issues &	Beverly Hogan	(716) 857-7950	HoganB@natfuel.com
Testing Initiation			
Business Issues	Billing Help Desk	(716) 857-7432	TSD-Billing@natfuel.com
	Nicole Barker	<u>(716) 857-7541</u>	BarkerN@natfuel.com
	Andrea Vasbinder	<u>(716) 857-7593</u>	VasbinderA@natfuel.com
General Technical &	EDI Support Team	(516) 739-1001 ext. 25	nfg.edisupport@ecinfosystems.com
Processing Issues, Testing,			
Network Outages			

The EDI Contacts for Distribution are as follows:

In cases where a NGS's EDI system has failed unexpectedly or in cases of EDI system maintenance of extremely limited duration, the Marketer should contact Transportation Services to determine whether it is appropriate to utilize alternative means to communicate business transactions that normally occur via EDI. If appropriate, the Company will provide alternative communications on a short-term basis only.

5. Distribution Electronic Bulletin Board

Distribution's TSS is the means by which parties place nominations. This online system allows users to communicate via a NAESB-compliant (as applicable) Customer Activities website. This includes nominations, confirmations, trading of imbalances, and month-end reports. This system embodies all existing policies and procedures utilized in gas management as contained in this GTOP. It is also the primary means by which Distribution will inform NGSs of changes to NGS delivered supplies and/or customer demand required to assure system reliability, both daily and seasonal, and to avoid pipeline penalties.

The TSS is also used to communicate monthly and, as applicable, daily report data that can be used to reconcile or true-up imbalances and to mitigate cash-out or penalty positions.

It is the ultimate responsibility of the Operator of each of the Pools and Groups to ensure that the membership and related information of each Pool and Group is correct before the start of each calendar month.

Further, it is the ultimate responsibility of each Pool or Group Operator to ensure that all paperwork, supporting documentation or other written notification, or processes, as required in Distribution's tariff, TSS Operators' Manuals, website, the GTOP, Service Agreements or binding contracts, are submitted in a timely manner as prescribed in these respective documents.

6. **Operational Teleconferences**

When necessary, Distribution will schedule operational teleconferences with Direct Customers and NGSs serving customers behind its system. The purpose of these teleconferences is to discuss operational issues that impact the safety and reliability of gas supply on the Distribution system.

If an Operational Teleconference is scheduled, notice will be posted under a link entitled "<u>Announcements</u>" on the **Services for Marketers, Producers and Suppliers** web page at:

http://nationalfuelgas.com/marketers/default.aspx

7. **Regular meetings**

Distribution conducts regularly scheduled and announced meetings among Marketers, and Direct Customers. Additionally, meetings may be held on an as needed basis during the heating season or other critical operating periods. The purpose of these meetings is to address issues of concern to Distribution as system operator, and Marketers, and Direct Customers as gas suppliers. Agendas are formulated with input from all parties, and include open discussion as part of each meeting's agenda. Announcements of any upcoming meetings are made via e-mail and are posted on the Distribution Website.

I. OPERATIONAL FLOW ORDERS (OFO) AND OTHER ORDERS/ALERTS

Distribution employs System Alerts (SAs), System Maintenance Orders (SMOs) and Operational Flow Orders (OFOs) to maintain the operational integrity of its system. These tools are designed to achieve an immediate balancing of consumption and deliveries on the system or in a part of the system. They can be directed at NGSs and/or Direct Customers and can be used to:

- Alleviate conditions that threaten the operational integrity of Distribution's system.
- Maintain pressures necessary for Distribution's operations.
- Ensure adequate flowing supplies are delivered to specific receipt points.
- Alleviate operational problems arising from over-deliveries or under-deliveries by NGSs or Direct Customers in violation of agreements or Distribution's tariff.

Distribution views OFOs as an extreme step (in some cases the last resort prior to curtailment) and views voluntary compliance with System Alerts and SMOs as a key to avoiding OFOs. Notifications of System Alerts, SMOs and OFOs during normal business hours will be made via e-mail, posting on Distribution's Website and via phone and fax as necessary. During non-business hours, e-mail and the 24-hour emergency/OFO contact phone numbers will be used to convey the orders.

Distribution has the right to access NFGSC nomination information to monitor Supplier compliance with SMOs and OFOs. Such information will be used solely for this purpose and will not be disclosed to any other Suppliers or Company affiliates.

Periodic status reports will be posted on the Website, as applicable, when an OFO is in effect. OFOs will state the actions required and the reasons for such actions, be as localized as possible and be applied in a nondiscriminatory manner.

1. System Alerts

A System Alert (SA) may be called during periods of projected increased or decreased consumer demand for, or supply of, natural gas that may cause system stress or threaten applicable storage or other pipeline contract limitations. An SA is a request for specific action on the part of an individual Shipper, or all Shippers. The Shippers are expected to respond to SAs after Distribution provides notice. Where possible, an SA may be used to avoid an OFO or SMO but shall not be required as a condition to the issuance of an OFO or SMO. E-Mail messages and web notices (during normal business hours) will include the following information:

- Date that the SA is issued
- Conditions (reason) for alert
- Requested action (increase or decrease nomination), if applicable
- Projected length of alert, if available

Distribution will maintain a record of the date, time, and person contacted, the requested action, and action taken. Distribution will notify affected parties via the Distribution Website once the SA condition has ended.

1. System Maintenance Orders

A System Maintenance Order may be called during periods of projected increased or decreased consumer demand for, or supply of, natural gas that may cause system stress or threaten applicable storage or other pipeline contract limitations. The purpose of the SMO is to assure that gas is flowing to the city gate where and when needed. SMOs shall include, but not be limited to, orders to deliver gas at particular primary points into NFGSC, or into the particular primary points of the Company Retained Upstream Capacity, as well as orders to deliver additional gas to or from storage. An SMO is similar to an SA but it is directed specifically at SATS Suppliers because they hold primary capacity critical to the operational integrity of the system. The SMO is a request for specific action on the part of an individual SATS Supplier, or all SATS Suppliers. Should SATS Suppliers fail to comply with such SMOs then Distribution shall issue OFOs.

The Shippers are expected to respond to SMOs after Distribution provides notice. Where possible, an SMO may be used to avoid an OFO but shall not be required as a condition to the issuance of an OFO. E-Mail messages and web notices (during normal business hours) will include the following information:

- Date that the SMO is issued
- Conditions (reason) for the SMO
- Requested action (increase or decrease nomination), if applicable
- Projected length of SMO, if available

2. **Operational Flow Orders**

During any period in which Distribution determines, in its sole discretion, that its ability to accommodate imbalances is restricted or impaired (i.e. "Critical Period"), or in order to maintain system operational integrity, or to prevent a short-term curtailment, an OFO shall be issued. OFOs are issued when other actions have failed to eliminate reliability concerns. A Critical Period is a period of operational stress or impending potential stress that may impact the integrity of Distribution's system or a force majeure event.

Non-compliance with OFOs could lead the system into a curtailment situation. A primary purpose of an OFO is to keep or restore the system or an affected part of the system into operational balance. Upon request of a Direct Customer or an NGS, Distribution shall consider, if time permits, adjustments to deliveries or consumption outside of DDQ levels/tolerances if, in Distribution's sole discretion, such adjustments benefit system operations and are confirmable by Distribution.

3. Guidelines for Instituting an OFO

Distribution will attempt to provide 24 hours' notice of an OFO unless circumstances exist which require an immediate response. At least 8 hours' notice will be provided. When an OFO is preceded by a System Alert, the 24-hour notice will begin with the issuance of the System Alert. Distribution will endeavor to provide an 8-hour notice when a System Alert is changed to an OFO. OFO notice will meet the time requirements above, and will note the time of issuance, date and time the OFO takes effect, and estimated duration.

The OFO notice will communicate the actions required of Marketers and Direct Customers, the reasons for those actions required, and will provide periodic update(s) to enable parties to continue their planning functions. Such actions as required in the OFO notice will be limited in scope and duration and as localized as possible to meet the required objective. OFOs will be applied on a non-discriminatory basis to all similarly situated parties. Distribution will respond to reasonable requests for information by parties within a reasonable time of the OFO event.

OFOs will not be issued to mitigate economic disparity.

4. OFOs Applicable to MMNGS Service

Distribution reserves the right to restrict the receipt of gas during critical periods to ADDQ levels for MMT Customers. During such a period, the MMT Customer or its MMNGS Supplier on a daily basis must deliver the ADDQ. The OFOs provide for zero percent delivery tolerance in the direction of the OFO.

Warm Weather OFO

- Delivery requirement: 95% to 100% of ADDQ.
- Nominations in excess of 100% of DDQ will be cut.

Cold Weather OFO

- Delivery requirement: 100% to 105% of ADDQ.
- Deliveries less than 100% of ADDQ will result in deficiency sales.

5. OFOs Applicable to DMT Service

Restriction on Access to Daily Metered Imbalances

OFOs may be issued to customers receiving service under this rate schedule to assure that adequate supplies are delivered to Distribution. During such period, DMT customers shall not be permitted to use banked gas to cover daily underdeliveries in excess of the 2% tolerance during the term of the OFO. Furthermore, in the event an OFO is issued, metered usage in excess of 102% of confirmed deliveries on behalf of the DMT customer to Distribution's city gate, less line loss, shall be deemed a sale of gas by Distribution to the customer. All provisions related to the price for such sales, including charges under Rate SB-Standby Service, shall apply.

Distribution may, in its discretion, waive DMT over-delivery charges during or following colder than normal periods and to waive underdelivery premiums during or following warmer than normal periods.

6. OFOs Applicable to SATS Service

Distribution reserves the right to issue OFOs as necessary to preserve the operational integrity of its system. Such OFOs may include, but shall not be limited to the following: a requirement to flow gas to or from storage on NFGSC, a requirement to flow gas to the Supplier's primary receipt points on NFGSC and/or a requirement to change nominations to match customer demand.

In addition to all other charges due Distribution, any gas not delivered by the SATS Supplier in violation of any OFO issued may be assessed a charge of the higher of \$25 per Dth or the Market Price of gas for that day which shall be determined by references in the SNL Natural Gas Index for Tennessee Gas Pipeline's Zone 4 200 Line pool plus associated variable transportation costs to Distribution's city gate.

J. <u>SUPPLEMENTAL CREDITWORTHINESS CRITIERIA</u>

1. Applicability

Pursuant 52 Pa Code Chapter 62, Company may request and adjust security from Supplier.

Should information provided by an NGS pursuant to the Financial Fitness Requirements for Natural Gas Suppliers section of Distribution's tariff prove insufficient to establish the creditworthiness of an applicant, this Section provides supplemental creditworthiness criteria that may be relied upon by the Company. NGS (referred to as Suppliers in this section of the GTOP) participation in Distribution's programs is contingent upon satisfying creditworthiness requirements and providing any security deemed necessary.

2. Suppliers/Guarantors

Initially, the applicant Supplier/Guarantor must provide Distribution with the most recent three years audited financial statements; 10K and annual report; including a list of Supplier's affiliates, parent and subsidiaries, as applicable. Ongoing, the Supplier/Guarantor shall provide Distribution with (i) quarterly financial statements no later than forty-five (45) days after each quarter-end, and (ii) audited fiscal year-end financial statements no later than ninety (90) days after each fiscal year-end. These financial statements must be prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP), include an income statement, balance sheet, statement of cash flows, reconciliation of net worth, and footnotes. Distribution shall safeguard it as confidential information and protect it from public disclosure. Distribution may deny unsecured credit to any Supplier/Guarantor that fails to provide the requested information.

Unless a better estimate is available, the Company will presume an initial annual consumption of 5,000 Mcf for Supplier/Guarantor credit evaluation purposes.

A Supplier shall satisfy Distribution's creditworthiness requirements if:

- The Supplier, or a guarantor, maintains a minimum rating from one of the rating agencies and no rating below the minimum from either of the other two rating agencies; for the purposes of this Section, minimum rating shall mean "BBB" from Standard & Poor's, "Baa2" from Moody's Investor Service, or "BBB" from Fitch Ratings (minimum rating); or,
- The Supplier enters into a billing arrangement with Distribution, whereby Distribution bills customers on behalf of the Supplier and retains the funds it collects to offset any balancing and billing service charges provided that Distribution has a priority security interest with a first right of access to the funds. The Supplier shall submit an affidavit from a senior officer attesting to such utility interest and right.

If a Supplier, or a guarantor, is not rated by Standard & Poor's, Moody's Investor Service or Fitch Ratings, the most recent three years audited financial statements; 10K and annual report; including a list of Supplier's affiliates, parent and subsidiaries may be used to by Distribution to evaluate creditworthiness. If the Supplier cannot provide this information, Supplier shall provide this information for its parent company if the parent intends to act as Guarantor.

Distribution may require a Supplier to provide and maintain security in the full amount of Distribution's credit risk, calculated in accordance with the appropriate section of this document and its tariff, if:

- The Supplier, or a guarantor, is not rated;
- The Supplier, or a guarantor, with a minimum rating, above referenced in Section 2.a., is placed on credit watch with negative implications or is rated below the minimum rating;
- The Supplier fails to maintain good payment history; or,
- A Supplier issuing consolidated bills fails to render timely bills to customers or to make timely payments to Distribution.

National Fuel Gas Distribution Corporation

3. Direct Customers

An end-user acting as its own supplier under the MMNGS tariff, i.e. a Direct Customer, shall satisfy Distribution's creditworthiness requirements if:

- Its account is current and remained current for the past 12 months; and,
- If its debt is rated, it maintains the minimum rating, above referenced in section 2.a., of its long-term unsecured debt securities from one of the rating agencies and no rating below the minimum rating from either of the other two rating agencies.
- If the Direct customer is not rated, creditworthiness will be determined as stated in 2b and 2c above.

4. Major Change in Risk

A major change shall mean any credit event that may negatively impact the rating acceptable to Distribution.

- The Supplier or Direct Customer shall promptly notify Distribution of any major change in credit and or rating risk.
- Distribution may require a Supplier or Direct Customer, within five days, to provide additional amounts of security if a major change occurs to increase its credit risk, such as:
 - i. If Standard & Poor's, Moody's Investor Service, or Fitch Ratings downgrades a Supplier, or its guarantor's, rating or a Direct Customer's rating below the minimum rating, above referenced in section 2.a., or, if already at the minimum rating. Being placed on credit watch with negative implications;
 - An increase occurs in customer usage or in energy prices and such increase is sustained for at least 30 days and if the resulting and sustained increase cannot be supported by an analysis of the customers financial statements (as stated in 2b and 2c above).

5. Security Instruments

The following financial arrangements are acceptable methods of providing security:

- Deposit or prepayment, which shall accumulate interest at the applicable rate per annum approved by the Commission;
- Irrevocable Standby Letter of Credit issued by a bank, or other financial institution with at least an "A" rating;
- Guarantee by another party or entity, acceptable to Distribution, with a credit rating of at least "BBB" by S&P, "Baa2" by Moody's, or "BBB" by Fitch and no rating below the minimum rating from either of the other two rating agencies; or
- Providing a cash deposit as adequate security

Distribution may refuse to accept any of these methods for just cause provided that its policy is applied in a nondiscriminatory manner to any Supplier or Direct Customer. If the credit rating of a bank, or other financial institution that issues a Letter of Credit to a Supplier or Direct Customer falls below an "A" rating, Distribution shall allow a minimum of five business days for the Supplier or Direct Customer to obtain a substitute Letter of Credit from an "A" rated bank, or other financial institution.

APPENDICES

Forms

National Fuel TRANSPORTATION SCHEDULING SYSTEM (TSS)	
Upstream Agency Consent Form and Affidavit	
, (hereinafter referred to as 'Agent'), h consents to act as upstream agent for, (hereinafter referred to as 'Shipper'); agrees to accept and maintain any capacity releases or assignments made by NFGDC to Shipp beginning and continuing so long as Shipper's STBA/SATS Agree effective, or until terminated by either party upon sixty (60) days written notice to NFGDC. A will become the customer of record of the applicable upstream Transportation Service Provide warrants that it is contractually obligated to provide gas supply sufficient to meet the Shipper' ADDQ.	and eer ment is gent er and
Agent:	-
Signature: Name :	-
Title (Officer/Member Level):	
Phone Number: () , as Shipper, appoints Agent to obt	ain.
capacity releases on behalf of Shipper as provided herein. Shipper shall remain the customer on NFGDC's Billing System.	ofrecord
Shipper:	
Signature:	
Name:	
Title (Officer/Member Level):	
Phone Number: ()	
Aggregation Group #:	
<u>Mail completed form to:</u> National Fuel Gas Distribution Corporation Transportation Services Department 6363 Main Street Williamsville, NY 14221	
FOR NFGDC TRANSPORTATION SERVICES DEPT. USE ONLY	

1

	TION SCHEDULING SYSTEM (TSS) 7 Consent Form and Affidavit ("Upstream Agency Arrangement")
Opsiteant Agenc	Consent Form and Andavit (Opsiteam Agency Arrangement
	, (hereinafter referred to as 'Upstream Agent'), here
-	Upstream egent Agent for,
•	SupplierShipper') and agrees to accept and maintain Supplier'seny capacity releases
	<u>National Fuel Gas Distribution Corporation ("NFGDC to Shipper")</u> beginning / uing on a calendar month-to-calendar month basis. NFGDC will accept the Upstrea
	cessing capacity releases or assignments and continuing so long as SupplierShipper'
	effective, or until terminated by either party upon 60-15 days written notice to NFG
-	VFGDC upon 15 days notice to Upstream Agent and Supplier. Upstream Agent will
	ord of the applicable upstream Transportation Service Provider and assumes Suppli
	cluding storage) management and city gate delivery responsibilities under Rate Sche
SATS. Further, Upstream	Agent warrants that it is contractually obligated to provide gas supply sufficient to n
the <u>Supplier</u> Shipper's ADI	Q.
	Agent:
	Signature:
	Name:
`	mber Level):
Ph	one Number:
	, as Supplier, appoints Upstream Agent to obtain cap
releases on behalf of Suppl	ier as provided herein. Shipper shall remain the customer of record on NFGDC's B
SystemNFGDC may invoi	e Upstream Agent on behalf of the Supplier for charges incurred pursuant to this
Upstream Agency Arrange	ment; however, Supplier remains ultimately responsible for payment. If Upstream A
does not comply with tarifi	NFGDC may, at its discretion, no longer accept this Upstream Agency Arrangement
	Supplier:
	Signature:
	Name:
	mber Level):
	one Number:
Aggrega	ion Group #:
Mail completed form to	: National Fuel Gas Distribution Corporation
man oompreteo rorm te	

	-			
SUPPLIER A	CKNOWLE	DGMENT FORM		
NATIONAL F	NATIONAL FUEL GAS DISTRIBUTION CORPORATION (NFGDC)			
App	licable to NY and	d PA Divisions		
I am a principal, authorized agent or representative (Agent) of the marketer/ESCO/NGS identified below. Said marketer/ESCO/NGS is a "Supplier" as defined in NFGDC's tariff which is available on NFGDC's web site at <u>www.natfuel.com</u> or at any Consumer Business office. On behalf of Supplier, I have reviewed and understand the provisions of NFGDC's tariff relevant to Supplier's interaction with NFGDC, including but not limited to the city gate balancing services, rules and regulations. I understand that Supplier must pay all applicable penalties and charges incurred for city gate imbalances resulting from Supplier's nominations and deliveries. I also understand that failure to comply with these rules and regulations may result in disqualification of Supplier status and rejection of future nominations. By my signature below, the promises and understandings I have made herein shall be binding on Supplier, its successors and assigns.				
		AGENT		
	By:			
PRINT NAME OF SUPPLIER	-	AUTHORIZED SIGNATURE		
DATE	-	PRINT NAME		
		TITLE (OFFICER/MEMBER LEVEL)		
NOTARAIZED BY	-			
FOR TRAN	SPORTATION SERVIC	ES DEPT. USE ONLY		
Appvd. By	Date	·		

I



Market Pool/Production Pool Request Form

This form is used when requesting creation of a new, first-time Pool, and required for initial setup of a new Market Pool or a new Production Pool. To initiate a **new** Pool for use in TSS, complete the <u>Market Pool/Production Pool Request Form</u> following, and fax to the Transportation Services Department @ (716) 857-7479. For Business Parties already transporting gas on NFGDC, *New* Pools should be established as early as possible in the month prior to the desired start month, but no later than fifteen (15) business days before the new month begins. Due to training considerations, a one-month advance notice to establish new pools is required for those Business Parties new to transporting gas on NFGDC.

Transportation Services will assign the name of a new Pool and will notify the Pool Operator of the pool name. It is always best to establish new Pools as early as possible before the new month begins.

national Fuel
Market Pool / Production Pool Request Form (Used to establish NEW pools on NFGDC)
Date (Month) (Day) (Year)
Business Party Name:
Gas Scheduler Name:Phone Number ()
Gas Scheduler Signature:
Proposed Pool Initiation Date:/
(Month) (Year) Note: New pools should be established at least fifteen days before the beginning of the month
Production Pool: Daily Monthly NY PA
Market Pool:
Billing Model: (NY-DMT) Dual
(NY-STBA) Dual Marketer Consolidated Utility Consolidated
(PA-DMT) Dual
(PA-SATS) Dual Utility Consolidated
(PA-MMNGS) Dual Utility Consolidated
Pool Type (applies <u>only</u> to PA MMNGS): Intrastate Interstate
Fax to NFGDC Transportation Services 716-857-7479 or Email to <u>TSSsupport@natfuel.com</u>
For Transportation Services Department Only
Approved ByDate
Pool Name

I

SYSTEM-WIDE SUPPLIER CHOICE APPLICATION

National Fuel Gas Distribution Corporation's Program for Small Volume Natural Gas Customers.

Name of Business:	DUNS#.			
Address:				
Billing/Mailing Address:				
Contact Person:				
Telephone#:	FAX #:			
E-Mail Address:				
If a subsidiary, list parent company name & headquarters address				
Name:				
Address:				

CREDIT INFORMATION REQUIREMENTS:

Please send with this application the following documents regarding your company:

- Most recent annual reports.
- ✓ Mostrecent SEC 10-K.
- Most recent financial audited statements. If audited re not available the applicant will advise that audited are not available therefore unaudited statements are being provided.

ADDITIONAL APPLICANT INFORMATION:

Description of ability and experience that will allow you to meet the gas supply needs for your projected number of customers (not to be less than 50, or a group of customers whose volumes total at least 5,000 Mcf on an annual basis) on National Fuel Gas Distribution's system. (Continue on additional page, if necessary.)

Description of ability and experience for managing transportation/storage capacity in order to make deliveries to your projected number of customers on National Fuel Gas Distribution's system. (Continue on additional page, if necessary.)

Please include a list of upstream pipeline contracts that you currently manage.

There are two (2) billing choices available for your customers. Please choose one of the following:

We will bill our customers for gas supply charges while National Fuel Gas 1 Distribution Corporation will bill my customers for transportation charges.

 \Box 2. We would like National Fuel Gas Distribution Corporation to provide a single bill to our customers for both their gas supply service charges and transportation charges.

If you choose No. 1 above, please include a description of your internal/external means or plans to meet the billing needs of your projected number of residential customers. (Continue on additional page, if necessary.) Please provide a sample of your proposed customer bill.

Please provide a description of your means or plans to be able to respond to customer complaints and/or disputes. (Continue on additional page, if necessary.)

Please include a copy of your intended proforma contract for your prospective customers (minus confidential pricing provisions) demonstrating inclusion of the consumer protection requirements set in Section K of Rate Schedule SATS (attached hereto).

Licensed in Pennsylvania? _____Yes _____No

If yes, please provide licensing documentation. Documentation should include licensed date, utility service area, customer mix, and type of service.

A nonrefundable \$500 fee, made payable to "National Fuel Gas Distribution Corporation", must accompany this form in order to be considered for a supplier position in National Fuel Gas Distribution's "System-Wide Supplier Choice" program.

Supplier Attestation

I represent that all of the statements made in response to the questions herein are accurate and complete to the best of my knowledge.

> X_____ Supplier Signature

Date

Printed Name

NATIONAL FUEL GAS DISTRIBUTION CORPORATION

MONTHLY METERED NATURAL GAS SUPPLIER (MMNGS) APPLICATION AND CREDIT APPLICATION

COMPLETION INSTRUCTIONS

Applications for MMNGS service must be received at the address shown below at least 30 days prior to the first calendar day of the desired start month.

- Complete entire application, filling in all spaces. If unclear on any part of this MMNGS Application, call (716) 857-7775 for assistance.
- Attach a listing of all NFGDC end-users which would be in the MMNGS Group – include each end-user's complete business name and NFGDC account number.
- 3. Include your \$500 non-refundable application fee.
- Mail or fax the completed MMNGS Application and End-User Listing to:

National Fuel Gas Distribution Corporation Steven Kawalerski Credit & Receivables Management 6363 Main St Williamsville, NY 14221 Fax #: (716) 857-7479

Upon receipt of your completed MMNGS Application and End-User list, we will advise the amount of security deposit required and provide you with Agreements to sign and return.

NATIONAL FUEL GAS DISTRIBUTION CORPORATION

MONTHLY METERED NATURAL GAS SUPPLIER ("MMNGS") APPLICATION

AND CREDIT APPLICATION

Appl. Dat	e: Account #:		Rec'd. by:	
Name of I	Business:			
Address:				
Billing/N	Mailing Address:			
Contact P	erson:		Telephone #:	
Name:	liary, list parent company name o			
Type of B		to of Inc		
	corporation Date & Sta imited Liability Company		Partnership	
	ole Proprietorship		Limited Partnership	
	chool or School District		Municipal Entity	
	hurch or Religious Institution		Municipal Agency	
	Jot-for-Profit Organization		Municipality	
OFFICER	S / PRINCIPALS OF BUSINESS	APPLICANT	· · ·	
Name:		T	itle:	
Home Ad	ldress:			
Name:		Т	itle:	
Home Address:				
Name:		г	ïtle:	
Home Ad	ldress:			

ADDITIONAL APPLICANT INFORMATION:

Does your company currently purchase gas or transportation services from National Fuel Gas Distribution Corporation (NFGDC)? _____yes_____no

If "yes", please enter your NFGDC account number from a recent bill: ______

Have you acted as a pool agent for any transportation gas pool on National Fuel Gas Distribution Corporation's system any time in the last twelve (12) months? _____ yes _____ no

When do you wish to initiate services as a Monthly Metered Natural Gas Supplier? 20

Do you elect to have NFGDC bill gas supply charges to your Monthly Metered Transportation Customers?

BANK REFERENCES:		
Bank:	Phone #:	
Address & Branch		
Bank:	Phone #:	
Address & Branch		

ADDITIONAL CREDIT / TRADE REFERENCES:

Name:	Phone #:	
Address:		
Name:	Phone #:	
Address:		
Name:	Phone #:	
Address:		

Remember to include your \$500 non-refundable application fee. Your application will not be processed until this fee is received.

The undersigned hereby authorizes National Fuel Gas Distribution Corporation to make whatever credit inquiries it deems necessary in order to process this credit application; regarding any credit review or the collection of any debts accrued as a result of any credit extended as a result of their reliance on the information provided on or obtained from credit references given on this application. In addition, the undersigned hereby authorizes and instructs any person or credit reporting agency to compile and furnish National Fuel Gas Distribution Corporation any information it may have or may find necessary to obtain in response to requested credit inquiries. The undersigned further asserts that they have the authority to grant the permission to relinquish the requested information.

Signature	Title	Date
Signature	Title	Date

Fax or mail this application, along with customer listing (business name <u>and NFGDC Account</u> Number) to:

> National Fuel Gas Distribution Corporation Steven Kawalerski Credit & Receivables Management 6363 Main St Williamsville, NY 14221 Fax #: (716) 857-7479

CUSTOMER CO	NSENT FORM
For customers who have elected to take natural gas sales service from a supplier other than National Fuel Gas Distribution Corporation ("National Fuel")	
Account Name: (Please print or	type your full legal name)
Please Check One of the Following:	
New Customer Existing National Fuel Customer National Fuel Account #	
Service Address:	
City: State:	Zip Code:
Phone Number: ()	
To National Fuel:	
I have agreed to purchase my natural gas from the following supplier instead of National Fuel:	
Supplier's Name:	
Supplier's Rate Code:	(for Choice Billing)
Supplier's Pool Name:	(obtain from Supplier)
I understand that I will not be a sales service customer of National Fuel. Also, I understand that all bills for natural gas charges will be billed at the above named Supplier's rates, but transportation charges shall continue to be billed at National Fuel's applicable rates. I also understand that if I have any questions about my bill, I should call the above supplier. However, if I smell gas or have any safety questions or concerns, I must call National Fuel at the phone number stated on my bill. Furthermore, I understand that this Customer Consent Form and the services that shall arise from signing this Customer Consent Form shall be subject to National Fuel's applicable tariffs and Gas Transportation Operating Procedures Manuals (collectively, the "Procedures"). If there are any inconsistencies between this Customer Consent Form and the Procedures, the Procedures shall prevail.	
Signed:(Customer Signature)	
(type or print name)	For Transportation Services Department Use Only SC App'd By Date Email Date/Time Stamp

I

Customer Consent to a Change of NGS Notification – Examples

a. SATC Customer Example



MONTH/DAY/YEAR

NAME ADDRESS CITYSTATEZIP

Dear CUSTOMER:

RE: Service Address: ADDRESS, Account Number(s): CONTRACT ACCOUNT NUMBER

We have received information from COMPANY that you have selected them as your new natural gas supplier. After a minimum 5-day waiting period, COMPANY will begin supplying your natural gas on or about <START DATE>. If this information regarding your new supplier is <u>NOT</u> correct, please call us as soon as possible during our normal business hours of 7:00 M – 6:00 PM, Monday – Friday. If you are calling from Erie, dial 871-8200. If you are calling from outside Erie, please call 1-800-365-3234.

National Fuel Gas Distribution Company (National Fuel) will send you your monthly bill on behalf of COMPANY. This bill will include the Delivery Service Charges owed to National Fuel and the Gas Supply Charges owed to COMPANY. The entire amount should be sent to National Fuel by the due date shown on the bill. You must pay both the National Fuel charges and the COMPANY charges to avoid termination and collection activity in accordance with public utility regulation.

If you are currently receiving your gas from another natural gas supplier, your last bill with your current natural gas supplier will show the total amount owed to your current supplier and the total amount owed to National Fuel. If you are on the gas supplier's Budget Plan, the supplier's plan balance will also be applied to your last bill for gas from that supplier.

Future bills from us will show the Gas Supply Charges owed to COMPANY and the Delivery Service Charges owed to National Fuel for the current month as well as any unpaid balances from previous months.

Although COMPANY will supply your natural gas; National Fuel will remain responsible for the safe delivery of the gas, including the meter reading. If you smell gas or have any safety concerns, please call us at 1-800-444-3130.

Sincerely,

National Fuel

(2) MMT Customer Example



MONTH/DAY/YEAR

NAME ADDRESS CITYSTATEZIP

Dear CUSTOMER:

RE: Service Address: ADDRESS Account Number(s): CONTRACT ACCOUNT NUMBER :

We have received information from COMPANY that you have selected them as your new natural gas supplier. After a minimum 5-day waiting period, COMPANY will begin supplying your natural gas on or about <START DATE>. If this information regarding your new supplier is <u>NOT</u> correct, please call us as soon as possible during our normal business hours of 7:00 M – 6:00 PM, Monday – Friday. If you are calling from Erie, dial 871-8200. If you are calling from outside Erie, please call 1-800-365-3234.

Although COMPANY will supply your natural gas, National Fuel will remain responsible for the safe delivery of your natural gas, including the meter reading. If you smell gas or have any safety concerns, please call us at 1-800-444-3130.

Sincerely,

National Fuel



National Fuel Gas Distribution Corporation Small Aggregation Transportation Supplier Gas Supply Affidavit

The undersigned swears and affirms, to the best of (his/her) information and belief, the following:

- Supplier has executed contracts to sell gas to customers located in National Fuel Gas Distribution Corporation's (NFGDC) service area and has entered into a Service Agreement with NFGDC pursuant to the Small Aggregation Transportation Supplier (SATS) Rate Schedule in NFGDC's Pennsylvania Public Utility Commission approved tariff.
- 2. Supplier represents that pursuant to aforesaid agreements it will satisfy firm delivery requirements by maintaining firm gas supplies AND, if such supplies are not directly produced into NFGDC, firm interstate pipeline capacity (Supplier or NFGDC provided) equal to 100% of the upstream pipeline capacity requirements for the periods specified in the tariff. Other than capacity assigned directly from NFGDC pursuant to the SATS program, all such firm interstate upstream capacity must be approved for use as described in 66 Pa. C.S.§ 2204 (d).

Supplier	:
Name:	
Title:	
Date:	

Return to: National Fuel Gas Distribution Corp. Gas Supply Administration 6363 Main Street Williamsville NY, 14221 Fax: (716) 857-7823

NATIONAL FUEL GAS DISTRIBTUION CORPORATION/6363 MAIN STREET, WILLIAMSVILLE, NY 14221

	national Fuel		
U	Utility Account Reclassification Certification		
-	•	l to Commercial	
Please complete this f	form and return it to National Fuel. Incomp	ete Forms will not be processed.	
National Fuel Account Nur	mber	Type of Structure (college dorm, commercial with upstairs residential, etc.)	
Name		Check if applicable: Industrial Public Authority	
Street Address			
City County	State ZP o	Percentage of commercial use at property	
If this reclassification	n is for another location, provide addre		
Street Address		Telephone Number () -	
City County	State ZP o	ode Emeli Address	
Who should comp	lete this form?		
The Customer of recor	d for the account indicated above should fill	I out and sign this form. Forms completed on behalf of Customers by Natural It to contact the Customer to verify the representations made in this form.	
		istribution Corporation's Tariff, Gas – Pa. P.U.C. No. 9 ("Tariff"):	
		assified as Residential where gas supplied for residential purposes such as a	
dwelling, accessory bui		our or less dwelling units, separately metered apartments of a multiple ch as garages. Churches and missions (places of worship) shall be entitled to	
trade, agriculture, fore clubs, hotels, auto repa	stry, fisheries, transportation, communication air, etc. The nature of the customer's prima	lassified as Commercial where the Customer is using gas in wholesale or retail sy sanitary services, finance, insurance, real estate and services such as ary business or economic activity at the location of service determines the se support is primarily from private funds shall be classified as a Commercial	
customer. Churches an		to be classified as Commercial customers, and, upon, choosing to receive	
	> 50% Rule: Where gas used for non-residential and residential purposes is not separately metered, the Commercial Service Classification shall apply only if more than 50% of the pertinent structure's square footage is used for commercial purposes.		
Allocation F	ormula		
calculated b common are	, by the square footage of commercial use (ex	on-residential space, the % applicable to commercial use should be voluding common areas) by the total square footage (excluding nearest 10%. Hotels, motels, etc., may claim residential status for ys.	
Account will be taxed a		urther I understand that if this information is accepted by National Fuel, my any portion of the account should be taxed at residential rates or is otherwise g information to National Fuel.	
Mail Form to:	National Fuel	Signature	
Wail Form to.	Attn. Transportation Services	Name	
	6363 Main Street Williamsville, NY 14221	Title	
or by Fax to:	(716) 857-7479	Date	
or by email to:	TSD-Billing@natfuel.com	For Transportation Services Department Use Only	
Questions:	(716) 857-7432	SC App'd By Date	
		Email Date/Time Stamp	

	ational Fuel	
	Utility Account Rec	lassification Certification
	•	ial to Residential
Please complete this	form and return it to National Fuel. Incom	plete Forms will not be processed.
National Publ Account Nu	mber	Type of Structure (college dorm, commercial with upstairs residential, etc.)
Name		
Street Address		
		Percentage of residential use at property
City County	State 217	code
If this reclassification	on is for another location, provide add	ress
Street Address		Telephone Number () -
City County	State 217	code Email Address
Who should com		
Residential Service O private dwelling, apa dwelling, accessory b Service under the Re <u>Commercial Service</u> 1 trade, agriculture, fo clubs, hotels, auto re customer classificatio customer. Churches a service as a Commen <u>> 50% Rule</u> ; Where a apply only if more th <u>Allocation</u> Where th calculated common a	<u>Jassification</u> : A Customer Account may be or rtment house with a single meter supplying wildings to dwellings or apartment houses a sidential service rate schedule. <u>Classification</u> : A Customer Account may be restry, fisheries, transportation, communica pair, etc. The nature of the customer's prim on. A religious or nonprofit organization, wh and missions (places of worship) may choose cial customer, shall remain a Commercial cu gas used for non-residential and residential s an 50% of the pertinent structure's square f <u>Formula</u> e premises consists of both residential and re t by the square footage of commercial use (s	purposes is not separately metered, the Commercial Service Classification shall botage is used for commercial purposes. non-residential space, the % applicable to commercial use should be excluding common areas) by the total square footage (excluding nearest 10%. Hotels, motels, etc., may claim residential status for
Account will be treat	ed as a Residential Account for tax purposes	Further I understand that if this information is accepted by National Fuel, my , and to the extent any portion of the account should be taxed at as a e for submitting the appropriate supporting information to National Fuel. Signature Name Title
	Williamsville, NY 14221	Date
or by Fax to: or by email to:	(716) 857-7479 TSD-Billing@natfuel.com	For Transportation Services Department Use Only
Questions:	(716) 857-7432	SC App'd By Date
	- •	Email Date/Time Stamp

ACRONYMS

°C	Degrees Celsius
°F	Degrees Fahrenheit
ADDQ	Aggregated Daily Delivery Quantity
AGA	American Gas Association
AVG	Average
BCF	Billion Cubic Feet
BSA	Billing Services Agreement
BT	Burner Tip
BTU	British Thermal Unit
CBS	Consolidated Billing Service
CCF	100 Cubic Feet (Volumetric) or approximately 1.03 therms
CDP	Central Delivery Point
CF	Cubic Foot
Chapter 56	Standards in Billing Practice for Residential Utility Service
CIS	Customer Information System
СТС	Competitive Transition Charge
CU	Cubic
CU FT/HR (CFH)	Cubic Feet Per Hour
DD	Degree Day
DDQ	Daily Delivery Quantity
DMI	Daily Market Index
DMT	Daily Metered Transportation
DSA	Data Security Agreement
DTH	Dekatherm, 10 Therms or 1,000,000 BTU's (Energy)
EBB	Electronic Bulletin Board
EBD PTRA	Elderly, Blind or Disabled Payment Troubled Residential Assistance Program
EDI	Electronic Data Interchange
EIA	Energy Information Administration
EFT	NFGSC's Enhanced Form Transportation Service
ESCO	Energy Services Company
EPSQ	Elapsed Prorated Scheduled Quantity
ESS	NFGSC's Enhanced Storage Service
FERC	Federal Energy Regulatory Commission
FIFO	First-In-First-Out
FT	Firm Transportation
GAC	Gas Adjustment Clause
GISB	Gas Industry Standards Board
IT	Interruptible Transportation
JDN	Jurisdictional Delivery Notice
LC	Letter of Credit
LDC	Local Distribution Company, (e.g.: Distribution – National Fuel Gas Distribution Corp.)
LIRA	Low Income Residential Assistance
LAUF	Lost and Unaccounted for Gas

МАОР	Maximum Allowship Operating Dressure
	Maximum Allowable Operating Pressure
MCF	Thousand Cubic Feet (volumetric) or approx. 10 therms
MDAPQ	Maximum Daily Aggregation Pool Quantity
MDIQ	Maximum Daily Injection Quantity
MDPQ	Maximum Daily Pooling Quantity
MDTQ	Maximum Daily Transport Quantity (or MDQ)
MDWQ	Maximum Daily Withdrawal Quantity
MMBTU	Million British Thermal Units
MMCF	Million Cubic Feet
MMDTH	Million Dekatherms
MMI	Monthly Market Index
MMNGS	Monthly Metered Natural Gas Supplier Service
MMT	Monthly Metered Transportation
MSQ	Maximum Storage Quantity
NAESB	North American Energy Standards Board
NFGDC	National Fuel Gas Distribution Corporation
NFGSC	National Fuel Gas Supply Corporation
NGDC	Natural Gas Distribution Company
NGPA	Natural Gas Policy Act of 1978
NGS	Natural Gas Supplier
NYMEX	New York Mercantile Exchange
OFO	Operational Flow Order
PA PUC	Pennsylvania Public Utility Commission (a.k.a. PUC)
PDA	Pre-determined allocation
POR	Purchase of Receivables
PSB	Priority Standby Service
PSI	Predetermined Scheduling Instructions
PSIG	Pounds Per Square Inch Gauge
RNG	Renewable Natural Gas
SA	System Alert
SATC	Small Aggregation Transportation Customer Service
SATS	Small Aggregation Transportation Supplier Service
SCF	Standard Cubic Feet
SMO	System Maintenance Order
SNL	SNL Natural Gas Index
T&E	Transportation & Exchange
TAQ	Total Annual Quantity
Th	Therm or 100,000 BTU's (Energy)
ТРА	Trading Partner Agreement
TS	Transition Surcharge
TSA	Transportation Service Agreement
TSD	Transportation Services Department
TSS	Transportation Scheduling System
UCR	Upstream Capacity Requirement
WACOG	Weighted Average Cost of Gas
MACOU	monthe and a cost of Gus

DEFINITIONS

Access Controller	For a non-residential customer or multiple dwelling owner or manager, it is a
	party known to the Company to be in control of access to the metering
	equipment of a customer.
Acquiring Shipper	In the context of capacity release, a shipper who acquires firm capacity
	rights from a releasing shipper (also known as "replacement shipper").
Act	The Natural Gas Choice and Competition Act (66 Pa.C.S. §§ 2201-2212).
Actual Reading	One obtained by a Company employee from either the meter or a remote
	registration device attached thereto.
Affiliated Natural Gas Supplier	A natural gas supplier engaging in marketing activities related to natural gas
	supply services by the marketing division or marketing operation of a natural
	gas distribution company. The term does not include a utility's marketing
	department or division to the extent that it informs existing or prospective
	customers of the availability and price of the regulated sales service that
	utility furnishes in its role as supplier of last resort.
Aggregated Customers	Customers receiving service under Distribution's SATC Rate Schedule.
Aggregated Daily Delivery	The quantity of gas a Supplier-or Aggregator is required to bring to
Quantity (ADDQ)	Distribution each day for redelivery by Distribution to the Supplier's Market
	Pool(s).
Aggregation	A) Grouping of customers organized by an Aggregator for the purpose of
	obtaining gas supplies from non-utility commodity suppliers.
	B) Also refers to the grouping of end-users together to qualify for
	Distribution's SATC Rate Schedule.
Aggregator	An entity licensed by the Commission that purchases natural gas and takes
	title to it as an intermediary for sale to retail customers. An Aggregator
Alternate Engl Canability	consolidates a number of individual customers into a group.
Alternate Fuel Capability	The ability of any user such as a non-residential facility, or critical care residential facilities such as nursing homes, to use more than one fuel,
	including natural gas, for the same purpose(s). Implies that the facilities for
	such use have actually been installed, are operable, and that an adequate
	supply of the alternate fuel is readily available on-site.
American Gas Association	The American Gas Association (AGA) represents 189 local natural gas
(AGA)	utilities that deliver gas to 54 million homes and businesses in all 50 states.
	Additionally, AGA provides services to member natural gas pipelines,
	marketers, gatherers, international gas companies and a variety of industry
	associates. AGA acts as a clearinghouse for gas energy information, as a
	catalyst in technical and energy policy matters and as a powerful voice for
	its members.
Annual Period	The 12 months beginning with the month in which the customer first
	receives service under the applicable Rate Schedule and each succeeding 12-
	month period.

Application for Service	The written form for requesting any of Distribution's service offerings. Completion of an Application For Service by any residential customer or non-residential customer shall constitute an agreement to accept gas service under the terms and conditions of Distribution's tariff, including all applicable charges.
Arrears	Charges for non-residential and residential customers for which payment has not been made more than 20 calendar days after payment was due.
Average Temperature (Mean)	The calculated average of the twenty-four hourly dry bulb atmospheric temperatures in degrees Fahrenheit recorded for each day.
BTU Content	British Thermal Unit as defined under Part 229 of the Commission's Regulations and, unless indicated otherwise, is expressed herein on the dry basis.
Backbill	The portion of any bill, other than a levelized bill, which represents charges not previously billed for service that was actually delivered to a non- residential customer during a period preceding the current billing cycle. A bill based on an actual reading rendered after one or more bills based on estimated or customer readings which exceeds by 50 percent or more the bill that would have been rendered under Distribution's standard estimation program is presumed to be a backbill.
Backup Supply Service	Energy provided to a pre-arranged customer to replace the loss of its sources and to cover that portion of demand that exceeds supply.
Balancing	Equalizing the volumes of gas withdrawn from a pipeline system with the volumes of gas injected into the pipeline. Penalties may be assessed for transportation imbalances beyond specified tolerances.
Banking (Banked Gas)	Excess volumes held to be consumed in future billing periods. Default practice is to make banked gas the first gas consumed in the following month, i.e. FIFO.
Base Load	The minimum amount of natural gas delivered or required over a given period of time at a steady rate. The minimum demand over a given period of time which is usually not temperature sensitive.
Base Rate	A charge normally set through rate proceedings by appropriate regulatory agencies and fixed until reviewed at future proceedings. It is calculated through multiplication of the rate from the appropriate rate schedule by the level of consumption. It does not include components that may vary from billing cycle to billing cycle, such as applicable surcharges.
Basic Services	Services necessary for the physical delivery of natural gas to a retail customer, consisting of natural gas distribution services and natural gas supply services.
Basis	The difference between the spot or cash price of a financial instrument or commodity and the price of the futures contract or a related derivative instrument. A seller is "short of the basis" if selling spot goods hedged by the purchases of futures. Someone who is "long of the basis" has bought spot goods and hedged them by the sale of futures. A basis point is one percent of one percent.
Billed Prices	The disclosed NGS prices on the customer bill.
Billing Cycle	The regular periodic interval used by a utility for reading the meters of a customer for billing purposes.

Boiler	A device for generating steam for power, processing, or heating purposes or
	for producing hot water for heating purposes or hot water supply. Heat from
	an electrical combustion source is transmitted to a fluid contained within the
	tubes in the boiler shell. This fluid is delivered to an end-user at a desired
	pressure, temperature, and quality. Boilers are often classified as steam or hot
	water, low pressure or high pressure, capable of burning one fuel or a number
	of fuels.
Boiler Fuel	Fuels suitable for generating steam or hot water in large industrial or
	electrical generating utility applications.
Boiler Fuel Gas	Natural gas used as fuel for the generation of steam or hot water.
British Thermal Unit (BTU)	The amount of heat energy necessary to raise the temperature of one pound of
	water one degree Fahrenheit.
British Thermal Unit (Btu), Dry	A measure of the heating value of natural gas that is free of moisture, or
	contains less than 7 pounds per Mcf of water vapor.
British Thermal Unit (Btu),	A measure of the heating value of natural gas that is fully saturated with
Saturated	water vapor under standard temperature, pressure and gravity conditions.
Broker	An entity, licensed by the Commission, that acts as an agent or intermediary
	in the sale and purchase of natural gas but does not take title to natural gas
	supply.
Bundled Sales Service	Service under which the cost of the gas and the cost of transporting it are
	combined into one retail price or rate. This is to be contrasted with
	unbundled services under which some or all of the different rate components
	are separately stated.
Burner Tip (BT)	The point at which natural gas is used such as a furnace, water heater or
	range.
Business Day	Monday through Friday excluding Federal Banking holidays and Company
·	holidays.
Business Party	An entity that can establish and make use of Production Pools, aggregation
	and end-use Market Pools, SATS and delegations.
Business Partner	A term for Customer used within Distribution's CIS.
Bypass	The action of a retail customer to obtain power or natural gas directly from a
Dypu ss	wholesale supplier or transporter, thus eliminating any utility charges
	applicable to distribution. This term is also sometimes applied when an end-
	user closes down operations, installs alternate fuel capability, or moves its
	operations to the service area of another natural gas supplier, thereby
	curtailing its purchases from its traditional supplier.
Capacity (Gas)	The maximum amount of natural gas that can be produced, transported,
T	stored, distributed, or utilized 1) in a given period of time under design
	conditions or 2) pursuant to the terms of a contract.
Capacity Charge	One element of a multi-part pricing method often used in energy
	transportation transactions. The Capacity Charge, sometimes called Demand
	Charge, is assessed on the amount of capacity being purchased or demanded.
	The Capacity Charge is typically expressed in \$/Dth/month.
Capacity Release	The assignment, allocation or release of transportation rights to another party
·····	authorized under applicable FERC orders and/or regulations. Releases are
	made on a permanent or temporary basis, and generally awarded to the
	highest bidder, except in the case of applicable retail customer choice
	programs and asset management arrangements.
Cash Out	The resolution of gas imbalances at the end of a period, usually a month, through
	cash payments instead of in-kind.
Ccf	100 cubic feet of gas. This is a measure of gas usage.
Central Delivery Points (CDP)	A logical nomination point where gas supplies are transferred from the "Gas
Central Denvery I Onits (CDF)	In" nomination to the end users designated in the "Gas Out" nomination for
	transportation.

Chapter 56	The PUC regulations that govern metering, billing and collections for
Chapter 62	residential gas and electricity service. The PUC regulations that govern Natural Gas Supply Customer Choice.
City Gate	The point where interstate pipelines deliver gas into Natural Gas Distribution Company facilities.
City Gate Imbalance Charges	Daily deliveries of gas supplies by a Supplier to its aggregated group(s) under SATS Service must be within a tolerance band of the sum of the DDQs (ADDQ) of the customers in the Supplier's SATS Group. City gate underdeliveries >2% of the ADDQ will result in gas being supplied by Distribution at the applicable penalty rates in effect.
City Gate Rate (Gate Rate)	The rate charged a distribution utility by its suppliers. It refers to the cost of the natural gas at the point at which the distribution utility historically took title to the natural gas.
Class of Service	A group of customers with similar characteristics (e.g., residential, commercial, industrial, etc.) that are identified for the purpose of setting a rate for service.
Cogeneration	Any of several processes which either use waste heat produced by electricity generating to satisfy thermal needs or process waste heat to electricity or produce mechanical energy. (2) The use of a single prime fuel source in a reciprocating engine or gas turbine to generate both electrical and thermal energy to optimize fuel efficiency. The dominant demand for energy may be either electrical or thermal. Usually it is thermal with excess electrical energy, if any, being transmitted into the local power supply companies' lines.
Commercial	A sector of customers or service defined as non-manufacturing business establishments, including but not limited to hotels, motels, restaurants, wholesale businesses, retail stores, and health, social, and educational institutions. Apartment complexes may be considered to be residential usage. A utility may classify the commercial sector as all consumers whose demand or annual use exceeds some specified limit. The limit may be set by the utility based on the rate schedule of the utility.
Commission (a.k.a. PUC)	See Public Utility Commission.
Commodity	Basic natural gas supply service sold by volume (ccf or Mcf) on Company's system.
Commodity Charges	The charges for basic gas supply service which is sold either by volume (ccf or Mcf) or heating value (dekatherms).
Commodity Costs	Those costs that are allocated on the basis of actual use of service.
Competitive Transition Charge (CTC)	A non-bypassable charge, however designated, for recovery of stranded costs.
Confirmed Nominations	Confirmation by system operators that a change in a customer's transportation nomination will be matched by a change in supplier quantities.
Conjunctive Billing	The process of billing for several natural gas demands, services, or meters as if the billing were for a single demand, service, or meter. Conjunctive Billing is sometimes referred to as Combined Billing.
Consumer	A retail gas customer.
Consumer Contract	The written disclosure statement of the terms of service between a customer and a Natural Gas Supplier (NGS) which satisfies the definition of consumer contract set forth at 73 P.S. §2203.

Consumer Protection	The standards, practices and service protections for retail gas customers,
	including those provided for in 52 PA. Code Ch. 56 (relating to standards and
	billing practices for residential utility service), as well as applicable federal
	and state debt/credit collection statutes and any regulations or orders of the
	commission that provide such protections, as may be modified by the
<u> </u>	commission from time to time.
Consumption Algorithm	A mathematical formula used to calculate a customer's daily consumption
	based on a customer's historical base load and heat use per effective degree-
	day factors.
Contract Account Number	The customer's nine-digit account number; formerly the RBA plus the two-
	check digits.
Contract Term	The duration of effectiveness for a contract.
Control Number	The sequential number which determines a customer's meter read date.
Conversion to Natural Gas	Changing customer's energy service to natural gas from some other fuel. The
	term includes adjustment of customers' appliances to perform satisfactorily
	with natural gas.
Core Customer	A customer that has no viable alternative fuel and relies on the utility for gas
	delivery and/or commodity service.
Core Market	Volumes that are typically supplied by the local distribution company to
	residential and commercial customers, public institutions such as hospitals
	and schools, and non-industrial companies with relatively small consumption
	and generally no alternative fuel capability.
Cost of Service	The total amount of money, including return on invested capital, operation
	and maintenance costs, administrative costs, taxes, and depreciation expense,
	to produce a utility service. Traditional utility cost of service may be
	expressed as Operating Costs + Taxes + (Rate of Return x [Cost of Plant
~ ·	Depreciation]).
Cramming	The addition of unauthorized charges to a customer's bill.
Critical Day	A critical day exists when the LDC declares an OFO.
Critical Period	A Critical Period is a period of operational stress or impending potential
	stress that may impact the integrity of Distribution's system or a force
	majeure event.
Critical Service Customer	Any customer such as, but not limited to: homes, hospitals, nursing homes,
	residences, apartment buildings, condominiums, hotels, motels, dormitories,
	correctional institutions, and firehouses. Schools are not classified as critical
	service unless there are dormitories or other living facilities present.
	Similarly, churches and other religious organizations are not critical service
Carbin Footman Harry (C. Ft /H.)	facilities unless they include rectories and/or convents for living/sleeping.
Cubic Feet per Hour (Cu. Ft./Hr.)	The standard unit of measurement used to express the maximum firing rate
or (CFH)	(capability) of a natural gas-fired space-heating or process-use device.
Curtailment	A reduction in transmission service in response to a transmission capacity
Createrner	shortage as a result of system reliability conditions.
Customer	a) A Retail Gas Customer as defined by 66 PA. C.S.§ 2202 (relating to
	definitions). The term includes all persons identified by the NGDC Ratepayer of record under \$50.05 (relating to persons authorized to act on behalf of a
	of record, under §59.95 (relating to persons authorized to act on behalf of a customer) as authorized to act on behalf of the NGDC Patapayer of record in
	customer), as authorized to act on behalf of the NGDC Ratepayer of record in changing the NGS for the account
	changing the NGS for the account. b) A person that buys retail natural gas.
Customon Assourt N	
Customer Account Number	The utility specific unique identifier associated with a utility customer, i.e. the
Customer Change	Contract Account Number.
Customer Charge	A monthly charge to cover NGDC costs such as maintaining the gas lines,
	meter reading and billing.

Customer Consent Form	Form by which a new customer selects supplier for transportation.
Customer Costs	The costs directly related to serving a customer, regardless of sales volume,
	such as meter reading, billing and fixed charges for the minimum investment
	required to serve a customer.
Customer Delivery Points	Metered points of entry for gas delivered from the Distribution pipeline
	system to a customer's facility.
Customer Excess	Unused current-month deliveries; i.e., the quantity of gas delivered in any
	month which is greater than that amount left after applying previous months'
	banks of customer excess to current month consumption. (a.k.a. "Surplus
	Imbalance")
Customer Information	Written, oral or electronic communications used by natural gas providers to
Carola Dilling	communicate to consumer prices and terms of service.
Cycle Billing	A billing procedure that provides for the billing of a portion of customers each working day so that all customers are billed within a predetermined
	period, such as one month, two months, etc. See also BILLING CYCLE.
Daily Delivery Quantity (DDQ)	Amount of gas supply required to be delivered at Distribution City gate by the
Duny Denvery Quantity (DDQ)	customer or the customer's NGS.
Daily Market Index (DMI)	A daily market price of gas used within NFGDC's Tariff, equal to the MCF
· · · · · · · · · · · · · · · · · · ·	equivalent of the volume weighted average price for the applicable date, at
	Tennessee Gas Pipeline's Zone 4 200 Line Pool.
Daily Metered Transportation	Type of service under Distribution's Rate Schedule DMT whereby the
(DMT)	customer installs the necessary electronic equipment, acceptable to
	Distribution, which allows Distribution to monitor the customer's daily usage
	of gas.
Data Element	One or more characters that represent numeric or alphanumeric fields of data.
Declining Block Rate	A rate structure that prices successive blocks of power use at increasingly
	lower per-unit prices. The more energy a customer uses the lower the
Defensed Desiment Agreement	average price.
Deferred Payment Agreement	An agreement between Distribution and the customer for the payment of outstanding charges over time.
Deficiency Imbalance	The amount of gas used by a customer that is greater than the sum of the bank
Denerency minimatiance	plus current-month deliveries.
Degree Day (DD)	A measure of the coldness of the weather experienced, based on the extent to
	which the daily mean temperature falls below a reference temperature,
	usually 65° F. For example, on a day when the mean outdoor dry-bulb
	temperature is 35° F, there would be 30 degree days experienced. A measure
	of seasonal variation and intensity of temperature. In residential customer
	load, the more degree-days in a year than the "average", the higher the utility
	bill.
Dekatherm	A measure of heat content value of gas. Gas usage is determined by
	multiplying the Mcf used by the heat content value of the gas. One Dth
Delimenskilian	equals approximately 945 cubic feet on the Company's system.
Deliverability	The amount of natural gas a well, field, pipeline, or distribution system can supply in a given period of time. Also, the practical output from a gas storage
	reservoir.
Delivery	In the context of futures trading, the tendering and receipt of the physical
2	commodity to satisfy a futures contract.
Delivery Point	The point on a gas pipeline's system at which it delivers natural gas that it has
	transported.
Demand	The rate at which natural gas is delivered to or by a system at a given instant
Demanu	The fate at which hatural gas is derivered to or by a system at a given instant
Demanu	or averaged over a designated period, usually expressed in Mcf, MMBtu, or

Demand Charge	The Demand Charge portion of rate design is expected to recover the costs
Demanu Charge	associated with the level of demand for the particular service and will be paid
	even if no service is taken by the customer; a reservation charge. Included in
	demand charges are capital-related costs and the cost of operation and
	maintenance of transmission and distribution pipeline facilities.
Design Day	A 24-hour period of demand which is used as a basis for planning gas
2 00-g 2 00	capacity requirements.
Design Day Conditions	The extreme weather conditions that an NGDC uses to project customer
	requirements.
Direct Customer	A customer that purchases and schedules delivery of natural gas for its own
	consumption and not for resale.
Disclosure Statement	The written disclosure of the terms of service between an NGS and a
	customer which satisfies the definition of "consumer contract" in section 3 of
	the Plain Language Consumer Contract Act (73 P.S. §56.15(4) (relating to
	billing information) and universal service, as applicable.
Disclosure Statement Prices	The disclosed NGS prices in the disclosure statement.
Distribution (Gas Utility)	A company that obtains the major portion of its natural gas operating
Company	revenues from the operation of a retail gas distribution system and that
	operates no transmission system other than incidental connections within its
	own system or to the system of another company. See also Local Distribution
	Company.
Distribution (Gas)	(1) Mains, service connections, and equipment that carry or control the supply
	of natural gas from the point of local supply to and including the sales meters.
	(2) The delivery of natural gas from the city gate to the consumer.
Distribution Charges	The charges for delivery of natural gas from the point of receipt into the
	NGDC's system.
Distribution Line	Network-like pipeline that transports natural gas from a transmission line to
	an end-user's service line or to other distribution lines. Generally, large
	pipelines are laid in principal streets, with smaller lateral lines extending
	along side streets and connected at their ends to form a grid; sometimes
	lateral lines are brought to a dead end.
Distribution Loss	See Line Loss.
Downstream Pipeline	A pipeline receiving natural gas from another pipeline at an interconnection
	point. Compare UPSTREAM PIPELINE.
Dual Fuel Capacity	The capacity of an energy burning facility to use more than one kind of fuel,
	alternatively.
Efficiency €	Relating to heat, a percentage indicating the available Btu input that is
	converted to useful purposes. It is applied, generally, to combustion
Efficiency Information	equipment. E equals Btu output over Btu input.
Efficiency Information	The existing NGDC efficiency information included in the NGDC's
Eldonly Dlind on Dischlad	consumer education program.
Elderly, Blind or Disabled	A program designed to assist our elderly, blind or disabled customers in the reduction of arrangees and asse the burden of financially troubled
Payment Troubled Residential Assistance Program (EBD	reduction of arrearages and ease the burden of financially troubled participants. Eligible customers will receive a lower gas rate, arrearage
PTRA)	forgiveness and case management counseling. In addition, they may be
I INAJ	eligible for repairs to heating equipment and weatherization and insulation of
	their residences.
Electronic Bulletin Board (EBB)	Generic name for the system of electronic posting of pipeline delivery
Electronic Duneun Doaru (EDD)	information as mandated by the Federal Energy Regulatory Commission
	(FERC).
End-User	One who actually consumes energy, as opposed to one who sells or re-sells it.
12114-0301	one who actuary consumes energy, as opposed to one who sens of re-sens it.

Enorgy Sorvigos Company	Any non-utility entity that can perform energy and customer service functions
Energy Services Company (ESCO)	in a competitive environment, including provision of energy and assistance in
(ESCO)	the efficiency of its use. The term ESCO is used herein to refer to entities that
	are deemed eligible by the Department of Public Service to provide
	associated customer service functions to end use customers in Pennsylvania.
Essential Human Needs Retail	Customers consuming gas service in buildings where persons normally dwell
Gas Customer	including, but not limited to, apartment houses, dormitories, hotels, hospitals.
Gas Customer	(52 Pa. Code § 69.22)
Estimated Usage	Customer usage based on history, estimated and used in balancing and
Estimateu Usage	settlement for customers whose meters have not been read for the month.
	When actual meter reads are obtained adjustments will be made to the
	account.
Facility	An existing, planned location or site which is or will be constructed where
1 uchildy	natural gas is defined as an energy source.
Federal Energy Regulatory	The Federal agency which regulates, <i>inter alia</i> , the transmission and sale of
Commission (FERC)	energy, including natural gas, in interstate commerce. FERC generally is the
	federal counterpart to state regulatory commissions.
Firm Capacity	Assigned capacity or comparable capacity that can be called upon to serve
	customer requirements on a reliable basis even under design day conditions
Firm Customer	A customer for whom contract demand is reserved and to whom the supplier
	is obligated to provide service.
Firm Demand	The capacity that a supplier is required by contract to provide (except during
	extreme emergencies).
Firm Gas	Gas sold on a continuous basis for a defined contract term (e.g., one year)
	under rate schedules or contracts that anticipate no interruptions, regardless of
	class of service, except for force majeure. Compare to Interruptible Gas.
Firm Service	Service, e.g. transportation, offered to customers under schedules or contracts
	that once scheduled, anticipates no interruptions, regardless of class of
	service, except for force majeure.
First-In-First-Out (FIFO)	A gas allocation practice which ensures that banked gas is applied to current-
	month usage before current-month deliveries. FIFO is the bank allocation
	methodology applied by Distribution.
Fixed Charge	The charge calculated in rate design to recover all or a portion of the fixed
	costs of a utility plant, including the generation facility and transmission
D , ID ,	lines, meters, and some taxes.
Fixed Price	A contract in which a named, exact price is specified for commodities. A
	fixed price contract may have variations to the fixed price such as escalators or redeterminations for increased costs or incentives for meeting various
Forecast Daily Requirement	goals. The estimated daily consumption of an Aggregation Group/Market Pool as
rorceast Dany Acquirement	calculated by the Consumption Algorithm and forecast effective degree-days.
Force Majeure	A common law concept borrowed from the French civil law. "Force
r or ce majeur e	majeure" means superior or irresistible force that excuses a failure to perform.
	It has been defined by the United States Supreme Court as a cause that is
	"beyond the control and without the fault or negligence" of the party excused.
	Force majeure events also must not have been reasonably foreseeable: e.g., a
	blizzard in Houston in January may be a force majeure event, but a blizzard in
	Montana will not qualify.
Futures	A standardized contract for the purchase or sale of a commodity that is traded

Futures Contract	An exchange-traded contract promising to buy or sell standard commodities
rutures Contract	or securities at a future date at a set price. Futures are "paper" deals and
	involve profit and loss on promises to deliver, not possession of the actual
	commodity. The main difference between a futures contract and a forward
	contract is that a futures contract is cash settled, or marked-to-market, daily.
	Additionally, the futures market requires that all market participants - sellers
	and buyers alike post a performance bond called margin.
Gas Confirmation Process	The process by which transporters (e.g. pipelines and NGDCs) compare and
	verify transportation nominations at points of interconnection upstream and
	downstream, to schedule gas along the path of the Supplier's nomination.
Gas Cost Adjustment Charges	The amount billed or credited each month to account for differences between
~ ~	projected and actual gas supply costs of the NGDC.
Gas Day	A period of twenty-four consecutive hours beginning at 10:00 a.m. and
	ending at 10:00 a.m. Eastern Clock Time, next calendar day.
Gas Industry Standards Board	A nonprofit North American industry association whose mission is "to
(GISB)	develop and promote standards to simplify and expand electronic
	communications, and to simplify and streamline business practices that will
	lead to a seamless marketplace for natural gas." This organization has been
	succeeded by the North American Energy Standards Board (NAESB).
Gas Supply	Natural gas required to meet customers' needs, including gas supply,
	interstate pipeline transportation, storage, losses and any other services
	required to transport such gas to the Company's system boundary, for
	subsequent delivery by the Company to its customers and/or Aggregators.
Gas Supply Assets	Includes all sources and components associated with the acquisition and
	delivery of natural gas.
Gas Transportation	A process whereby customers may purchase gas supply from Qualified
	Sellers and have it delivered using the Company's gas distribution system.
	An entity selling capacity and energy to a Direct Retail Customer.
Gas Week (Bid Week)	Usually the last full week each month when all parties (LDCs, Marketers,
	Shippers, etc.) firm up and finalize their required gas purchases and
	transportation arrangements for the upcoming month.
Gathering Line	Network-like pipeline that transports natural gas from individual wellheads to
	a compressor station, treating or processing plant, or main trunk transmission
	line. Gathering lines are generally relatively short in length, operate at a
	relatively low pressure, and are small in diameter.
Heat Content	The sum of the latent heat and sensible heat contained in a substance, above
	the heat contained at a specified temperature and pressure expressed as Btu or
	calories per unit of volume or weight.
Heating Value	The amount of heat produced by the complete combustion of a unit quantity
	of fuel. The gross, or higher, heating value is that which is obtained when all
	of the products of combustion are cooled to the temperature existing before
	combustion, the water vapor formed during combustion is condensed, and all
	the necessary corrections have been made. The net, or lower, heating value is
	obtained by subtracting the latent heat of vaporization of the water vapor

FERC jurisdiction under the NGA) defined as a regulated company engaged in transportation in interstate commerce, or the sale in interstate commerce for resale, of natural gas received by that company from another person within or at the boundary of a state, if all the natural gas one reaver eaver certificate authorizing it to transport natural gas out of the state in which it is located, without giving up its status as a Hinshaw pipeline may receive a certificate authorizing up this status as a Hinshaw pipeline. Historical Billing Data The minimum of twelve (12) months of data as recorded by the NGDC, which contains usage data and dollar amount billed, unless I zomths of such data is not available. This data is Mcf, ccf, or Dth consumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. Sce also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally delined as one engaged in manufacturing, constru		
in transportation in interstate commerce, or the sale in interstate commerce for resale, of natural gas received by that company from another person within or at the boundary of a state, if all the natural gas so received is ultimately consumed within such state. A Hinshaw pipeline may receive a certificate authorizing it to transport natural gas out of the state in which it is located, without giving up its status as a Hinshaw pipeline. Historical Billing Data The minimum of twelve (12) months of data as recorded by the NGDC, which contains usage data and dollar amount billed, unless 12 months of such data is not available, in which case the NGDC shall provide as much billing data as is available. This data is MGC, cfor, OT the onsumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from anon-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial customer is generally defined aso not engaged in ama	Hinshaw Pipeline	A pipeline company (defined by the Natural Gas Act and exempted from
for resale, of natural gas received by that company from another person within or at the boundary of a state, if all the natural gas so received is ultimately consumed within such state. A Hinshaw pipeline may receive a certificate authorizing it to transport natural gas out of the state in which it is located, without giving up its status as a Hinshaw pipeline. Historical Billing Data The minimum of twelve (12) months of data as recorded by the NGDC, which contains usage data and dollar amount billed, unless 12 months of such data is not available. This data is Mcf, ccf, or Dth consumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure tog et gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypasing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplicit other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Customer is generice an intres werecont is opened; such accounts will not expere		
within or at the boundary of a state, if all the natural gas so received is ultimately consumed within such state. A Hinshaw pipeline may receive a certificate authorizing it to transport natural gas out of the state in which it is located, without giving up its status as a Hinshaw pipeline. Historical Billing Data The minimum of twelve (12) months of data as recorded by the NGDC, which contains usage data and dollar amount billed, unless 12 months of such data is not available. This data is Mcf, ccf, or Dth consumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exce		
ultimately consumed within such state. A Hinshaw pipeline may receive a certificate authorizing it to transport natural gas out of the state in which it is located, without giving up its status as a Hinshaw pipeline. Historical Billing Data The minimum of twelve (12) months of data as recorded by the NGDC, which contains usage data and dollar amount billed, unless 12 months of such data is not available, in which case the NGDC shall provide as much billing data as is available. This data is Mcf, ccf, or Dth consumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Service using the SIC codes, or based on demand or annual usage exceeding some speciffed linnit. The limit may be set by the utility based on		
certificate authorizing it to transport natural gas out of the state in which it is located, without giving up its status as a Hinshaw pipeline. Historical Billing Data The minimum of welve (12) months of data as recorded by the NGDC, which contains usage data and dollar amount billed, unless 12 months of such data is not available. in which case the NGDC shall provide as much billing data as is available. This data is Mcf, ccf, or Dth consumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplicr, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes of 3.9. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on th		
Iocated, without giving up its status as a Hinshaw pipeline. Historical Billing Data The minimum of twelve (12) months of data as recorded by the NGDC, which contains usage data and dollar amount billed, unless 12 months of such data is not available, in which case the NGDC shall provide as much billing data as is available. This data is MG, cf, or Dth consumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplice, typassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes of -39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility. Input Rating		
Historical Billing Data The minimum of twelve (12) months of data as recorded by the NGDC, which contains usage data and dollar amount billed, unless 12 months of such data is not available, in which case the NGDC shall provide as much billing data as is available. This data is Mcf, ccf, or Dth consumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility. Industrial Customer The indesigned rate of fuel acceptance by a burner. Usually expressed in BTH or CFH. Industrial Customer The de		
which contains usage data and dollar amount billed, unless 12 months of such data is not available, in which case the NGDC shall provide as much billing data as is available. This data is Mcf, ecf, or Dth consumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Service using the SIC codes, or base(on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility. Input Rating The designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH. Interruptible Gas Service Indicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC sales ser		
data is not available. This data is Mcf, ccf, or Dth consumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility. Input Rating The process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is system of where the customer is system of the Signed rate of the soft will yinvolves commercial and industrial customer in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial customer is system operator for Service wh	Historical Billing Data	
data as is available. This data is Mcf, ccf, or Dth consumption at some prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial lassification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility. Input Rating The designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH. Instant Connect Enrollment The process for initiating NGS service when a new account is opened; such accounts will not exprise end in term priod where the customer is supplied through NGDC sales service before switching to		
prescribed interval of consumption and associated cost. Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per MCf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Cussification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility. Input Rating The designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH. Instant Connect Enrollment The process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service berg whitching toro Mere the customer is sacondance with contractual prov		· · ·
Human Needs Customer High priority customers such as residences, hospitals and nursing homes, for which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility. Input Rating The designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH. Interruptible Gas Service Indicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff. Interruptible Load Demand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak		
which failure to get gas could be life threatening. See also Critical Service Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility. Input Rating The process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service. Interruptible Load Demand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) affer		
Customer. Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per MC); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC codes of 1 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility. Input Rating The designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH. Interruptible Gas Service Indicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC sales service before switching to NGS service. Interruptible Load Demand that can be interrupted y direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operato	Human Needs Customer	
Incremental Cost The change in total costs when output is increased or decreased by an increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per MC); marginal cost. Industrial Bypass A situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility. Industrial Customer An industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility. Input Rating The process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service bofor switching to NGS service. Interruptible Load Demand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the is ablected by direct action of the system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction		
increment or block of output for which costs can be accurately determined, usually calculated as the change in cost divided by the change in volume (for example as cents per Mcf); marginal cost.Industrial BypassA situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility.Industrial CustomerAn industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utilityInput RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Interruptible Gas ServiceIndicates that natural gas service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as		
usually calculated as the change in cost divided by the change in volume (for example as cents per MC); marginal cost.Industrial BypassA situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility.Industrial CustomerAn industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator operation reserve requirements should be reported as Interruptible Service	Incremental Cost	
example as cents per Mcf); marginal cost.Industrial BypassA situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility.Industrial CustomerAn industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Interruptible Gas ServiceIndicates that natural gas service before switching to NGS service.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planing or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible Load. <th></th> <th></th>		
Industrial BypassA situation in which large industrial customers buy energy and/or transportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility.Industrial CustomerAn industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Interruptible Gas ServiceIndicates that natural gas service before switching to NGS service.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interrupt		
Interruptible Loadtransportation service directly from a non-utility supplier, bypassing the local utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility.Industrial CustomerAn industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to a lack of pipeline capacity at receipt points, delivery points and/or due to lack of pipeline capacity at receipt po		
utility system. Deregulation of supply and transmission in some instances has opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility.Industrial CustomerAn industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Cas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt po	Industrial Bypass	
opened up the opportunity for large electricity users to purchase services from a supplier other than the local retail utility.Industrial CustomerAn industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline a		
a supplier other than the local retail utility.Industrial CustomerAn industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator provision. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
Industrial CustomerAn industrial customer is generally defined as one engaged in manufacturing, construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
construction, mining, agriculture, fishing and forestry establishments, Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
Standard Industrial Classification (SIC) codes 01 - 39. The utility may classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	Industrial Customer	
classify industrial service using the SIC codes, or based on demand or annual usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
usage exceeding some specified limit. The limit may be set by the utility based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
based on the rate schedule of the utility.Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
Input RatingThe designed rate of fuel acceptance by a burner. Usually expressed in BTH or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
or CFH.Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	Innut Dating	
Instant Connect EnrollmentThe process for initiating NGS service when a new account is opened; such accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	Input Kating	
accounts will not experience an interim period where the customer is supplied through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	Instant Connect Enrollment	
through NGDC sales service before switching to NGS service.Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	Instant Connect Em onment	
Interruptible Gas ServiceIndicates that natural gas service may be interrupted consistent with the terms and conditions of the NGDC tariff.Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible ServiceInterruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	Interruntible Gas Service	
Interruptible LoadDemand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	Interruptione Gas Service	
system operator in accordance with contractual provisions at times of seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	Interruptible Load	
seasonal peak load. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	up	
In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load.Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
fulfill planning or operation reserve requirements should be reported as Interruptible Service Transportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
Interruptible Load. Interruptible Service Transportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
Interruptible ServiceTransportation service that is subject to interruption due to a lack of pipeline capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.		
capacity at receipt points, delivery points and/or due to flowing constraints within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	Interruptible Service	
within the pipeline as the case may be. The scheduling priority for interruptible service is lower than that for Firm Service.	-	
	Interruptible Transportation IT)	
	Interstate Capacity	*
pipeline transportation, storage, peaking, balancing, and no-notice services.	÷ •	

Interstate Gas	1) Natural gas transported in interstate pipelines and consumed in a state
Interstate Gas	other than the one in which it was produced or 2) Gas transported on a pipeline
	which travels through more than one state (and for purposes of this manual) is
	delivered to a receipt point within Pennsylvania.
Interstate Dineline	
Interstate Pipeline	A natural gas pipeline company that is engaged in the transportation of
Introstata Car	natural gas not subject to FERC jurisdiction under the NGA.
Intrastate Gas	1) Natural gas produced, sold and consumed in the same state without being transported in interstate commerce and not made subject to federal (FERC)
	jurisdiction or 2) Gas transported on a pipeline which travels through one state
	(and for purposes of this manual) is delivered to a receipt point within
	Pennsylvania.
Intrastate Pipeline	A natural gas pipeline company that is engaged in the transportation of
Intrastate Elpenne	natural gas, generally not subject to the FERC jurisdiction under the NGA.
Invested Pleak Data (Creducted	
Inverted Block Rate (Graduated	A rate structure that prices successive blocks of power use at increasingly
Rate)	higher per-unit prices. The more energy a customer uses, the greater the
Translam to my Caritta I	average price.
Involuntary Switch	A process or situation where a customer's energy supplier is changed from
	one provider to another without the customer's authorization. This would include situations where a customer returns to utility service as a result of a
	supplier's failure to deliver. An involuntary switch that is not in accord with
	the "Discontinuance of Service" provision set forth in the rules is referred to
Lata Dammant	as "slamming".
Late Payment	Any payment made more than 20 calendar days after the date payment was
	due. Payment is due whenever specified by Distribution on its bill, provided
	such date does not occur before personal service of the bill or three calendar
Linner	days after the mailing of the bill.
License	A license granted to an NGS under 52 PA. Code Ch. 62.
Licensee	A person or entity that has obtained a license to provide natural gas supply services to retail customers.
The Tem	
Line Loss	The reduction in the quantity of natural gas flowing through a pipeline that
	results from leaks, venting, and other physical and operational circumstances
	on a pipeline system. Line Loss is sometimes referred to as Shrinkage or Distribution Loss.
Line Pack	
	Inventory of gas in a pipeline or in a gas distribution system.
Liquefied Natural Gas (LNG)	Natural gas which has been liquefied by reducing its temperature to minus
	260 degrees Fahrenheit at atmospheric pressure. It remains a liquid at minus 116 degrees Fahrenheit and 673 psig. In volume, it occupies a volume 1/600
Load Factor	of that of the vapor. The ratio of average load to peak load during a specific period of time
	(usually a month) expressed as a percent. The load factor indicates to what degree energy has been consumed compared to maximum demand or the
	utilization of units relative to total system capability. It shows the variability
	in all customers' demand.
Load Profile	A customer's actual usage as recorded on interval meters designed for such
Local Distribution Company	purpose. The company whose primary function is to distribute gas supply procured by
Local Distribution Company	The company whose primary function is to distribute gas supply procured by
(LDC)	it or by Marketers or Direct Customers, to retail gas users. LDCs also provide
Lookhor	transportation service to retail end users as well as other services.
Lockbox	A collection mechanism agreed upon by Distribution and an
	<i>NGS/Marketer/Direct Customer</i> that employs a third party financial
	institution to receive and disburse customer payments.

Losses are the difference between the generation amount of energy produced and the metered amount of customer usage within a specific service area. Lost and Unaccounted for Gas (LUAF) The difference between the quantity of gas available from all sources (purchased, transported, and locally produced) and the quantity accounted for by sales or company uses. Low Income Residential Assistance (LIRA) A program designed to assist economically disadvantaged customers in the reduction of their arrearages. Eligible customers will receive a lower gas rate, arrearage forgiveness, a conservation credit (as earned), and case management counseling with referrals made to other available programs when appropriate. Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the countracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Participants LDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Marketd Prices The disclosed prices on NGS marketing customer information. <th>Losses</th> <th>Losses are associated with all transmission and distribution service systems.</th>	Losses	Losses are associated with all transmission and distribution service systems.
and the metered amount of customer usage within a specific service area. Lost and Unaccounted for Gas (LUAF) Description Description Cust Area Charling The difference between the quantity of gas available from all sources (purchased, transported, and locally produced) and the quantity accounted for by sales or company uses. Low Income Residential Assistance (LIRA) Aprogram designed to assist economically disadvantaged customers in the reduction of their arrearages. Eligible customers will receive a lower gas rate, arrearage forgiveness, a conservation credit (as camed), and case management counseling with referrals made to other available programs when appropriate. Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Pool A logical grouping of end-use transportation customer bruner tips or	Losses	
Lost and Unaccounted for Gas (LUAF) The difference between the quantity of gas available from all sources (purchased, transported, and locally produced) and the quantity accounted for by sales or company uses. Low Income Residential Assistance (LIRA) A program designed to assist economically disadvantaged customers in the reduction of their arrearages. Eligible customers will receive a lower gas rate, arrearage forgiveness, a conservation credit (as earned), and case management counseling with referrals made to other available programs when appropriate. Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contrast. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market daily and, in times of extreme volatility, marked-to users and pipelines involved in bringing gas to an LDC's city gate. Market Pool A logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas. Marketer Any non-utility entity that is determined eligible to provide or arrange to pro		
(LUAF) (purchased, transported, and locally produced) and the quantity accounted for by sales or company uses. Low Income Residential Assistance (LIRA) A program designed to assist economically disadvantaged customers in the reduction of their arrearage. Eligible customers will receive a lower gas rate, arrearage forgiveness, a conservation credit (as earned), and case management counseling with referrals made to other available programs when appropriate. Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contretyparies. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Pool A logical grouping of end-use transportation customer hormation. Marketed Prices The disclosed prices on NGS marketing customer information. Marketer An ono-utility matit, broadcast, electronic media, direct mail or by telecorinnunication. M	Lost and Unaccounted for Cas	
by sales or company uses. Low Income Residential Assistance (LIRA) A program designed to assist economically disadvantaged customers in the reduction of their arrearcages. Eligible customers will receive a lower gas rate, arrearage forgiveness, a conservation credit (as earned), and case management counseling with referrals made to other available programs when appropriate. Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contreparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Market Participants LDC's, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Marketed Prices The disclosed prices on NGS marketing customer information. Marketer Any non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service ternitory. Marketer Any non-utility entity that is determined eligible to provide or arrange to provide a gas sup		
Low Income Residential A program designed to assist economically disadvantaged customers in the reduction of their arrearages. Eligible customers will receive a lower gas rate, arrearage forgiveness, a conservation credit (as earned), and case management counseling with referrals made to other available programs when appropriate. Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, market-on-market market align and, in the increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Pool A logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas. Marketer Any non-utility entrity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory. Market Pool A logical grouping of end-use transport andin customery burewise, or enery consultant, that under contract to	(LUAF)	
Assistance (LIRA) reduction of their arrearages. Eligible customers will receive a lower gas rate, arrearage forgiveness, a conservation credit (as earned), and case management counseling with referrals made to other available programs when appropriate. Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price futurations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Participants LDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Markete Prices The disclosed prices on NGS marketing customer information. Marketer Service Earliny. The publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broackast, electronic media, direct mail or by telecommunication.		
arrearage forgiveness, a conservation credit (as earned), and case management counseling with referrals made to other available programs when appropriate. Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market dally and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Participants LDC's. Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Marketer Prices The disclosed prices on NGS marketing customer information. Marketer A logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas. Marketer The disclosed prices on NGS marketing customer information. Marketer A cogical prices on NGS marketing customers in Distribution's service territory. </th <th></th> <th></th>		
management counseling with referrals made to other available programs when appropriate. Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Participants LDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Market Pool A logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas. Marketer The disclosed prices on NGS marketing customer information. Marketer An y non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory. Marketing	Assistance (LIKA)	
when appropriate. Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contracts. For over-the-contre options, margins are negotitated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. LDCS, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Market Pool A logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas. Marketer Any non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory. Marketing The publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.		
Main A main is a pipeline located on a public or private right-of-way which is generally available or used to transport gas to more than one service line. Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Participants LDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Market Pool A logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas. Marketed Prices The disclosed prices on NGS marketing customer information. Marketing The publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication. Marketing Services Consultant A commercial entity, such as a telemarketing firm or auction-type w		
generally available or used to transport gas to more than one service line. Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put p with the clearingbouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Participants LDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Market Pool A logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas. Marketer The disclosed prices on NGS marketing customer information. Marketer Any non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory. Marketing The publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by t		
Main, Gas Pipe used to carry natural gas from one point to another. As contrasted with service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Participants LDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Marketed Prices The disclosed prices on NGS marketing customer information. Marketer Alogical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas. Marketing The disclosed prices on NGS marketing customer information. Marketing The publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication. Marketing The publication, dissemination or distribution of informational and advertising materials regarding the NGS's services ore tail customer, may act as agent to market natural gas	Main	
service gas pipes, mains usually carry natural gas in large volume for general or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Participants LDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Marketed Prices The disclosed prices on NGS marketing customer burner tips or an aggregation group designated and authorized to receive gas. Marketer Any non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory. Marketing The publication, dissemination or distribution or informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication. Marketing Services Consultant A commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide s		
or collective use. Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market dialy and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Participants LDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Markete Prices The disclosed prices on NGS marketing customer burner tips or an aggregation group designated and authorized to receive gas. Marketer Any non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory. Marketing The publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication. Marketing Services Consultant A commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customers may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide servic	Main, Gas	
Margin Money that buyers and sellers of futures and exchange-traded options must put up with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well. Marginal Cost The increase or decrease in total costs brought about by a one-unit increase or decrease in output. Market Participants LDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate. Market Pool A logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas. Marketer The disclosed prices on NGS marketing customer information. Marketeng Any non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory. Marketing The publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication. Marketing Services Consultant A commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or		
put up with the clearinghouse to assure performance on the contracts. For over-the-counter options, margins are negotidad between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well.Marginal CostThe increase or decrease in total costs brought about by a one-unit increase or decrease in output.Market ParticipantsLDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate.Marketed PricesThe disclosed prices on NGS marketing customer burner tips or an aggregation group designated and authorized to receive gas.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.MarketingThe collective central point metering of individual units in a new building which is required if the occupant has control		
over-the-counter options, margins are negotiated between the counterparties. In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well.Marginal CostThe increase or decrease in total costs brought about by a one-unit increase or decrease in output.Market ParticipantsLDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate.Market PoolA logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas.Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.MarketingThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Master MeteringThe greatest of all demands o	Margin	
In both cases, the amount of margin required varies with the price fluctuations of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well.Marginal CostThe increase or decrease in total costs brought about by a one-unit increase or decrease in output.Market ParticipantsLDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate.Market PoolA logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas.Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services of retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.MarketingThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Master MeteringThe equetest of all demands of		
of the underlying contract. Open positions are marked-to-market daily and, in times of extreme volatility, marked-to-market intra-day as well.Marginal CostThe increase or decrease in total costs brought about by a one-unit increase or decrease in output.Market ParticipantsLDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate.Market PoolA logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas.Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Master MeteringThe maximum pressure at which a gas system may be operated.Master MeteringThe maximum pressure at which a gas system is occurred within a specified period of		
times of extreme volatility, marked-to-market intra-day as well.Marginal CostThe increase or decrease in total costs brought about by a one-unit increase or decrease in output.Market ParticipantsLDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate.Market PoolA logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas.Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Marketing DeperatingThe maximum pressure at which a gas system may be operated.MarketingThe maximum pressure at which a gas system is a measure of gas usage. The <th></th> <th></th>		
Marginal CostThe increase or decrease in total costs brought about by a one-unit increase or decrease in output.Market ParticipantsLDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate.Market PoolA logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas.Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Master MeteringThe greatest of all demands of the load that has occurred within a specified period of time.Master MeteringThe collective central point metering of individual units in a new building which is required if 1000 cubic feet of gas. This is a		
decrease in output.Market ParticipantsLDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate.Market PoolA logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas.Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The greatest of all demands of the load that has occurred within a specified period of time.Maximum DemandCone thousand (1000) cubic feet of gas. This is a measure of gas usage. The		
Market ParticipantsLDCs, Marketers or their agents, Direct Customers and pipelines involved in bringing gas to an LDC's city gate.Market PoolA logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas.Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The maximum pressure at which a gas system may be operated.Market Derived of time.The maximum pressure at which is a measure of gas usage. The	Marginal Cost	e .
bringing gas to an LDC's city gate.Market PoolA logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas.Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The greatest of all demands of the load that has occurred within a specified period of time.MarkOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		*
Market PoolA logical grouping of end-use transportation customer burner tips or an aggregation group designated and authorized to receive gas.Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The greatest of all demands of the load that has occurred within a specified period of time.MarketOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The	Market Participants	
aggregation group designated and authorized to receive gas.Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		
Marketed PricesThe disclosed prices on NGS marketing customer information.MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The maximum pressure at which a gas system may be operated.Maximum DemandThe greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The	Market Pool	
MarketerAny non-utility entity that is determined eligible to provide or arrange to provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		aggregation group designated and authorized to receive gas.
provide a gas supply and other services on behalf of end-use customers in Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The	Marketed Prices	The disclosed prices on NGS marketing customer information.
Distribution's service territory.MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The	Marketer	Any non-utility entity that is determined eligible to provide or arrange to
MarketingThe publication, dissemination or distribution of informational and advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		
advertising materials regarding the NGS's services and products to the public by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		
by personal contact, print, broadcast, electronic media, direct mail or by telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The	Marketing	The publication, dissemination or distribution of informational and
telecommunication.Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The maximum pressure at which a gas system may be operated.Maximum DemandThe greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		
Marketing Services ConsultantA commercial entity, such as a telemarketing firm or auction-type website, or energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The maximum pressure at which a gas system may be operated.Maximum DemandThe greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		by personal contact, print, broadcast, electronic media, direct mail or by
energy consultant, that under contract to a licensee or a retail customer, may act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The maximum pressure at which a gas system may be operated.Maximum DemandThe greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		telecommunication.
act as agent to market natural gas supply services to retail customers for the licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The maximum pressure at which a gas system may be operated.Maximum DemandThe greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The	Marketing Services Consultant	A commercial entity, such as a telemarketing firm or auction-type website, or
licensee or may act as an agent to recommend acceptance of offers to provide service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The maximum pressure at which a gas system may be operated.Maximum DemandThe greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		energy consultant, that under contract to a licensee or a retail customer, may
service to retail customers.Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The maximum pressure at which a gas system may be operated.Maximum DemandThe greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		
Master MeteringThe collective central point metering of individual units in a new building which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The maximum pressure at which a gas system may be operated.Maximum DemandThe greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		
which is required if the occupant has control over energy use in the unit and if benefits exceed costs.Maximum Allowable Operating Pressure (MAOP)The maximum pressure at which a gas system may be operated.Maximum DemandThe greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The		
benefits exceed costs. Maximum Allowable Operating Pressure (MAOP) The maximum pressure at which a gas system may be operated. Maximum Demand The greatest of all demands of the load that has occurred within a specified period of time. Mcf One thousand (1000) cubic feet of gas. This is a measure of gas usage. The	Master Metering	
Maximum Allowable Operating Pressure (MAOP) The maximum pressure at which a gas system may be operated. Maximum Demand The greatest of all demands of the load that has occurred within a specified period of time. Mcf One thousand (1000) cubic feet of gas. This is a measure of gas usage. The		1 1 01
Pressure (MAOP) The greatest of all demands of the load that has occurred within a specified period of time. Mcf One thousand (1000) cubic feet of gas. This is a measure of gas usage. The		
Maximum DemandThe greatest of all demands of the load that has occurred within a specified period of time.McfOne thousand (1000) cubic feet of gas. This is a measure of gas usage. The	Maximum Allowable Operating	The maximum pressure at which a gas system may be operated.
period of time. Mcf One thousand (1000) cubic feet of gas. This is a measure of gas usage. The	Pressure (MAOP)	
Mcf One thousand (1000) cubic feet of gas. This is a measure of gas usage. The	Maximum Demand	The greatest of all demands of the load that has occurred within a specified
		period of time.
	Mcf	One thousand (1000) cubic feet of gas. This is a measure of gas usage. The

Meter, Gas	An instrument for measuring and indicating, or recording, the volume of natural gas that has passed through it.
Meter Read Date	The date on which Distribution is scheduled to read a customer's meter each billing period.
Metering	Use of devices that measure and register the amount and/or direction of energy quantities relative to time.
Minimum Purchase	Volume deducted from customer usage for minimum purchase tariff requirements associated with a customer's Rate Schedule.
Monthly Market Index (MMI)	A monthly market price of gas used within NFGDC's Tariff, equal to the MCF equivalent of the highest volume weighted average price during the month, at Tennessee Gas Pipeline's Zone 4 200 Line Pool.
Monthly Metered Natural Gas Supplier Service (MMNGS)	Transportation service offered by Distribution under Rate Schedule MNNGS in which an NGS assumes responsibility for serving an aggregated group of MMT Customers.
Monthly Metered Transportation (MMT)	Transportation service offered by Distribution under Rate Schedule MMT in which the allocation period is the billing month. Imbalance and usage is based on end-of-month readings (except in the case of an Operational Flow Order).
Natural Gas	A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in porous geological formations beneath the earth's surface, often in association with petroleum. The principal constituent is methane, CH4.
Natural Gas Distribution Company (NGDC)	A state regulated natural gas utility which owns the gas lines and equipment necessary to deliver natural gas to the consumer (Formerly called local distribution company).
Natural Gas Distribution Service	The delivery of natural gas to retail gas customers utilizing the jurisdictional facilities of the natural gas distribution company.
Natural Gas Providers	The term refers collectively to the NGDC, NGS, marketer, aggregator and/or broker, as well as any third party acting on behalf of these entities.
Natural Gas Supplier (NGS)	 (1) An entity that sells or arranges to sell natural gas to customers that is delivered through the distribution lines of an NGDC. (2) An entity other than a NGDC, but including natural gas distribution company marketing affiliates (without regard to structural relationship), which provides natural gas supply services to retail gas customers utilizing the jurisdictional facilities of a NGDC. The term includes a NGDC that provides natural gas supply services outside its certificate service territories. The term includes a municipal corporation, its affiliates or any joint venture, to the extent that it chooses to provide natural gas supply services to retail customers located outside of its corporate or municipal limits.
Natural Gas Supply Services	The term includes the sale or arrangement of the sale of natural gas to retail customers and services that may be unbundled by the Commission under section 2203 (3) of the Act (relating to standards for restructuring of natural gas utility industry). The term does not include distribution service.

Network Construction Characteristics	Desis service shares for actual second becaution to actual evolutions
Natural Gas Supply Charges or	Basic service charges for natural gas supply services to retail customers,
Commodity Charges	excluding charges for natural gas distribution services.
Natural Gas Policy Act of 1978	A federal statute enacted in 1978 to phase out producer rate regulation
(NGPA)	between January 1, 1985 and July 1, 1987. The NGPA provides "maximum
	lawful prices" for those categories of natural gas that it subjects to price
	regulation. The NGPA also provides for "self-implementing" transportation
	services, without the need for prior certificates of public convenience and
	necessity from the FERC under the NGA, for certain qualifying transportation
	by interstate pipelines on behalf of intrastate pipelines or local distribution
	companies or by intrastate pipelines on behalf of interstate pipelines or local
	distribution companies served by an interstate pipeline.
New York Mercantile Exchange	The commodity exchange based in New York City where the natural gas
(NYMEX)	futures and options contract and other energy futures are traded.
No-Bump Rule	Rule which protects a shipper with flowing gas from losing capacity (being
	bumped) by a higher priority shipper in the interruptible queue deciding to
	increase its gas volumes.
Nominated Deliveries	The volume of gas requested for delivery to a customer or pool of customers.
Nomination	A shipper's request to move a certain volume of gas on a pipeline during a
	given period. Most nominations are made on a daily basis, although
	intraday nominations are required by GISB standards and hourly nominations
	are possible on some pipeline systems.
Non-aggregated Transportation	A DMT customer that acts on its own behalf in arranging to bring natural gas
Customers	to the utility's city gate.
Nonbasic Services	Optional recurring services which are distinctly separate and clearly not
	required for the physical delivery of natural gas service. Examples include a
	gas line repair program and a gas appliance warranty program.
Non-Core Customer	A customer that has multiple fuel options and does not rely solely on the flow
	of gas for continued heat and other operations.
Non-residential Applicant	Any person, corporation or other entity that has requested and made
	application for gas service as a non-residential customer.
Non-residential Customer	Any person, corporation or other entity, supplied by Distribution with gas
	service under Distribution's tariff and pursuant to an accepted application for
	service, who is not a residential customer as defined in Distribution's tariff.
Nontraditional marketer	A community based organization, civic, fraternal or business association, or
	common interest group that works with a licensed supplier as an agent to
	market natural gas supply services to its members or constituents.
Non-utility Cogeneration Facility	Any cogeneration facility not selling gas to the public at retail pursuant to a
	franchise.
Notice of Proposed Rule Making (NOPR)	A draft generic policy change promulgated by regulatory agencies.
Normal Degree Days	Estimated (normalized) degree-days for a given day based on a historical
- ·	average.
Normalized	Adjusted for weather using weather normalization (degree-day) factors.
North American Energy	A nonprofit North American industry association whose mission is to
Standards Board	"propose and adopt voluntary standards and model business practices
(NAESB)	designed to promote more competitive and efficient natural gas and electric
	service, as such standards apply to electronic data interchange ("EDI") record
	formats and communications protocols and related business practices that
	streamline the transactional processes of the natural gas and electric
	industries."

Off Peak	The period during a day, week, month or year when the load being delivered
	by a natural gas or electric system is not at or near the maximum volume delivered by that system for a similar period of time. (night vs. day; Sunday vs. Tuesday)
Off-Peak Gas	Natural gas supplied during periods of relatively low system demands.
Off System Transportation Service	Open Access transmission service that is contracted and scheduled pursuant to the provisions of Distribution's FERC Statement of Operating Conditions.
Offer to Provide Services	The extension of an offer to provide services or products communicated orally or in writing to a customer.
Office of Consumer Advocate (OCA)	The state agency that represents the interests of Pennsylvania utility customers before the PUC, federal regulatory agencies and state and federal courts. The OCA was created by the Pennsylvania General Assembly in 1976 and is an independent office within the Office of Attorney General.
Open Access	Non-discriminatory, fully equal access to transportation or transmission services offered by a pipeline.
Operational Flow Orders (OFOs)	An order issued by an NGDC to protect the safe and reliable operation of its gas system, either by restricting service or requiring affirmative action by shippers.
Overdelivery	See Surplus Imbalance.
Payment, Timely	Payment is considered to be made on the date when Distribution or one of its authorized agents receives it.
Peak Day	The day in which the highest volume of gas is delivered into the utility's system in order to meet usage demands. Related to operational deliverability of the entire system.
Peak Demand	The maximum load during a specified period of time.
Peak Month	The month in which the highest volume of gas is delivered into the utility's system in order to supply usage demands.
Pipeline	An entity engaged in the transportation of natural gas in interstate or intrastate commerce. Also, the actual facility itself.
Pool	Pools are groups of customers supplied by one marketer.
Pool Agent	The Pool Agent is responsible for establishing and maintaining a pool. Only the Pool Agent can change the parameters of a pool.
Pool Excess	Total net deliveries to a Production Pool less total pool allocations to Market Pools, for receipt points in Production Pools with no excess purchase contracts. Pool excesses are allocated to the Market Pools utilizing PDAs through the TSS or purchased by the Company.
Pooling	Aggregation of customers by a Pool Agent to deliver natural gas supplies to Distribution's system.
Pooling Point	The point (either physical or theoretical) at which gas is aggregated from many receipt points in order to serve several contracts without tying a specific receipt point to a specific contract. "Paper pooling" refers to aggregation as a matter of accounting, as opposed to physical pooling in a supply basin.

Due determined Allocation	A method of allocating the excess or shortege of ges that was measured
Pre-determined Allocation	A method of allocating the excess or shortage of gas that was measured
(PDA)	relative to that which was scheduled.
Pre-determined Scheduling	The PSI is an instruction used by Production Pool Operators to rank Market
Instructions (PSI)	Pools nominating gas from Production Pools as a part of the scheduling
	process. Modifications to the PSI will be effective the day of the change and
	forward.
Premises	Any building or buildings where natural gas burning equipment is located.
Price Majeure	The process of re-trading interruptible gas which is the result of significant
	upward or downward price adjustments.
Price to Compare	The dollar amount charged by the NGDC used by consumers to compare
	prices and potential savings with other NGSs.
Priority Allocation	Customer allocations in a DMT pool are made in the order set by the Pool
	Agent (i.e. Customer One gets all his nominated volume before Customer
	Two, etc.)
Producer	A working interest owner of an oil and/or gas well. A producer may sell its
	share of production itself through the operator of the well, or through another
	producer.
Production Pool	Groups of local production meters.
Production Pool Excess Pre-	A PDA that allows Production Pool operators to determine which Market
determined Allocation (PPE	Pools will receive excess gas.
PDA)	and a second and a second a s
Production Pool Shortage Pre-	A PDA that allows Production Pool operators to determine which Market
determined Allocation (PPS	Pools will be shorted.
PDA)	
Proration	An allocation methodology whereby shippers are allocated a share of the
1 i oi uuton	difference between scheduled quantities and measured quantities based upon
	the proportionate share each shipper scheduled.
Public Utility Commission (PUC)	The State regulatory agency that provides oversight, policy guidance and
Tuble Cullty Commission (100)	direction to public utilities and suppliers.
Rate	The unit charge or charges made by an energy company or utility to
Kate	customers for energy. Rate structures include <i>Block:</i> A rate that provides
	different unit charges for consumption falling within various blocks of
	demand or consumption. <i>Flat:</i> A rate that provides for a specified charge
	irrespective of the quantity used or the contract demand. <i>Postage-Stamp:</i>
	Transportation rate which applies for a given zone or area rather than the
	distance of actual transportation.
Rate Base	The value of property upon which a utility is given the opportunity to earn a
Natt Dast	specified rate of return as established by a regulatory authority. The value of
	property used by the utility in providing service and may be calculated by any
	one or a combination of the following accounting methods: fair value,
	prudent investment, reproduction cost, or original cost. The rate base may
	include a working capital allowance covering such elements as cash, working
	capital, materials and supplies, prepayments, minimum bank balances and tax
	offsets. The rate base may be adjusted by deductions for accumulated
	provision for depreciation, contributions in aid of construction, accumulated
Data Sahadula	deferred income taxes, and accumulated deferred investment tax credits
Rate Schedule	Each of Distribution's rates and service offerings is a Rate Schedule. For
	example, MMT is Firm Transportation Service Rate Schedule.

Ratepayer Billing Account	A 7-digit number assigned to a transportation customer for identifying
(RBA)	purposes replaced by the Contract Account Number.
Rebundling	The process under which a Supplier may arrange supply, storage and/or
	transportation service and sell these combined services to a customer as a
	single product when permitted by applicable laws, rules and/or regulations,
	etc.
Recall Rights	The provision for a wholesale seller of power to cease to perform, generally
	in order to use such power to serve its indigenous retail loads.
Receipt Points	Metered points of entry for gas delivered into Distribution's pipeline system.
Redelivery	Delivery of natural gas by a pipeline, back to a shipper or to a shipper's
Delegaing Chingen	account that the pipeline had received from the shipper.
Releasing Shipper	A shipper who is the original capacity holder of firm space on a pipeline for which reservation fees are paid, and who desires to sell this capacity under
	the capacity release program.
Reliability	The term comprises adequacy and security. The term "adequacy" means the
Kenability	provision of sufficient volumes and deliverability of natural gas so as to
	supply the requirements of retail gas customers, taking into account peak and
	seasonal demands, as well as isolated market areas and system operation
	contingencies. The term "security" means designing, maintaining and
	operating a system so that it can safely handle extreme conditions, as well as
	emergencies.
Reliability Plan	A Reliability Plan provided for in Section 1317(c)I of the Public Utility Code, 66 Pa. C.S. § 1317(c).
Replacement Shipper	A shipper who acquires firm transportation capacity through release by
	another shipper under a pipeline's capacity release program (also known as
	"acquiring shipper").
Residential	Private household establishments, which consume energy primarily for space
	heating, water heating, air conditioning, fighting, refrigeration, cooking and
	clothes drying. The classification of an individual consumer's account, where
Desidential Ameliaget/Customer	the use is both residential and commercial, is based on principal use.
Residential Applicant/Customer	Any person who requests gas service at a premise to be used as his or her residence or the residence of a third party on whose behalf the person is
	requesting service.
Residential Retail Gas Customer	A party that receives service under the RESIDENTIAL SERVICE RATE
Residential Retail Ous Customer	SCHEDULE. This classification shall include gas supplied for residential
	purposes such as a private dwelling, apartment house with a single meter
	supplying four or less dwelling units, separately metered apartments of a
	multiple dwelling, accessory buildings to dwellings or apartment houses such
	as garages, except at residences receiving service under Rate Schedule
	LIRAS for Low Income Residential Assistance Service and other places of
	residence where gas is used for residential purposes. Churches and missions
	(places of worship) shall be entitled to Service under the Residential service
	rate schedule.
Retail Access Program	The transmission, distribution, and delivery by Distribution to the customer of
	natural gas requirements, furnished to Distribution by the customer or by a third party on the customer's babalf
Retail Delivery Metering Point	third party on the customer's behalf. The location where the gas service is metered or the location to which meter
Retain Denvery wietering Found	readings are compensated.
Retail Delivery Point	The point where Distribution's retail distribution system connects to the
Actan Denvery I Unit	customer's service entrance at the customer's premises.
Retail Distribution Receipt Point	The point(s) of receipt of natural gas into the distribution system.
Kean Distribution Keterpt I Onit	The point(s) of receipt of natural gas into the distribution system.

Retail Gas Customer	A direct purchaser of natural gas supply services or natural gas distribution services, other than a Natural Gas Supplier. The term excludes an occupant of a building or facility where the owner/operators manage the internal distribution system serving such building or facility and supply natural gas and other related services to occupants of the building or facility; where such owner/operators are direct purchasers of natural gas supply service; and
	where the occupants are not direct purchasers.
Retail Supplier	An energy services company who has been licensed as a provider of natural gas service to customers in Pennsylvania, and has met all other approval requirements of Distribution.
SATC Customer	Transportation service customer who has elected an alternative gas supplier approved under the terms of SATC of Distribution's tariff.
SATC Group	The SATS supplier's pool of SATC customers.
SATC Imbalance	Net imbalances developed by the SATC Group and the primary financial responsibility of the SATS supplier.
Seasonal Customer	A short-term customer that can be non-residential or residential.
Service Line	The piping, including associated metering and pressure reducing appurtenances, that transports gas below grade from a main to the first accessible fitting inside the wall of a customer's building, when a meter is located within the building; if a meter is located outside the building, the service line will be deemed to terminate at the outside of the building foundation wall.
Service Requestor	The Business Party Name for the Market Pool Operator or owner.
Shortfall	The quantity of a transporting customer's usage exceeding the quantity of gas delivered into Distribution's system for a transportation customer.
Short-term Customer	A customer who requested service for a period of time up to two years.
Shrinkage	See Line Loss.
Slamming	When a retail customer is switched from one provider to another without the customer's authorization.
Small Aggregation	Service available under Distribution's Rate Schedule SATC whereby
Transportation Customer Service (SATC)	Distribution will provide transportation and balancing services to facilitate the redelivery of gas supplies from the city gate to the customer for those customers enrolled to receive gas supply service from SATS Suppliers.
Small Aggregation	Service available under Distribution's Rate Schedule SATS whereby
Transportation Supplier Service (SATS)	Distribution will provide transportation and balancing services to facilitate the redelivery of gas supplies from the city gate to the customer.
Small Business Customer	This term refers to a person, sole proprietorship, partnership, corporation, association or other business entity that receives natural gas service under a small commercial, small industrial or small business rate classification, and whose aggregate maximum registered annual consumption over the last 12 months with the NGDC was less: Small Volume Industrial Serviceless than or equal 1,000 Mcf less than 250 McfSmall Comm. & Pub. Auth. (Lower Limit)less than 250 McfSmall Comm. & Pub. Auth. (Upper Limit)250 to 1,000 Mcf
Special Meter Read	A service provided to obtain an actual meter reading on a date that is different than the regularly scheduled meter read date.

Special Needs Customer	A customer with documented medical conditions or who is elderly, blind or physically challenged. These customers have special protections regarding gas
	service and life threatening situations.
Spot Market	Commodity transactions in which the transaction commencement is near term (e.g., within 10 days) and the contract duration is relatively short (e.g., 30 days).
Spot Purchases	A short-term single shipment sale of on an interruptible or best efforts basis. Spot purchases are often made to fulfill a certain portion of energy requirements, to meet unanticipated energy needs, or to take advantage of low prices.
Standard Cubic Foot (SCF)	One cubic foot of natural gas as measured at standard conditions of 60°F and 1 atmosphere of barometric pressure.
Standby Sales Service	Mandatory for all heating needs of customers which heat any building solely by gas where persons reside, including apartment houses, prisons, dormitories, nursing homes, hospitals, hotels, and other buildings where persons may dwell on a permanent basis.
Standby Service	Support service that is available, as needed, to supplement a consumer, a utility system, or to another utility to replace normally scheduled energy that becomes unavailable.
Storage	Placing natural gas into an underground facility for removal and use at a later date.
Straight Gas Utility	A utility company that derives the major portion of its total sales revenues from natural gas operations.
Supplier	Signatory to an SATS Agreement who, in the sole judgment of Company, has been determined creditworthy for participation in the SATS program. See also NGS.
Supplier of Last Resort	A supplier approved by the Commission under section 2207(a) of the Act (relating to obligation to serve) to provide natural gas supply services to customers who contracted for natural gas that was not delivered, or who did not select an alternative NGS, or who are not eligible to obtain competitive natural gas supply, or who return to the supplier of last resort after having obtained competitive natural gas supply.
Surplus Delivery	See Surplus Imbalance.
Surplus Imbalance	The cumulative amount by which the volume of gas delivered, since the commencement of transportation service by Distribution for the customer under any rate schedule, to Distribution for the customer's account, after adjustment for line losses and after elimination of volumes purchased from the customer by Distribution, exceeds the total amount of transportation service volumes taken by the customer from Distribution under any rate schedule since the commencement of transportation service for the customer by Distribution.
System Alert	An announcement of actual or pending events that if unchecked may result in an OFO.
System Supply	Natural gas supplies purchased, owned and sold by Distribution to retail sales customers.
Tampered Equipment	Any service-related equipment that has been subjected either to unauthorized interference so as to reduce the accuracy or eliminate the measurement of gas service, or to unauthorized connection occurring after a Company has physically-disconnected service.

Tariff	A document filed by a regulated entity with either a federal or state
1 8 1 11	commission. It lists the services the entity will provide, rates the regulated
	entity will charge to provide service to its customers and the terms and
	conditions that it will follow in providing service.
Telemetering	Process by which measured quantities of gas are transmitted through
Telemetering	telecommunication to a remote location.
Therm	A unit of heating value equivalent to 100,000 British thermal units (Btu) (0.1
	MMBtu).
Throughput	The volume of gas flowing through a pipeline or distribution system.
Total Annual Quantity (TAQ)	The maximum annual quantity of gas Distribution is contractually obligated to
	deliver per year.
Transition Costs	Costs associated with the change of an industry from a regulated, bundled
	service to a competitive open-access service, including "Stranded Costs."
Transmission	The moving of natural gas through the interstate pipeline system for delivery to
	the NGDC.
Transportation Customer	Transportation service customer of Company pursuant to an effective
	Transportation Service Agreement or upon execution of Customer Consent
	Form.
Unbundled Services	The selling and pricing of energy services separately as opposed to offering
	services "bundled" into packages with a single price for the whole package.
	With unbundling, separate fees are charged for each service, based upon only
	the costs of providing that service (i.e. transportation, storage, generation,
	production, etc.).
Universal Service and Energy	Policies, practices and services that help residential low-income retail gas
Conservation	customers and other residential retail gas customers experiencing temporary emergencies, as defined by the Commission, to maintain natural gas supply
	and distribution services. The term includes retail gas customer assistance
	programs, termination of service protections and consumer protection policies
	and services that help residential low-income customers and other residential
	customers experiencing temporary emergencies to reduce or manage energy
	consumption in a cost -effective manner, such as the low-income usage
	reduction programs and consumer education.
Upstream Capacity	Transportation or storage capacity on a pipeline upstream of Distribution.
Upstream Capacity	The quantity of upstream transmission capacity delivered into NFGSC at a
Requirement (UCR)	point aligned with Distribution's primary EFT receipt capacity necessary to
	serve the Supplier's SATC Customer's winter period requirements.
Upstream Pipeline	1) An interstate pipeline or intrastate pipeline to which Distribution is
	physically connected and from which Distribution may take deliveries of gas
	or 2) The pipeline delivering natural gas to a downstream pipeline at an
	interconnection point along the transportation path to the consumer.
Voluntary Switch	A process or situation where a customer's energy supplier is changed from one
Wabaita	provider to another with the customer's direct authorization.
Website	Site on internet world-wide web established and maintained by Distribution for transacting business.
Weighted Average Cost of Gas	The weighted average unit cost of a supply of natural gas. WACOG is
(WACOG)	calculated as the total cost of all natural gas purchased during a base period
(MACOG)	divided by either the total quantity purchased (unit of production) or the
	system throughput (unit of sales) during the same period.
Wellhead Price	The price received by the producer for sales at the well.
Translau I I Icc	The price received by the producer for sales at the went.

NON-EDI DATA EXCHANGE PROTOCOLS

The following narrative descriptions describe the information that Distribution provides to Suppliers in order to facilitate Natural Gas Choice. There are two types of files, common and non-common. Common files contain data that is generally applicable to all suppliers while non-common are supplier specific. These files will be available via the Distribution web site for viewing or download. Downloads may be done through the Internet using HTTP or FTP file transfers. The files will be in standard ASCII format with fields delimited by semicolons.

The file layouts are publicly available from Distribution's web site at:

http://www.nationalfuelgas.com/marketers/tech_docs/markfile.aspx

A log identifying changes is maintained on the website.

WEB files

Naming conventions for non-common files:

Filename:	bytes 1 - 6	Supplier Id
	bytes 7 - 8	File type code (See below for list)
File extension:	byte 1	A letter code indicating effective month of file.
		A=January, B=February, etc.
	bytes 2 - 3	Effective day of month(numeric)

List of non-common files:

File type codes	Description	Retention Period
A0	New customers - General customer information	$\frac{10100}{93}$ days
BO	New customers - Meter information	93 days
CO	New customers - Consumption history	93 days
D0	New customers - Payment history	93 days
E0	Daily meter reads	120 days
G0	Monthly bill statement	3 months
H0	Transportation charges	3 months
IO	Capacity charges	3 months
JO	Aggregation group assignments - file	10 days
T0	Aggregation group assignments - report	10 days
U0	Residential/Commercial End Users Connected to National Fuel's System - file	3 months
A1	Daily bill amount audit	93 days
F1	Daily canceled meter reads	93 days
G1	Mercury device daily meter read report	60 days
H1	Daily Marketer Payment Transactions	93 days
I1	Daily Marketer Billed Amount	93 days
J1	Daily Aggregation Assignment Change File	10 days
K1	Batch Inquiry Statistics File	33 days
L1	Customer Consumption History (Batch)	33 days
M1	Customer Payment History (Batch)	33 days
01	Batch Enrollment Statistics File	33 days
P1	New customers – General customer Information (Batch)	33 days
Q1	Daily Supplier Transaction Errors	33 days
T1	Web Meter Reads Rejected During Posting	33 days
U1	Web Meter Reads Rejected During Billing	33 days
$\overline{V1}$	Batch Meter Read Statistics File	33 days
X1	Batch Billing Options Statistics File	33 days
Y1	Daily Marketer Choice Account Status - Report	33 days
Y2	Daily Marketer POR Account Status – Report	120 days

Z1	Daily Marketer Choice Account Status - File	33 days
A2	Monthly Choice Billing Revenue Report	186 days
B2	Monthly Choice Aged Receivables Report	186 Days
C2	Monthly Billing Comparison Report	93 days
F2	NFG Disconnection and DPA Information	10 days
L2	Monthly DDQ Cumulative Report	730 days
M2	Marketer Rate Change Verification Report	33 days
Q2	Daily Supplier Term/DPA Transaction File	33 days
W2	Monthly SATS Eligible Customer List (ECL)	31 days
C3	Monthly Billing Comparison File	93 days
F3	Monthly CME Readings	93 days
H3	Monthly DDQ Basis Report	365 days
I3	Monthly DDQ Basis File	365 days
J3	6-Day DQ Basis Report	62 days
K3	6-Day DQ Basis File	62 days
L3	Monthly DDQ Cumulative File	730 days
K4	Daily DDQ Midcourse Report	93 days
K5	Daily DDQ Midcourse File	93 days

List of Common files:

List of Common files:		
Description	Name	Retention/update Period
Transportation rate classes	TBSL3400.DAT	refreshed monthly
Transportation rates	TBSL3401.DAT	refreshed monthly
Transportation rate blocks	TBSL3402.DAT	refreshed monthly
County table	TBSL3410.DAT	refreshed monthly
Town table	TBSL3411.DAT	refreshed monthly
School district table	TBSL3412.DAT	refreshed monthly
Revenue class table	TBSL3413.DAT	refreshed monthly
Budget plan status table	TBSL3414.DAT	refreshed monthly
Meter read source code table	TBSL3415.DAT	refreshed monthly
Degree day table	TBSL3420.DAT	indefinite retention
Average degree day table	TBSL3430.DAT	3 months
Weather Normalization Factors	TBSL3440.DAT	refreshed daily
DMT-Daily Imbalance Index	TBSL3750.DAT	refreshed daily
DMT-Monthly Imbalance Index	TBSL3751.DAT	refreshed daily
PA MMNGS Daily Cashout Index	TBSL3850.DAT	refreshed daily
PA SATS/MMNGS Monthly Cashout Index	TBSL3852.DAT	refreshed daily
NY Degree Day Information	TBSL5045.DAT	refreshed daily
PA Degree Day Information	TBSL5046.DAT	refreshed daily
PA MMNGS Degree Day Information Report	TBSL5047.DAT	refreshed daily
PA SATC Degree Day Information Report	TBSL5048.DAT	refreshed daily
PA Gas Supplier Customer List	KRVN300C.DAT	refreshed quarterly

Initial transaction/customer setup: These files will be used to facilitate the communication between Distribution and the marketers. They will provide all the customer data necessary for the marketer to interpret the other transaction sets/files and to help the marketer bill their customers. This information will be sent as soon as the customer is active on the Distribution marketer billing system as an aggregation (SATS) account. All files will identify the marketer and aggregation group or pool.

Notes:

1. The jurisdictional location fields can be used to determine various taxes. Updates to this information will not be provided.

- 2. An individual Contract Account Number can have multiple meter locations. The meter file will contain meter/meter location information for all meter locations that have an active meter assigned to the SATS customers.
- 3. The payment history information may be provided to suppliers via batch processing. Provided acceptable proof of customer authorization is given to the Distribution.

Transportation Customer Enrollment

A Supplier can remove an active customer. Populate the "remove" indicator and indicate whether it's voluntary or involuntary. This will create an Assignment End Date of 15 days from the current date. Also, if the Supplier wants to bring that customer back, they can by populating the "add" indicator. This will erase the Assignment End Date for that customer. This "remove" and "add" process is valid when there are no pending assignments for that customer.

Batch consumption and payment inquiries

Suppliers can receive 12 month consumption and payment history files by providing a customer list to Distribution. Suppliers can only receive customer payment history when they have a contract with the customer and Distribution has approved the contract text.

To receive consumption history and payment history files use the following procedure:

1. E mail a text file of customers for whom you want consumption and payment to TSD Billing (<u>TSD Billing@natfuel.com</u>)

Batch Inquiry Required File Format	
Field name	<u>Format</u>
Marketer ID	N7
Contract Account Number	N9
Notes:	
1. File should be in ASCII text format	
2. Fields should be delimited with semi-colons (record will reject if not used)
3. Marketer ID should be included in the file nar	
File example:	
0000999;912777503	
0000999;912777604	
0000999;912777705	
0000999;912777806	

2. In 2 to 3 business days Distribution will process the file. You will receive back via your Web page up to 3 files:

Consumption History:

The file format (file type L1) is the same as the consumption history you receive when customers become pending and active (file type C0). The format is detailed in Microsoft Word 6.0 document markfile.doc, which is also available on this web page. See 'Customer Consumption History (Batch)' on the web for the results of the requested account numbers.

Payment History:

The file format (file type M1) is the same as the payment history you may receive when customers become pending and active (file type D0). The format is detailed in Microsoft Word 6.0 document markfile.doc, which is also available on this web page. See 'Customer Payment History (Batch)' on the web for the results of the requested account numbers.

Rejected Records:

Records that were rejected and the reason for the rejection (file type K1). See 'Batch Inquiry Statistics File' on the web for any rejected account numbers. If a marketer id is invalid, a hardcopy report is created for Distribution.

Note: Only the most current request will be available on the web if more than one inquiry is executed on a given day.

Batch enrollment

Suppliers can enroll new customers by providing Distribution with a new customer file. To participate in batch enrollment use the following procedure:

1. E mail a text file of customers you wish to enroll to TSD Billing (<u>TSD Billing@natfuel.com</u>)

Enrollment Required File Format:		
Field name	Format	<u>Comments</u>
Marketer ID	N7	
Group ID number	N9	
Contract Account Number	N9	
Meter Number	N8	
Marketer Rate Code	A2	(only required when Distribution is providing billing service)
Budget Plan Indicator	A1	("Y" or "N" only when Distribution is providing billing service)
Late Payment Charge Code	Δ.2	(optional only available when Distribution is providing

billing service)

Notes:

Late Payment Charge Code

1. File should be in ASCII text format

2. Fields should be delimited with semi-colons (record will reject if not used)

 A^2

3. Marketer id should be included in the file name (e.g. 00999E07.txt)

File example:

0000999;777777777;912777503;00072108;1A;Y; A1 0000999;77777777;912777604;05498322;1A;Y; A2 0000999;77777777;912777705;00061432;1B;Y; A1 0000999:77777777;91277777;00043107;1A:N: A2 0000888:454544444:914876766:00077654

2. In 2 to 3 business days Distribution will process the file.

You will receive back via your Web page the 'Batch Enrollment Statistics File'. All enrollments that were accepted will be reflected in your 'Aggregation Group Assignment File' (J0) and 'Aggregation Group Assignment Report' (T0). You may also receive the following file:

Rejected Records:

Records that were rejected and the reason for the rejection (file type O1). See 'Batch Enrollment Statistics File' on the web. If a marketer id is invalid, a hardcopy report is created for Distribution.

Batch Billing Options

Suppliers can change information for a CHOICE customer's Billing Options by providing Distribution with a file.

To participate in batch Billing Options use the following procedure:

1. E-mail a text file of customers you wish to modify to TSD Billing (<u>TSD-Billing@natfuel.com</u>)

Billing Options Required File Format:

Field name

Comments

Marketer ID

Contract Account Number

Marketer Rate Code

Budget Plan Indicator

("Y" or "N")

Late Payment Charge Code

(optional)

Notes:

1. File should be in ASCII text format

2. Fields should be delimited with semi-colons (record will reject if not used)

3. Marketer id should be included in the file name (e.g. 00999E07.txt)

4. The entered values will overlay the current values for each record

File example: 0000999;912777503;1A;Y; A1 0000999;912777611;1A;Y; A1

2. In 2 to 3 business days Distribution will process the file.

You will receive back via your Web page the 'Batch Billing Options Statistics File'. All billing options changes that were accepted will be reflected in your 'Aggregation Assignment Change File' (J1). You may also receive the following file:

Rejected Records:

Records that were rejected and the reason for the rejection (file type X1). See 'Batch Billing Options Statistics File' on the web. If a marketer id is invalid, a hardcopy report is created for Distribution.

Supplier Transactions

(Only for suppliers who use Distribution for billing service.)

Suppliers can e-mail Distribution transactions to add, subtract, or transfer funds to and from accounts. To process a transaction use the following procedure:

1. E-mail a file of customers you wish to process transactions for to TSD Billing (<u>TSD-Billing@natfuel.com</u>)

Transaction Required File Format:

Field Name	Format	<u>Comments</u>
Marketer ID	N7	(blanks must be zero filled)
Group ID Number	N9	(blanks must be zero filled)
Contract Account Number	N9	(all nine digits are required)
Amount Transaction Code	A2	(first character must be 'S')
Date File Sent	N8	(yyyymmdd)
Amount of Transaction	N11	(no decimal point, blanks must be zero filled)

Sign of Amount	A1
Complement ID (Contract Account Number)	N9

("-" indicates a credit,"+" indicates a debit)

(only required for type "SG" - balance transfers)

Notes:

- 1. Files should be in ASCII text format.
- 2. Fields **must** be delimited with **semi-colons**.
- 3. All fields must be <u>completely</u> filled in.

4. In the case of type "SG" (balance transfers) - the **Complement ID** is the Contract Account Number where the funds are coming from.

5.**TRANSFERS** <u>MUST</u> HAVE <u>2 SEPARATE</u> "SG" RECORDS - 1 for transferring <u>from</u> an account and another for transferring <u>to</u> an account. See example below.

- Currently acceptable Amount Transaction Types are as follows:
- SB Supplier Balance Change
- SC Pd to supplier for supplier (typically a credit "-")
- SD Pd to supplier for Distribution Corp (typically a credit "-")
- SE Supplier Penalty (typically a debit "+")

SF - Supplier Rebate (typically a credit "-")

SG - Supplier Balance Transfer

File example:

```
0001111;000222222;993333303;SB;20000101;0000002000;-; <==credits acct 9933333 $20.00
0001111;000222222;99444404;SG;20000101;00000001250;+;555555 <==debits acct 9944444 $12.50
0001111;000222222;995555505;SG;20000001;00000001250;-;444444 <==credits acct 9955555 $12.50
```

- 2. In 2 to 3 business days Distribution will process the file. All transactions that were accepted will be reflected in the Web file "Daily Payment Transactions File' (H1).
- 3. <u>Rejected Records:</u>

All transactions that were rejected and the reason for the rejection will be on the WEB file 'Supplier Transaction Error File' (Q1). If a marketer ID is invalid a hardcopy report is created for Distribution.

Field definitions

The following is an alphabetized list of field definitions for the information being provided. It is hoped that this will be useful for explaining how to interpret and use the information provided.

Account creation date:

The date that the Customer account (Contract Account Number) was initially set up with Distribution.

Actual bill amount:

The total dollars that Distribution billed the Contract Account Number for the marketer.

Additional consumption:

Additional consumption is used to capture consumption in exception situations. An example would be a non registering meter. This value should always be added to the consumption computed from the meter reads to determine total consumption.

ADDQ Day 01-31:

Aggregated Daily Delivery Quantity

Aggregated Daily Demand Quantity

The city gate delivery requirement amounting to the sum of the DDQs for all customers in a Supplier's aggregation group (pool).

The minimum quantity that Distribution will require a Supplier to deliver in any gas day to meet the aggregation group's forecast daily requirement.

Since the quantity to be delivered can change over the course of the month, each record will contain the most recent calculation for each day of the month.

Aggregation group id

Unique identification number assigned to each group of customers being aggregated. It is possible for a supplier/marketer to operate multiple groups. A group cannot contain customers (Contract Account Numbers) from different states. Aggregation groups are analogous to delivery pools.

Assignment status code & Assignment status description

The aggregator assignment status code indicates the status of an aggregation assignment. Valid aggregation status codes are:

A - Active - assignment is currently in use for a Contract Account Number.

P - Pending - the assignment will become active the next time the Contract Account Number is cycle billed. The effective start billing date will be the day after the cycle bill date.

I - Inactive - assignment is no longer is use, it was once active.

C - Canceled - assignment was created in error and eliminated.

Q - Requested - an assignment that will remain as a "note" indefinitely without ever going active, unless its status is changed manually.

R - Rejected - an assignment that was rejected and will never become active.

Assignment start reference date

The reference date used to start a Contract Account Number aggregation assignment. Aggregation for the assignment will begin the day after the next cycle bill date greater than this date.

Assignment start billing date

The start billing date of an aggregation assignment is the date on which the aggregator becomes responsible for supplying and billing the Contract Account Number.

Assignment end reference date

The reference date used to end a Contract Account Number aggregation assignment. Aggregation for the assignment will end the next cycle bill date greater than this date.

Assignment end billing date

The end billing date of an aggregation assignment is the last day the aggregator is responsible for supplying and billing the Contract Account Number.

Baseload

The amount of non-heat load gas a customer historically consumes every month in hundreds of cubic feet. Meter baseload is the baseload for only one meter location. Account level baseload is an accumulation of all meter location baseloads for an account.

Beginning balance

Balance forward from prior billings.

Bill amount

The total dollars that Distribution would have billed the Contract Account Number at bundled sales rates, including all applicable taxes.

Billing control

The control in which an account is billed (Contract Account Number). Distribution's customer are split up into 21 controls each of which bills 12 times in a calendar year.

Billing control effective date

The date on which an account was put into a billing control. Accounts can be moved from one billing control to another in order for Distribution to improve or maintain operational efficiency.

Billing date

The current month being billed.

Billing month

The month for which charges are being assessed or adjusted.

Bill period days

The number of days in the period being billed.

Bill to date

The bill to date is the last day of a billing period.

Bill type code

The type of billing process that created the associated bill. The appropriate values are as follows:

- '01' = initial billing
- '02' = cycle billing
- '03' =final billing
- '04' = cancel
- 05' = rebill
- '06' = 60 day cancel
- 07' = 60 day rebill

Block max consumption

The maximum consumption in CCF that can be billed with the rate associated with block.

Block rate

The rate of the block used to bill consumption up to the maximum for the block.

Budget plan

Indicates whether a customer is on budget plan with Distribution.

City gate imbalance volume

Volume of gas purchased at city gate imbalance rates.

City gate imbalance rate

City gate imbalance rate.

City gate imbalance charge

Total city gate imbalance charges.

Consumption

This is the gas consumption in CCF calculated based on meter reads and additional consumption. It is provided in the Consumption history and Daily bill amount audit files for SATS customers.

County code and county name

A code and name identifying the county of the premises being served. The table of all codes is provided in the general tables.

Current charges and description

The total charges from current month's activity.

Cust first name

First name of the end use customer associated with the Contract Account Number.

Cust last name

Last name of the end use customer associated with the Contract Account Number.

Cust middle init

Middle initial of the end use customer associated with the Contract Account Number.

Cust phone number

The most recent phone number on file for the customer associated with the Contract Account Number.

Cust status code

Account status of the end use customer associated with the Contract Account Number, 'A' - Active, 'I' - Inactive

Cust status date:

The date upon which the Cust status code became effective.

Credit adjustment and description

The total credit adjustments from prior billing months in the current billing month.

Day

The day the average degree days are in.

Debit adjustment and description

The total debit adjustments from prior billing months in the current billing month.

Degree Date

The date for which the degree days and average temp are for.

Degree Day Factor

The amount of gas a customer historically consumes for each degree day in hundreds of cubic feet. Meter degree day is for only one meter location. Account level degree day is an accumulation of all meter degree day factors for an account.

Dial count

Indicates the number of dials on a meter. It is needed to interpret meter turns.

Direct Pay

Page DEP-10

Indicates whether a customer is part of Distribution automatic payment program.

Due date

The last date a payment can be made before late charges are assessed.

Effective month

The month in which the data on this record is effective.

Effective year

The year in which the data on this record is effective.

EDZR disc credit

The economic development zone rate discount credit calculated for a Contract Account Number.

Gas commodity amt

Used in DSS aggregation accounts. The marketer charges placed on the Distribution bill for the county and the end-user.

Gas commodity rate

Used in DSS aggregation accounts. The rate supplied by the marketer to be placed on the Distribution bill for the county and the end-user.

Gas delivery pool id

The unique identification assigned to each group of customers being aggregated. It is possible for a supplier/marketer to operate multiple pools. A pool cannot contain customers (Contract Account Numbers) from different states. Gas delivery pools are analogous to Aggregation groups.

Last customer payment date

The date of the last payment by a choice customer. This is the Supplier's portion of the payment only.

Last customer payment date

The amount of the last payment by a choice customer. This is the Supplier's portion of the payment only, it does not include any Distribution payment amount.

Late payment amount and description

The late payment amount is equal to overdue amount multiplied by the late payment rate.

Late payment amount

The amount owed due to a late payment.

Late payment date

The date shown on the customer's bill, after which any late payment charge subject amount is eligible for application of a 1.5% late payment charge.

Late payment subject amount

The amount on which any appropriate late payment charge is calculated. At cycle billing, this amount is determined by taking the account current balance immediately prior to billing and subtracting all bills not yet due (as of four days prior to cycle billing), all debit items to the customer account since the last cycle billing except NSF checks, and in Pennsylvania, any accumulated late payment charge.

Mail address 1

First line of the mailing address for the customer (Contract Account Number).

Mail address 2

Second line of the mailing address for the customer (Contract Account Number).

Mail zip code

The mailing zip code for the customer (Contract Account Number).

Marketer id

Unique identification number assigned to each organization that initiates an aggregation account with Distribution. This will be used by the marketer along with a password to access Distribution WEB server.

Marketer Budget Plan add deduct

Indicates that the customer is on budget plan with the Supplier, and the amount of the adjustment.

Marketer Budget Plan cancel

Indicates that the customer is on budget plan with the Supplier, and the cancelled amount.

Marketer Budget Plan Current Balance

The current balance that a choice customer has on the Supplier portion of the budget plan.

Marketer Budget Plan Current Payment Amount

The current payment amount that a choice customer has on the Supplier portion of the budget plan.

Marketer Budget Plan Indicator

Indicates whether or not if the customer is on Budget Plan with the marketer.

Marketer Budget Plan Indicator Change Date

Indicates the most recent date that the Supplier Budget Plan Indicator has been changed.

Marketer Current Balance

A choice customer's balance at the time the file was created. This is the marketer's portion of the balance only, it does not include any Distribution balance.

Marketer Late Payment Code

The late payment code is used to identify the additional rate to be charged a customer for a late payment.

Marketer Late Payment Amount

The late payment amount is equal to overdue amount owed to the marketer multiplied by the late payment rate.

Marketer Overdue Amount

The amount of a choice customer's balance that is overdue (late) at the time the file was created. This is the marketer's portion of the overdue balance only, it does not include any Distribution overdue amount.

Marketer Rate Code

A code used to identify the rate that is to be associated with a Contract Account Number when Distribution is providing billing services for the Aggregation Group to which the Contract Account Number is enrolled.

Marketer Rate Code Effective Date

The date that a Supplier Rate identified by the Marketer Rate Code becomes effective for that Contract Account Number.

Marketer sales tax amount

The total sales tax dollars that Distribution billed the Contract Account Number for the Supplier when the Supplier uses Distribution's billing service.

Marketer total amount billed

The total dollars that Distribution billed the Contract Account Number for the Supplier when the Supplier uses Distribution's billing service (does not include sales tax).

Meter location number

The meter location number is a unique location that a meter can be placed. These numbers are never changed or reissued.

Meter number

The meter number is a manufacturer serial number assigned to the meter. These are not unique and can move to different meter locations over time.

Meter read date

The calendar date of a meter reading.

Meter reading

This is reading in CCF that would be used for Distribution billing. It can be actual or estimated and has passed all Distribution edit checks before being provided.

Meter read frequency code

A code indicating when a given meter is to be read for each cycle. The codes are as follows:

- O bimonthly-Odd
- E bimonthly-Even
- M Monthly

Meter read source code and meter read source description

A code and description describing the type of read and reason for read. The table of all codes is provided in the general tables. Also included on the table is an abbreviated description.

Meter read source type name and type abbreviation

A high level classification of meter readings to allow for prioritization of those reading for editing, billing and/or purging. This classification, for example, allows the system or user to place more value (integrity) on a company meter reading than on a customer meter reading, or more value on a customer meter reading than on an estimated meter reading.

Meter read used for bill code

Indicates if the meter reading was used for billing and how it was used.

B - used for billing - boundary read - ends/starts a billing period

N - not used for billing - just a memo read

U - used for billing - a reading that's necessary for billing but doesn't end/start a billing period (usually meter sets/removes, meter changes, etc. that are done mid-cycle.)

Min charge

The minimum bill calculated for all end use accounts (Contract Account Number).

Month

The month the average degree days (based upon Erie, Pennsylvania) are in.

Monthly consumption

The estimated calendar month consumption for a Contract Account Number in CCF.

Open/close type

A one character code identifying boundary meter readings (those meter readings which either start (open) or stop (close) the billing of an account (lock, unlock, set, remove) or of a meter or meter index (meter change set, meter change remove).

Other charge description

A description of other charges which are included in the capacity bill. The charge may be per MCF in which a volume and a rate are entered or the charge could be a straight dollar amount.

Other charge volume

The volume of gas associated for this particular other charge.

Other charge rate

The rate associated for this particular other charge.

Other charge amount

Total amount for this particular charge on the capacity bill.

Overdue amount and description

The amount overdue. It is equal to prior balance minus payments made and credit adjustments.

PA average degree days

Pennsylvania's (based upon Erie, Pennsylvania) average degree days for a specific month and day.

PA average temp

Pennsylvania's (based upon Erie, Pennsylvania) actual average temperature for the degree date.

PA degree days

Pennsylvania's (based upon Erie, Pennsylvania) actual degree days for the degree date.

Posted amount

The amount of money (debit or credit) that is applied to a Contract Account Number's current balance.

Posted amount transaction code

A code indicating the various types of money transactions affecting a Contract Account Number's current balance. Valid codes include:

P1- Posting Correction - used for transferring money between accounts when an error has occurred in posting (could be debit or credit amount).

R1- Ratepayer Payment - used for payment received from customer (credit amount).

R6 - Remittance Processing Correction - used for transferring money between an account and a bank when an error has occurred in posting (could be debit or credit amount).

R7 - Multiple Posting Correction - used for correcting multiple (duplicate) postings to an account when an error has occurred with records received from outside payment vendors (could be debit or credit amount).

R8 - Direct Payment - used for payment received from customer due to direct debiting of customer's bank account (credit amount).

S7 - Supplier Balance Return - used for when a customer has severed the relationship with a Supplier and a balance is remaining on the Supplier account that must be returned to the Supplier (could be debit or credit balance).

SH - Distribution credit transfer to Supplier - used for <u>automatic</u> transfer to the Supplier balance any credit remaining on the Distribution balance after all Distribution amounts owing have been paid, calculated at billing. It is limited to the Supplier balance owed or the amount of the credit transfer, whichever is less (credit amount).

SJ - Distribution Transfer to Supplier – used for <u>manual</u> transfer to the Supplier any credit remaining on the Distribution balance after all Distribution amounts owing have been paid, calculated at any time. It is limited to the Supplier balance owed or the amount of the credit transfer, whichever is less (normally a credit amount; can be a debit if correcting a previous error credit amount).

The following are transactions initiated by a Supplier:

SB – Supplier Balance Change – used for transfer of a Supplier balance to Distribution such as in the case of when a customer is changed to being billed by Distribution (could be debit or credit amount).

SC – Paid to Supplier for Supplier Balance – used for payment received from a customer by a Supplier where payment is to be applied to the Supplier balance (normally a credit amount, can be a debit if correcting a previous error credit amount).

SD – Paid to Supplier for Distribution balance – used for payment received from a customer by a Supplier where payment is to be applied against a Distribution balance (normally a credit amount, can be a debit if correcting a previous error credit amount).

SE – Supplier Penalty – used for when a penalty is charged on a customer's account (normally a debit, can be a credit if correcting a previous error debit amount).

SF – Supplier Rebate – used for when a rebate is applied to a customer's account (normally a credit, can be a debit if correcting a previous error credit amount).

SG – Supplier Balance Transfer – used for when a customer is being switched from an old account to a new account such as in the case of when a customer's moves (can be a debit or credit amount).

As far as what transactions to use for your balancing R1, R8, SH and SJ will be your most common transactions occurring daily with an occasional P1,R6,R7,SB,SC,SD,SE,SF or SG transaction. The S7 transactions can be ignored as far as balancing is concerned.

Posted date

The date in the format of yyyymmdd on which an amount of money (debit or credit) was applied to a Contract Account Number's current balance.

Premises address

The full street address of the premises being served. It is the address of the meter and meter location, not the customer.

Prior balance and description

The balance from the previous bill.

Processing month

The month in which charges are calculated.

Ratepayer billing account id (RBA)

Unique identification number assigned to each end use customer that initiates an gas account will Distribution. RBAs are never reissued (RBAs have been replaced by Contract Account Numbers).

Record code

An indicator specifying the change status of a customer record on the Residential & Commercial End Users Connected to Distribution's System file. Values are:

Space - No changes to record since last list was provided.

A - Record was not on previous list.

C - Record modified since last list was provided.

D - Record no longer marketable (inactivated Contract Account Numbers)

Revenue class

A two digit code identifying for revenue reporting purposes, the type of burner-tip usage of natural gas. The first digit identifies whether the usage includes space heating (1 or 3)) or not (0 or 2). The second digit identifies the end use as residential (1), commercial (2), industrial (3); public authority (4); etc.

Sales tax

Total of sales tax charges. This is computed at the Contract Account Number level on the consumption bill detail and assessed on capacity bills.

Sales tax exemption status

A code provided to indicate whether Distribution has sales tax exemption information on file for the customer.

Sales tax rate

Sales tax rate in effect.

Sales tax charge

Total of sales tax charges. This is computed at the Contract Account Number level on the consumption bill detail and assessed on capacity bills.

School district code and school district name

A code and name identifying the school district of the premises being served. The table of all codes is provided in the general tables.

Service Class

The Service Class associated with the account of the Customer's Contract Account Number.

State code

Abbreviation for a state, e.g. NY for New York, PA for Pennsylvania.

Take or Pay charge

Total take or pay charges calculated for a Contract Account Number.

Take or Pay rate

Take or pay rate is used to calculate take or pay charges under transportation. These charges are separate from and in addition to transportation charges.

Total amount owed amount and description

The total amount owed is total of current charges, prior period adjustments and balances and late payment charges.

Total charges

The total accumulated charges for a detail item. This field appears on the consumption detail records for Contract Account Numbers and on the capacity bill detail by aggregation group.

Town code and town name

A code and name identifying the town of the premises being served. The table of all codes is provided in the general tables.

Trade to volume

Gas traded to a supplier to relieve an imbalance situation.

Trade from volume

Gas traded from a supplier to relieve an imbalance situation.

Trade rate

The imbalance trading rate.

Trade charge

Equal to trade rate multiplied by the total volume of gas traded to and from a supplier.

Transition charge

Total transition charges calculated for a Contract Account Number.

Transport amt per block

The amount calculated for the bill for each block of the rate structure.

Transport charge

Total transportation charges calculated for a Contract Account Number.

Transition rate

Transition rate is used to calculate transition charges under transportation. These charges are separate from and in addition to transportation charges.

Transport rate class description

A narrative description of the transportation rate class indicative of type of customers qualifying for the rate class. FOR example, "TC - Residential".

Transport rate class id

Indicates the transportation rate schedule being used to bill a Contract Account Number. This key can be used along with billing month to access the transportation rate tables to obtain actual rates.

Transport rate effective date

The date that the rate begins to be used for billing.

Transport rate per block

The rate used to calculate the bill for each block of the rate structure.

Units of measure code and units of measure description

A code and description describing units of measurement on a meter.

Upstream capacity charge volume

The volume of gas eligible for capacity release surcharge or credit.

Upstream capacity charge rate

The rate at which the surcharge or credit is billed at.

Upstream capacity charge

Total charges to the release of upstream capacity which can be a charge or a credit.

STANDARD-FORM AGREEMENTS

1. Producer Interconnection Agreement

PRODUCER INTERCONNECTION AGREEMENT

THIS INTERCONNECTION AGREEMENT (the "Agreement") is made and entered into this day of ______, by and between _____, hereinafter, "Operator,"

and

NATIONAL FUEL GAS DISTRIBUTION CORPORATION, 6363 Main Street, Williamsville, New York, 14221-5887, hereinafter, "NFGDC."

WITNESSETH

WHEREAS, NFGDC is a public utility authorized and obligated to receive and transport natural gas and to provide retail natural gas service subject to the jurisdiction of the Public Service Commission of the State of New York hereinafter, "NYSPSC"; and

WHEREAS, NFGDC is a public utility authorized and obligated to receive and transport natural gas and to provide retail natural gas service subject to the jurisdiction of the Pennsylvania Public Utility Commission, hereinafter, "PAPUC"; and

WHEREAS, by means of facilities operated by it, Operator proposes to deliver to, and deliver into facilities owned and operated by NFGDC natural gas produced in the State of New York or deliver into facilities owned and operated by NFGDC natural gas produced in the Commonwealth of Pennsylvania; and

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements hereinafter contained, NFGDC and Operator agree as follows:

ARTICLE 1. DEFINITIONS

1.1 "Receipt Point" means the point of interconnection between Operator's facilities and the facilities of NFGDC located immediately upstream of NFGDC's measurement facility which is used to identify such point of interconnection in Exhibit A.

1.2 "Exhibit A" means the document entitled "Exhibit A" which is attached hereto (and by such attachment, made a part hereof), as said document may be amended or supplemented, from time to time.

1.3 "Btu" or "British Thermal Unit" means, generally, the amount of heat required to raise the temperature of 1 pound of liquid water by 1°F at a constant pressure of one atmosphere and is a measure of heat value (energy content). Btu is calculated in conformance with applicable ANSI/API and A.G.A. recommendations.

1.4 "Cubic Foot" means the volume of gas contained in one (1) cubic foot of space at a standard pressure of fourteen and seventy-three hundredths (14.73) pounds per square inch absolute and a standard temperature of sixty degrees Fahrenheit (60° F), under standard gravitational force.

1.5 "Mcf" means one thousand (1,000) cubic feet of gas, determined on the measurement basis set forth in this Agreement.

Page SFA-1

1.6 "Meter Location" means the state, New York or Pennsylvania, in which an individual meter on Exhibit A is geographically located.

1.7 "NFGDC's Tariff" or "Tariff" means NFGDC's Schedule For Gas Service Applicable In The Entire Territory (PSC No. 8 – GAS, as amended from time to time, or any superseding tariff), for gas delivered by Operator in New York or Rates, Rules And Regulations Governing The Furnishing of Natural Gas Service (Gas--Pa. P.U.C. No. 9, as amended from time to time, or any superseding tariff) for gas delivered by Operator in Pennsylvania. Meter Location determines the applicable Tariff.

1.8 "Gas Transportation Operating Procedures Manual" or "GTOP" is a document describing operating procedures, protocols and business practices for transportation service, as amended from time to time. The GTOP applicable to gas delivered by Operator in New York is filed with the NYSPSC and the GTOP applicable to gas delivered by Operator in Pennsylvania is filed with the PAPUC. Each GTOP is posted on the NFGDC web site. Meter Location determines the applicable GTOP.

1.9 "Day" means the twenty-four (24) hour period commencing at an hour specified in the tariff of an interstate pipeline delivering gas to NFGDC at a city gate station, or as otherwise specified in NFGDC's GTOP.

1.10 "Month" means the period commencing on the first Day of a calendar month and ending immediately prior to the commencement of the first Day of the next calendar month.

1.11 "Operator's Gas" means the natural gas delivered into NFGDC's facilities at any given time at any given Receipt Point.

1.12 "Commission" means the NYSPSC or PAPUC depending on Meter Location.

1.13 "NFGDC Contacts Addendum" means the document so entitled which is attached hereto (and by such attachment, made a part hereof), providing NFGDC contact information pertinent to this Agreement. Said document may be amended or supplemented, from time to time by NFGDC and communicated to Operator through facsimile, e-mail or a posting to the NFGDC website,

1.14 "Operator Contacts Addendum" means the document so entitled which is attached hereto (and by such attachment, made a part hereof), providing Operator contact information pertinent to this Agreement. Said document may be amended or supplemented, from time to time by Operator and communicated to NFGDC as provided therein.

1.15 "Gas Scheduling" means the administrative function(s) of arranging for Operator's Gas to be delivered for the account of NFGDC transportation customers and/or their suppliers, including nominations, confirmations, pool assignments and related activities.

ARTICLE 2. DELIVERY OF GAS INTO NFGDC FACILITIES

2.1 Operator shall not deliver (or permit the delivery of) any gas into any facility owned or operated by NFGDC other than at a Receipt Point identified on Exhibit A at the time of such delivery (the "Exhibit A Receipt Point(s)"). No Receipt Point shall be deemed to have been added to Exhibit A, and Exhibit A shall not be deemed to have been otherwise amended or supplemented, unless and until such amendment or supplement of Exhibit A shall be evidenced by a writing executed by Operator and NFGDC.

2.2 Operator warrants and represents as follows:

2.2.1 All gas delivered into NFGDC's facilities at any one Receipt Point shall be gas produced exclusively from wells configured to deliver to such Receipt Point.

2.2.2 Gas produced or scheduled by Operator to be produced from additional well(s) flowing through a Receipt Point identified in Exhibit A shall be authorized and gas received therefrom accepted by Distribution at the designated Receipt Point so long as:

2.2.2.1 Operator provides Distribution with 15 days written notice of its intent to add said additional well(s), together with the scheduled turn-on date; and

2.2.2.2 The well has been tested by or caused to be tested by Distribution and the results therefrom meet Distribution's satisfaction;

2.2.2.3 Provided, however, if Distribution fails to perform or cause to perform such well test by Operator's scheduled turn-on date, as provided in subdivision (i) above, said well(s) may nonetheless be turned on and production therefrom shall be accepted by Distribution at the designated Receipt Point, subject to Operator's sole liability for damages resulting from such production, and further subject to Distribution's determination, upon testing at any later date, that such gas is not acceptable pursuant to the terms and conditions of this Agreement.

2.2.2.4 The criteria contained in paragraph 2.2.2 shall also apply to new or different formations of gas that are accessed from an existing well already flowing through a Receipt Point identified on Exhibit A.

2.3 Operator shall deliver gas at a pressure sufficient to enable such gas to enter NFGDC's facilities against the pressure prevailing therein from time to time, provided, however, that Operator shall not deliver gas at any Receipt Point at a pressure in excess of the pressure designated by NFGDC.

2.4 Operator shall not install or operate (or permit any other entity to install or operate) compression facilities in order to deliver gas into any NFGDC facility ("NFGDC-Related Compression Operations") without the express prior written consent of NFGDC, which consent shall not be unreasonably withheld.

2.5 Operator warrants that all NFGDC-Related Compression Operations shall be conducted in a manner (i) so as to prevent the pulsations therefrom from interfering with NFGDC's measurement at any Receipt Point, and (ii) so that compressed gas will be delivered to NFGDC at a temperature not exceeding one hundred twenty degrees Fahrenheit (120° F).

2.6 Operator shall give NFGDC written notice at least fourteen (14) days prior to the commencement of (and any material change in) authorized NFGDC-Related Compression Operations.

2.7 Operator shall give NFGDC written notice at least twenty-four (24) hours prior to any material change in the maintenance routine applicable to any compressor used in NFGDC-Related Compression Operations. For purposes of this subsection, "material" shall mean any change that may produce a variance in gas volumes or pressure.

2.8 In the event that the installation, operation and/or maintenance of Operator's compressor used in NFGDC-Related Compression Operations requires (in NFGDC's reasonable judgment) modification(s) to any facility owned or operated by NFGDC, the cost of such modification(s) shall be borne by Operator. Operator shall consult with NFGDC so as to assist NFGDC in ascertaining the extent to which such modification may be indicated, and on the basis of such consultation and NFGDC's own judgment, NFGDC shall endeavor to notify Operator of its determination prior to the date scheduled by Operator for such installation, operation and/or maintenance. Notwithstanding NFGDC's efforts to provide such notice to Operator, Operator shall remain solely responsible for costs incurred by NFGDC in the event resulting and reasonably unforeseen modification of NFGDC facilities are required.

2.9 Operator shall, at its own cost and expense, (i) obtain, provide NFGDC with, and maintain any easement(s) or other land interest(s) which, in NFGDC's judgment as to type and extent, are reasonably necessary for the installation, operation and maintenance of NFGDC's receipt and related measurement

facilities; and (ii) upon NFGDC's request, provide NFGDC with a copy of the recorded instruments evidencing such land interests and NFGDC's beneficial interest therein.

2.10 Receipt facilities shall be installed, owned and maintained by and at the expense of either NFGDC or Operator according to the below schedule. Such equipment shall be installed at each Exhibit A Receipt Point facility, which, in NFGDC's reasonable judgment, may be necessary to accommodate the deliveries of gas received and projected to be received by it at the Receipt Points. The normal operation, calibration, maintenance, adjustment and repair of the measurement equipment shall be performed by the owner of the equipment. Modifications to Receipt Facilities resulting from changes in Operator's operations shall be performed at Operator's cost and expense. The Receipt Facilities shall be operated in accordance with the applicable specifications of the Gas Measurement Committee of the Natural Gas Department of the American Gas Association, as amended from time to time, or in accordance with any other mutually agreeable standard commonly accepted in the industry.

Equipment	Install By	Own By	Maintain By	Paid By
Meter/Recording instrument Meter run and valves Regulator Drying Equipment Odorizing Equipment "Pop-offs"/Relief valves Mainline valve Heaters Water separator/drips Communications facilities Telemetrics/Teleflow	NFGDC Either Operator Operator NFGDC Either Either** Operator Operator Operator NFGDC	NFGDC Either Operator Operator NFGDC Either NFGDC Operator Operator Operator NFGDC	NFGDC Either Operator Operator NFGDC NFGDC Operator Operator Operator NFGDC	Either* Operator Operator Operator Operator Operator Operator Operator Operator Operator Operator

* NFGDC for initial installation and replacements due to normal wear and tear; otherwise by Operator except on a case by case basis.

**Pursuant to a determination by NFGDC

2.11 Operator shall pay to NFGDC the Receipt Facility Maintenance Fee(s), if any, which shall be applicable, from time to time, pursuant to the provisions of NFGDC's Tariff. In this connection, Operator agrees that NFGDC shall have the unilateral right, exercisable at its sole option, to file with any regulatory authority having jurisdiction, and to make effective, (i) initial and revised rates and charges applicable to NFGDC's operations hereunder, (ii) changes in any provision of the General Terms and Conditions of NFGDC's Tariff applicable to NFGDC's operations hereunder, and (iii) the terms and conditions of this Agreement (hereinafter, collectively, the "Receipt Parameters"). NFGDC agrees that Operator may protest or contest any such filing and/or may seek from any duly constituted regulatory authority having jurisdiction such revision of any one or more of the Receipt Parameters as may be necessary or appropriate to cause the same to be, in all respects, just and reasonable.

2.12 Operator shall, at its own cost and expense, provide, operate and maintain in safe and efficient operating condition such regulators, relief valves, and other equipment as may be necessary in NFGDC's reasonable judgment to avoid excessive pressures (and the risk of such pressures) in facilities owned and operated by NFGDC or its customers.

2.13 Operator acknowledges that:

2.13.1 The Receipt Points identified in Exhibit A are located on NFGDC's gas distribution facilities;

2.13.2 NFGDC must, at all times, be in a position to operate, maintain, enhance, and/or replace any one or more of its facilities in such a manner, at such times, and under such circumstances as will

enable it to furnish and provide facilities and service which are safe and adequate and in all respects just and reasonable;

2.13.3 The maximum and/or minimum delivery pressures or other parameters applicable to Operator's delivery of gas into NFGDC's facilities may vary from time to time, in light of the above, and in order to enable NFGDC to satisfy its retail market requirements, including but not limited to its firm service obligations, transportation obligations, and to ensure the maintenance of safe operating conditions throughout its system, including, but not limited to, the maintenance, enhancement and/or improvement of its facilities;

2.13.4 Operator acknowledges NFGDC's right (a) to restrict and/or completely stop Operator's deliveries at any one or more Receipt Points insofar as reasonably necessary in NFGDC's judgment to accommodate the above requirements, and/or (b) to designate and re-designate, from time to time, the maximum pressure or other delivery parameter(s) temporarily applicable to deliveries of gas by Operator at any one or more Receipt Points; and

2.13.5 Without limitation of the remedies available to NFGDC in respect of any breach of this Agreement, a breach of any one or more of the obligations undertaken by Operator under paragraphs 2.1, 2.2, 2.3 and 2.5 of this Article 2 shall constitute a material breach of this Agreement.

ARTICLE 3. MEASUREMENT

3.1 Measurement of Operator's Gas shall be in accordance with the Tariff and GTOP requirements applicable to gas delivered into NFGDC's facilities for transportation service and/or applicable to production facility gas measurement.

3.2 The unit of volume for purposes of measurement of the gas delivered into NFGDC's facilities at the respective Exhibit A Receipt Points shall be Mcf.

3.3 The total heating value of the gas delivered into NFGDC's facilities at the respective Exhibit A Receipt Points shall be determined by tests of samples of gas collected at said Receipt Points at such time(s) as may be determined by NFGDC. The unit of measurement of heating value shall be Btu. Btu determinations shall be made as often as NFGDC deems appropriate, and at NFGDC's expense, provided, however, that Btu determinations which are made by NFGDC at Operator's request shall be made by NFGDC at Operator's cost and expense.

3.4 If undertaken at Operator's request, NFGDC's test of the accuracy of any meter or other measurement equipment owned and used by NFGDC to measure volumes of gas delivered into its facilities shall be arranged and conducted, insofar as reasonably practicable, so as to permit representatives of Operator to be present. If, upon any such test (whether conducted at Operator's request or upon NFGDC's own initiative) any such meter or measurement equipment shall be found to be inaccurate, NFGDC shall adjust the same as soon as practicable to read correctly; and

3.4.1 If such inaccuracy is less than three percent (3%), the previous readings shall be deemed correct, and, in the event such test was conducted at Operator's request, Operator shall bear all costs of such test;

3.4.2 If such inaccuracy is three percent (3%) or more, the previous readings shall be corrected to zero (0) error for the period of time during which such meter or other measurement equipment is known or agreed to have been inaccurate. If the length of such period of inaccuracy is not known or agreed upon, such correction shall be made for a period equal to one-half ($\frac{1}{2}$) of the time which has elapsed since the date of the last calibration, provided, however, that such correction period shall not exceed thirty (30) days.

If any such meter or other measurement equipment is out of service, or inaccurate by three percent (3%) or more, under circumstances where the correction of previous readings of such equipment to "zero (0) error" is not feasible, then the volume of gas delivered during the period shall be estimated (a) by using data recorded by any check-measuring equipment, if installed and registering accurately, or (b) if such check-measuring equipment is not installed or registering inaccurately, by correcting the error if the percentage of error is ascertainable by calibration, test or mathematical calculation, or (c) if neither such method is feasible, by estimating the quantity delivered based upon deliveries under similar conditions during a period when equipment was registering accurately.

ARTICLE 4. GAS QUALITY

4.1 Operator understands and acknowledges that NFGDC will not continuously monitor, test, or otherwise inspect Operator's Gas prior to the delivery thereof into NFGDC's facilities. Operator further acknowledges that, irrespective of the contractual disposition of Operator's Gas, all such gas is commingled with, and becomes an inseparable part of, the gas supply used by NFGDC to satisfy its obligations to its retail and transportation customers. Accordingly, Operator expressly warrants and represents that (i) Operator's Gas shall, in all respects and at all times, consist solely of gas which is merchantable and fit for use by NFGDC's retail customers, and (ii) without limitation of the generality of the foregoing, Operator's Gas shall at all times, and in all respects, shall conform to the Tariff and GTOP requirements applicable to gas delivered into NFGDC's facilities for transportation service, and meet at least the following minimum quality specifications:

4.1.1 Operator's Gas shall be entirely free of all hydrocarbon liquids and other material in liquid form, including, without limitation, water, glycol, brines, condensate and oil;

4.1.2 All gas delivered by Operator to NFGDC hereunder into NFGDC's facilities through any Receipt Point listed on the attached Exhibit A shall be dehydrated by Operator for removal of water present therein in a vapor state to a level determined acceptable by NFGDC, at its sole discretion, from time to time. In no event shall the acceptable level, as determined by NFGDC, be required to be less than the maximum water vapor (H₂O) per million cubic feet level specified in the Tariff;

4.1.3 Operator's Gas shall be entirely free of NOx compounds;

4.2 To the extent accepting Operator's Gas does not prevent gas delivered to customers from being merchantable and fit for use in its retail markets, NFGDC shall have the option (but never the obligation), to relax gas quality requirements, from time to time, by describing permissible variations in its GTOP.

4.3 Operator shall furnish, install, operate, maintain and keep in efficient and safe operating condition, at Operator's sole cost and expense, such drips, separators, dehydrators, alcohol bottles, gas cleaners, treatment facilities, and any other devices or equipment as may be or become reasonably necessary to effect compliance with the quality specifications set forth in this Article.

4.4 In addition to any other remedy which may be available to NFGDC hereunder, or under any provision of law, in respect of Operator's undertakings expressed in this Article, NFGDC shall have and be entitled to exercise any one or more of the following rights, options and remedies, on a non-exclusive basis, in the event of any breach by Operator of any one or more of said undertakings, to wit:

4.4.1 Upon notice to Operator, treat or process Operator's Gas, at Operator's sole cost and expense, insofar as reasonably necessary in NFGDC's judgment to cause the same to conform to the quality specifications set forth in this Article;

4.4.2 Continue to receive Operator's Gas, with or without treatment or processing thereof;

4.4.3 Discontinue receiving Operator's Gas at the affected Receipt Point(s) until the occasion(s) for the exercise of a remedy by NFGDC has, in NFGDC's reasonable judgment, been corrected;

4.4.4 Terminate this Agreement as respects the delivery of Operator's Gas into NFGDC's facilities at the affected Receipt Point(s) in the event that, in NFGDC's reasonable judgment, the occasion for NFGDC's exercise of a remedy cannot be corrected at a reasonable cost in a reasonable time;

4.4.5 Require Operator to cease receiving into Operator's facilities production attributable to the source which occasioned NFGDC's exercise of a remedy; and

4.4.6 Clean-up and/or repair, at Operator's sole cost and expense, all facilities, equipment and apparatus affected by the occasion for NFGDC's exercise of a remedy. NFGDC shall endeavor to notify the Operator prior to taking such remedial action.

ARTICLE 5. CHART CHANGES AND INDEX READINGS

5.1 Operator shall, at its own cost and expense, (i) change the charts on each orifice meter associated with the Exhibit A Receipt Points (the "Charts"), on the first (1st) working day of each month, (ii) mail the removed Charts to NFGDC on or before the fifth (5th) working day of each month, (iii) change the Charts regularly, once each seven (7) day period following said first (1st) working day, or on a 31-day cycle in the case of 31-day charts, and (iv) mail these removed Charts to NFGDC within three (3) working days of each such chart change.

5.2 Insofar as applicable, Operator shall, at its own cost and expense, read each displacement meter associated with any Exhibit A Receipt Point on the first (1st) working day of each month and shall mail, or, with confirmed receipt, e-mail or fax all such index information to NFGDC on or before the fifth (5th) working day of each month.

5.3 All charts and all index information shall be addressed to "NATIONAL FUEL GAS DISTRIBUTION CORPORATION" at the address provided for Gas Measurement in the NFGDC Contacts Addendum.

5.4 Operator understands that NFGDC is not able to account for and/or allocate Operator's Gas without using the Chart or index information (as the case may be) referred to in this Article. Accordingly, given (i) the incremental expense and other costs which will be incurred by NFGDC in the event of its tardy receipt of the Chart or index information referred to in this Article; (ii) the difficulty of quantifying such costs and expenses, and (iii) the inconvenience and practical infeasibility of otherwise providing an adequate remedy in respect of Operator's breach of its undertakings expressed in this Article, it is agreed as follows:

In the event that either of the following conditions are met, to wit: (i) Operator shall fail to mail any Chart or index information as stipulated in this Article, or (ii) NFGDC shall fail to receive said Chart or index information on or before the fifth (5th) working day following the mailing date stipulated in this Article, then NFGDC shall be relieved of any obligation to account for any of the production in a timely manner but will endeavor to account for such production in the next accounting period.

ARTICLE 6. TERM

6.1 This Agreement shall have no force or effect unless and until it shall have been executed by each of the parties identified on the first page hereof and by each of the parties identified in the Addendum thereto, if any (the "Effective Date"). Thereafter, and unless and until NFGDC shall have notified each of the other parties who executed this Agreement (the "Non-NFGDC Parties") that all applicable gas disposition agreements have become effective, no right or entitlement shall accrue to any Non-NFGDC Party due to the execution of this Agreement.

6.2 The term of this Agreement shall extend until the first anniversary of the Effective Date, and, unless otherwise lawfully terminated, this Agreement shall continue in effect thereafter, until the same is terminated by any party to this Agreement, if any, by written notice to all other such parties, no later than thirty (30) days prior to the beginning of a calendar month.

6.3 Notwithstanding any other provision of this Agreement, and in addition to any other right or remedy available to NFGDC hereunder or under any provision of law, NFGDC shall have the following rights, exercisable at NFGDC's sole option, to wit:

6.3.1 Terminate this Agreement and remove all Receipt Facilities at the Exhibit A Receipt Points, or suspend or cease receiving Operator's Gas at any one or more of the Exhibit A Receipt Points, upon thirty (30) days' prior written notice to Operator, in the event that Operator should for any reason experience a loss or cancellation of the security required to be provided by Operator pursuant to Article IX hereof; and

6.3.2 Terminate this Agreement as to the affected Receipt Point(s) and remove all Receipt Facilities at the affected Receipt Point(s), or suspend or cease receiving Operator's Gas at any affected Receipt Point(s), upon thirty (30) days' prior written notice to Operator, in the event that Operator should (i) fail to provide satisfactory title to the production or (ii) repeatedly violate, in NFGDC's sole opinion, the standards contained in Article IV.

ARTICLE 7. GOVERNMENTAL REGULATION

7.1 This Agreement and the respective obligations of the parties hereunder shall be subject to all valid applicable federal, state and local laws, orders, rules and regulations, whether in effect on the date hereof, or becoming effective thereafter. The parties shall be entitled to regard all laws, orders, rules and regulations issued by any federal, state or local regulatory or governmental body as valid and may act in accordance therewith until such time as same shall have been invalidated by final judgment (no longer subject to judicial review) of a court of competent jurisdiction. Neither party shall be held in default for failure to perform hereunder if such failure is due to compliance with laws, orders, rules or regulations of any such duly constituted authorities. Nothing contained herein, however, shall be construed as affecting any party's right(s) to contest the validity or applicability of any such law, order, rule or regulation.

ARTICLE 8. FORCE MAJEURE

8.1 In the event either NFGDC or Operator is rendered unable, in whole or in part, by force majeure to carry out their respective obligations under this Agreement, other than to make payments due hereunder or to maintain minimum gas quality specifications, it is agreed that the obligations of the party claiming such inability to perform, so far as they are affected by such force majeure, shall be suspended from the inception of and during the continuance of such inability so caused but for no longer period; provided that the party claiming such inability gives notice and reasonably full particulars of such force majeure event relied upon; and provided further that the party claiming such inability shall promptly and diligently take such action as may be necessary and reasonably practicable to correct, or cause to be corrected, such inability.

8.2 The term "force majeure" as employed herein shall mean, without limitation, acts of God, Governmental action or regulation, strikes, lockouts or other industrial disturbances, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, tornadoes, storms, storm warnings, floods, washouts, arrests and restraints of governments and people, civil disturbances, explosions, breakage or accidents to machinery or pipelines, the necessity for making repairs to or alterations of machinery or pipelines, freezing of pipelines, and any other causes, whether of the kind herein enumerated or otherwise, not under or within the control of the party claiming inability to perform and which, by the exercise of reasonable diligence, such party is unable to prevent or overcome.

8.3 The settlement of strikes, lockouts or any such labor disputes shall be entirely within the discretion of the party having the difficulty, and the above requirement that any <u>force majeure</u> event shall be remedied promptly and diligently shall not require the settlement of strikes, lockouts or other labor disputes by acceding to the demands of any opposing party when such course is inadvisable in the discretion of the party having the difficulty.

8.4 <u>Force majeure</u> shall not include failure or disruption of technical systems or products within the reasonable control of the party claiming <u>force majeure</u> which arise as a result of any leap year.

ARTICLE 9. NOTICE

9.1 Every notice, request, statement, bill or invoice provided for in this Agreement shall be in writing, unless otherwise provided herein, and shall be sent by prepaid mail, facsimile, or by overnight delivery, addressed to the party to whom given, at such party's address stated below, or at such other address as such party may in and by such notice direct hereafter. Facsimile notices, requests, statements, bills or invoices shall be deemed given only when facsimile receipt is confirmed.

9.1.1 Notice to NFGDC shall be sent to the address provided for Notices in the NFGDC Contacts Addendum.

9.1.2 Notice to Operator shall be sent to the address provided for Notices in the Operator Contacts Addendum.

9.2 Operator shall provide NFGDC with a current telephone number, facsimile number and E-mail address at which Operator or Operator's representatives may be contacted at all hours using the Operator Contacts Addendum or other mutually agreeable form that minimally provides the same information contained therein. For themselves and their agents, NFGDC and Operator agree to the recording of all telephone conversations during which NFGDC notifies Operator to suspend or cease deliveries into any facility owned or operated by NFGDC.

ARTICLE 10. OPERATOR'S CREDITWORTHINESS

10.1 At its sole option, NFGDC may (i) suspend its receipt of Operator's Gas, or (ii) terminate this Agreement, in the event that Operator is or has become insolvent or fails within a reasonable period, upon NFGDC's request, to demonstrate creditworthiness, or in the event that Operator incurs a poor credit history with respect to any service provided by NFGDC or as established by a reliable reporting agency.

10.2 As a demonstration of Operator's creditworthiness and as security in respect of any remedy afforded NFGDC under this Agreement or under any provision of law, Operator agrees to provide NFGDC, prior to the Effective Date, and to keep in force throughout the term of this Agreement, any one of the following:

10.2.1 A security deposit in the amount of Ten Thousand Dollars (\$10,000), to be held in a non-interest-bearing general account by NFGDC;

10.2.2 An irrevocable letter of credit issued by a financial institution acceptable to NFGDC and in a form acceptable to NFGDC with a face amount of Ten Thousand Dollars (\$10,000); or

10.2.3 At NFGDC's sole discretion, a copy of the most recent audited financial statements of Operator (or of a guarantor of Operator's performance hereunder) showing a net worth in excess of Thirty Thousand Dollars (\$30,000), or a copy of the most recent unaudited financial statements of Operator (or of a guarantor of Operator's performance hereunder) showing a net worth of at least Forty Thousand Dollars (\$40,000), in which event, Operator shall also provide NFGDC with evidence of its ownership of unencumbered assets valued, in the aggregate, in excess of Ten Thousand Dollars (\$10,000) in each state in which Operator conducts any business with NFGDC.

10.2.4 Security, in a form acceptable to NFGDC, provided on behalf of Operator by a creditworthy third party, including but not limited to a marketer, individual, or other entity.

10.3 NFGDC reserves the right to require Operator to establish or demonstrate its creditworthiness, from time to time, during the term of this Agreement.

ARTICLE 11. TITLE TO GAS

11.1 Nothing in this Agreement shall affect the title to Operator's Gas.

11.2 Operator shall indemnify NFGDC against, and hold it harmless from, and undertake the defense of NFGDC with respect to, all suits, actions, claims, debts, accounts, damages, costs, losses and expenses (including attorneys' fees) arising from or out of adverse claims of any and all persons or entities to Operator's Gas, or to royalties, overriding royalties or other payments with respect thereto, or to taxes, licenses, fees, or charges with respect to Operator's Gas or the disposition thereof (hereinafter, respectively "Adverse Claim To Operator's Gas"). Except insofar as Operator is in breach of its obligations or has an obligation to indemnify and save NFGDC harmless pursuant to this section XI (B), NFGDC agrees to indemnify and save Operator harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising out of adverse claims of any and all persons to the natural gas after receipt by NFGDC of Operator's gas for redelivery by NFGDC (whether by means of transportation service or NFGDC commodity service) according to NFGDC's tariff.

11.3 In the event of any Adverse Claim To Operator's Gas, NFGDC may, at its sole discretion, suspend receipts of Operator's Gas at the Receipt Point(s) where the affected gas is delivered into NFGDC's facilities (without incurring any liability to Operator or any other entity interested in Operator's Gas) until such claim is finally determined and the prevailing party(ies) agree(s) to be bound by this Agreement, or until Operator furnishes NFGDC a bond, in form and amount and with sureties acceptable to NFGDC, conditioned to hold NFGDC harmless from any such Adverse Claim To Operator's Gas, or until Operator demonstrates, to NFGDC's satisfaction, that such gas subject to an adverse claim does not constitute any portion of Operator's Gas

11.4 Operator agrees to provide NFGDC, upon request, evidence reasonably satisfactory to NFGDC of Operator's right to handle and deliver into NFGDC's facilities, one hundred percent (100%) of the gas comprising Operator's Gas.

ARTICLE 12. REMEDIES

12.1 In addition to any other remedy available to NFGDC under this Agreement or any provision of law, Operator shall indemnify NFGDC against, hold it harmless from, and undertake the defense of NFGDC with respect to all suits, actions, claims, losses, damages (including punitive damages and economic losses), injuries (including personal injury and death), debts, accounts, costs and expenses (including attorneys' fees and other expenses incurred by NFGDC in responding to, and in partial or full satisfaction of, any such suits, actions, claims, losses, damages and injuries) related to and/or arising from or out of any breach by Operator of any provision of this Agreement.

ARTICLE 13. MISCELLANEOUS

13.1 This document shall <u>*not*</u> be construed as an agreement running with the land.

13.2 No change, modification or alteration of this Agreement shall be or become effective until executed in writing by the parties hereto, and no course of dealing between the parties shall be construed to alter the terms hereof, except as expressly stated herein.

13.3 No waiver by any party of any one or more defaults by the other in the performance of any provision of this Agreement shall operate or be construed as a waiver of any other default or defaults, whether of a like or of a different character.

13.4 Not less than five (5) working days prior to the first day of each calendar month during the term of this Agreement, Operator shall provide NFGDC with update(s), if any, to the identity of the entity and person who shall conduct Gas Scheduling for Operator's Gas at each of the Exhibit A Receipt Points. In the absence of Operator's timely notification to this effect, NFGDC may (but shall not be obligated to) deem the authority of the entity and person identified in Operator's last previous timely notification to continue until its receipt of the Operator's next timely notification under this paragraph.

13.5 Any company which shall succeed by purchase, merger or consolidation of the gas related properties, substantially as an entirety, of NFGDC or of Operator, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Agreement. Either party may, without relieving itself of its obligations under this Agreement, assign any of its rights hereunder to a company with which it is affiliated, but otherwise, no assignment of this Agreement or of any of the rights or obligations hereunder shall be made unless there first shall have been obtained the consent thereto in writing of the other party. Consent shall not be unreasonably withheld.

13.6 The headings contained in this Agreement are intended solely for convenience and do not constitute any part of the agreement between the parties and shall not be used in any manner in construing this Agreement.

13.7 With respect to Meter Location, this Agreement shall be construed, enforced and interpreted in accordance with the laws of

13.7.1 the State of New York, excluding, however, any such law which would direct the application of the law of another jurisdiction. The parties (i) submit to the jurisdiction of the United States District Court for the Western District of New York, and, in the event that such court lacks subject matter jurisdiction, to the New York State Supreme Court, Erie County, and, as respects those matters which are subject to the exclusive or primary jurisdiction of the NYSPSC, and (ii) waive any right or entitlement which they or any of them might otherwise have to cause any dispute arising under this Agreement to be adjudicated, determined or resolved pursuant to the law of any other jurisdiction, or, in or by any other court(s) or tribunal(s). Provided, however, that the parties may bring disputed matters before the NYSPSC according to dispute resolution procedures under NFGDC's Interconnection Rules and Procedures set forth in NFGDC's GTOP.

13.7.2 the Commonwealth of Pennsylvania, excluding, however, any such law which would direct the application of the law of another jurisdiction. The parties (i) submit to the jurisdiction of the United States District Court for the Western District of Pennsylvania, and, in the event that such court lacks subject matter jurisdiction, to the Court of Common Pleas of Erie County, Pennsylvania, and, as respects those matters which are subject to the exclusive or primary jurisdiction of the PAPUC, and (ii) waive any right or entitlement which they or any of them might otherwise have to cause any dispute arising under this Agreement to be adjudicated, determined or resolved pursuant to the law of any other jurisdiction, or, in or by any other court(s) or tribunal(s). Provided, however, that the parties may follow the dispute resolution procedures applicable to Suppliers as set forth in NFGDC's Tariff under Rate Schedule SATS, Special Provision § U(19), as revised.

13.8 So that there will be certainty as to the actual agreement between the parties, it is mutually understood and agreed that this Interconnection Agreement and the Exhibit A attached hereto, as the same may be impacted by any applicable provision of NFGDC's Tariff and GTOP, are intended to constitute the final expression, as well as the complete, exclusive and integrated statement, of the terms of the parties' agreement relative to the interconnection and other transactions described therein. If there is any inconsistency between this Agreement and the Tariff, either as presently in effect or as amended, then the provisions of the Tariff shall apply.

13.9 No presumption shall operate in favor of or against either party hereto as a result of any responsibility either party may have had for drafting this Agreement.

(OPERATOR)

NATIONAL FUEL GAS DISTRIBUTION CORPORATION

By	By:	_
Name:	Name:	
Title:	Title:	_
Date:	Date:	

PRODUCER INTERCONNECTION AGREEMENT NFGDC CONTACTS ADDENDUM

CONTACT INFORMATION:	24-Hour Telephone: (800) 444-3130 EMERGENCIES ONLY
Legal/Contract Notices/Contracting	NATIONAL FUEL GAS DISTRIBUTION CORPORATION Legal Department 1100 State Street
	Erie, PA 16504Facsimile: (814) 871-8061 Attn. Nathaniel Ehrman
	Email: <u>EhrmanN@natfuel.com</u>
Gas Supply	Gas Supply Administration Department
	6363 Main Street
	Williamsville, NY 14221
	Phone (716) 857-7107
	Facsimile: (716) 857-7823
	Email: michalskib@natfuel.com
Gas Measurement/Gas Testing	Gas Measurement Department
	717 State Street – Suite 700
	Erie, PA 16501
	Phone (844) NFG-WELL (844) 634-9355
	Facsimile: (814) 871-8672
	Email: <u>NFG_GM@natfuel.com</u>
Field Operations/Meter Sets	Gas Measurement Department
	717 State Street – Suite 700
	Erie, PA 16501
	Phone (814) 871-8539
	Facsimile: (814) 871-8672
One Ontradulian	Email: <u>CampbellC@natfuel.com</u>
Gas Scheduling	Transportation Service Department
	Williamsville, NY 14221
	Phone (716) 857-7232
	Facsimile: (716) 857-7479
	Email: <u>TSSsupport@natfuel.com</u>
Credit	Credit & Receivables Management
orodit	6363 Main Street
	Williamsville, NY 14221
	Phone (716) 857-76167570
	Facsimile: (716) 857-74797439
	Email:- <u>KawalerskiS@natfuel.com</u> : Szretterb@natfuel.com

PRODUCER INTERCONNECTION AGREEMENT OPERATOR CONTACTS ADDENDUM		
CONTACT INFORMATION:	Operator:	
Legal/Contract Notices		
5	Name:	
	Address:	
	Title:	
	City/State/Zip:	
	Phone(1):	
	Phone(2):	
	Facsimile:	
	Email:	
Emergency (24-Hour)		
	Name:	
	Address:	
	Title:	
	City/State/Zip:	
	Phone(1):	
	Phone(2):	
	Facsimile:	
	Email:	
Field/Gas Testing/Operations		
	Name:	
	Address:	
	Title:	
	City/State/Zip:	
	Phone(1):	
	Phone(2):	
	Facsimile:	
Accounting/Invision	Email:	
Accounting/Invoices	Nome	
	Name:	
	Address: Title:	
	City/State/Zip:	
	Phone(1):	
	Phone(2):	
	Facsimile:	
	Email:	
	Lindi	
Other:	Name:	
	Address:	
	Title:	
	City/State/Zip:	
	Phone(1):	
	Phone(2):	
	Facsimile:	
	Email:	

Updated Addendums should be sent to NFGDC by facsimile: (814) 871-8672 or E-mail: NFG_GM@natfuel.com

INTERCONNECTION AGREEMENT

Between

NFGDC and Operator

EXHIBIT A

Receipt Points(s):

I

2. **Daily Metered Transportation Service Agreement**

DAILY METERED TRANSPORTATION SERVICE AGREEMENT

THIS AGREEMENT is made this ____ day of _____, 20___, by and between NATIONAL FUEL GAS DISTRIBUTION CORPORATION ("Distribution"), a New York corporation, having its office and principal place of business at 6363 Main Street, Williamsville, New York, 14221-5887, and _____ ("Customer"), a _____, having its office and principal place of business at _____

WITNESSETH:

WHEREAS, Customer, requests Daily Metered Transportation Service for its facilities located at ______, Pennsylvania ("Customer's Facility"), Account No. ______ and

WHEREAS, Distribution is willing to receive, transport and deliver Customer's natural gas to Customer at Customer's Facility.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein, and subject to the jurisdiction of all applicable and relevant laws and regulations of the Commonwealth of Pennsylvania, the United States of America, and other governmental bodies having jurisdiction, it is agreed as follows:

ARTICLE I TERM

This Agreement will be effective as of ______1, 20____, for an initial term of twelve (12) months and for successive twelve (12) month periods thereafter. Either the Customer or Distribution may terminate this Agreement at the end of a term upon written notice thereof to the other not less than thirty (30) days prior to the end of such term; provided, however, that Distribution may terminate this Agreement at an earlier date as provided by law or the provisions of Distribution's Tariff.

ARTICLE II SERVICE TO BE PROVIDED BY DISTRIBUTION

(a) Distribution will receive from Customer at the point(s) of receipt designated by the DMT Market Pool Operator assigned by the Customer to nominate to Distribution on Customer's behalf volumes of natural gas up to a Maximum Daily Quantity of _____ Mcf per day, subject to its rights under Paragraph (b) under this Article. Distribution will transport said volumes and deliver equivalent volumes (less volumes retained as a loss allowance) to Customer at Customer's usual service point.

(b) Distribution shall not be obligated to receive and transport during any single hour more than 1/24 of the Maximum Daily Quantity. Nevertheless, Distribution may receive and transport greater volumes during any single hour in its sole discretion.

(c) Customer or Customer's Agent, utilizing Distribution's Transportation Scheduling System ("TSS"), shall provide Distribution with a nomination setting forth, by source, the daily volume to be transported by Distribution. Such nominations must be received in TSS according to the scheduling timeline established and posted by Distribution.

ARTICLE III APPLICABLE TARIFF PROVISIONS

The effective Rates, Rules and Regulations of Distribution, as set forth in its Pennsylvania Tariff (Gas--Pa. P.U.C. No. 9 or any superseding tariff) are incorporated herein by reference.

Customers classified as Priority 1 under the curtailment portion of Rule 26 of Distribution's Pennsylvania Tariff (i.e. customers serving essential human needs such as residential dwellings, hospitals, hotels, dormitories, nursing homes, etc.) who do not possess adequate installed alternative fuel capability should pay special attention to the Priority Standby Service requirements under Rate Schedule PSB.

ARTICLE IV INVOICING

(a) Billing periods hereunder will coincide, as nearly as is practicable, with the calendar months. At the conclusion of each billing period, Distribution will furnish Customer with a billing statement showing the volumes transported and all amounts owed by Customer.

(b) Within 15 days of providing the monthly billing statement, Customer will pay Distribution for all services provided by Distribution during the immediately preceding billing month as shown by the billing statement. Late payments shall be subject to the provisions of Distribution's Tariff.

ARTICLE V DAILY METERING

(a) Customer agrees to receive Distribution's Daily Metered Transportation ("DMT") service at Customer's Facility as provided in Distribution's Tariff.

(b) Customer acknowledges and understands that, as mandated by Distribution's Tariff, the DMT service rate requires Customer's source of gas to either have telemetering in place for Distribution's receipt points or be delivered into National Fuel Gas Supply Corporation receipt points. Customer also acknowledges and understands that Daily Metered Transportation Service rate requires Customer's natural gas be delivered through telemetering equipment at the point of delivery through Distribution's meter(s) to the Customer's Facilities.

(c) The DMT service will be effective on the 1st day of the succeeding calendar month pending successful installation and testing of all required telemetering equipment at least six (6) days prior to the effective date of this Agreement.

ARTICLE VI MISCELLANEOUS PROVISIONS

(a) This Agreement shall not be construed to effectuate a relationship of common carriage between Customer and Distribution.

(b) This Agreement will be binding on and inure to the benefit of the parties hereto and their respective successors and assigns, but may not be assigned without consent of each party, such consent not to be unreasonably withheld.

(c) This Agreement sets forth the entire understanding of the parties and no modification of its terms and provisions shall be or become effective except as set forth and confirmed in writing by the parties hereto.

(d) No waiver of any party of any one or more defaults by the other in performance of any provisions of this Agreement shall operate or be construed as a waiver of this Agreement, or shall operate or be construed as a waiver of any other default or defaults, whether of a like or different character.

(e) The respective obligations of the parties under this Agreement are subject to valid laws, orders, rules and regulations of the Pennsylvania Public Utility Commission or other duly constituted authorities having jurisdiction.

(f) The interpretation and performance of this Agreement shall be in accordance with the laws of the Commonwealth of Pennsylvania.

(g) This Agreement represents the entire and integrated agreement between the parties hereto and supersedes all prior and contemporaneous negotiations, representations, and agreements, either written or oral, regarding the subject matter hereof.

IN WITNESS WHEREOF, the parties hereunto have executed this Agreement on the date and year first above written, with the intent to be legally bound.

CUSTOMER

NATIONAL FUEL GAS DISTRIBUTION CORPORATION

Signature

Print Name

Signature

Name

Print Title

Title

STATE OF)) SS: COUNTY OF)

On this _____ day of _____, 20___, before me personally appeared ______ who being duly sworn and deposed, acknowledged ______ of ______ of _______ and that he, as _______, being authorized to do so, executed the foregoing

Agreement.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Notary Public

My Commission Expires:

STATE OF NEW YORK

COUNTY OF ERIE

) SS:)

On this _____ day of _____, 20___, before me personally appeared who being sworn and deposed, acknowledged himself to be of National Fuel Gas Distribution Corporation and that he, as _____, being authorized to do so, executed the foregoing Agreement.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Notary Public

My Commission Expires:

3. Monthly Metered Natural Gas Supplier Service Agreement

MONTHLY METERED NATURAL GAS SUPPLIER SERVICE AGREEMENT

This AGREEMENT is made and entered into as of the _____ day of ______, 20___, by and between ,_______ a corporation having offices at ______ ("Supplier") and National Fuel Gas Distribution Corporation, a New York corporation, with offices at 6363 Main Street, Williamsville, New York, 14221 ("Company").

DEFINITIONS APPLICABLE TO THIS AGREEMENT

Terms and conditions in this Agreement not defined below shall have their meaning utilized in the Company's Tariff for gas service, Gas - Pa. P.U.C. No. 9.

Control Date:	Customer's meter read date.
Supplier:	Signatory to this Agreement who, in the sole judgment of Company, has been determined creditworthy for participation in the MMNGS program.
MMNGS:	Monthly Metered Natural Gas Supplier.
MMT Customer:	A gas service customer who that receives transportation service from the Company under Rate Schedule for Monthly Metered Transportation Service under Company's tariff and receives gas supply from a MMNGS.
MMNGS Group:	The Supplier's group of MMT Customers
MMNGS Imbalance:	Net imbalances developed by the MMNGS Group and the primary financial responsibility of the Supplier.
Commission:	Pennsylvania Public Utility Commission
Tariff:	The effective Rates, Rules and Regulations of Company, as set forth in its Pennsylvania Tariff (GasPa. P.U.C. No. 9 or any superseding tariff).
Web Site:	Site on the internet world-wide web established and maintained by Company for transacting business hereunder.

GENERAL INFORMATION

WHEREAS, Supplier desires to participate in Company's MMNGS program under the Tariff;

WHEREAS, Supplier wishes to do all things necessary to effectuate all services under Company's MMNGS program as set forth in the Tariff;

WHEREAS, Company is willing to provide such services to Supplier as are necessary and sufficient to effectuate the MMNGS program under the Tariff in accordance with all laws, rules, regulations, permits, orders and authorizations applicable to the MMNGS program, or any part thereof.

NOW THEREFORE, The parties agree as follows:

A. Designation as Supplier:

Company shall accept designation and appointment of Supplier, and identification of MMNGS Group, upon the terms and conditions contained in this Agreement.

B. Identification of MMT Customers:

MMT Customers shall be identified by the Supplier on a list provided to the Company showing the name and account number of each Customer properly enrolled. All information shall be communicated to the Company via Electronic Data Interchange (EDI), the Company's Web Site or other protocol established by the Company. Notification and execution of Customer switches, including switches from the Company to a Supplier, shall be governed by the applicable provisions of the Tariff and the rules and regulations of the Commission. All switches shall occur on the Customer's Control Date.

C. Term of Agreement:

The initial term of this Agreement shall commence on ______ for a period of 12 months and shall be renewable annually for successive 12-month terms unless cancelled by default of any terms or conditions of this Agreement or the Tariff, or by the Company or the Supplier on sixty (60) days written prior to the end of the term, or otherwise by mutual agreement .

D. Supplier further agrees as follows:

1. Supplier will deliver natural gas to the Company's City Gate on behalf of MMT Customers included in Supplier's MMNGS Group.

2. Supplier is bound by the terms and conditions of the transportation service classification applicable to the MMT Customers in Supplier's MMNGS Group in accordance with any changes or modifications thereof as approved by the Commission.

3. Supplier warrants that all information provided to the Company for the purpose of qualifying for Company's MMNGS program is true, timely and accurate and Supplier

acknowledges that such information has been provided to the Company for the purpose of inducing the Company to provide service pursuant to the Tariff.

4. As a condition of MMNGS service, Supplier shall satisfy the credit criteria set forth in the Tariff. Supplier acknowledges that its creditworthiness may be periodically reviewed during service hereunder, and any security requirement modified as determined by the Company to accommodate changes in the Supplier's financial standing, fitness to serve or ADDQ for Supplier's MMNGS Group.

5. Supplier acknowledges that its obligations to deliver natural gas on behalf of its MMT Customers will not be abated under any circumstances, including a breach of the obligations by any MMT Customer to the Supplier, except for events of Force Majeure as specified in the Tariff or actions by the Company that prevent performance by Supplier.

6. Supplier shall comply with all applicable rules and regulations of the Commission for transacting business hereunder.

E. Company's Duties and Obligations:

1. Company shall accept Supplier's MMNGS Group, as determined according to MMNGS enrollment procedures, and shall provide all services required to effectuate MMNGS service under the Tariff.

2. Company shall bill Supplier on a monthly basis for services rendered or to be rendered.

3. Company shall comply with all applicable rules and regulations of the Commission for transacting business hereunder.

4. All other terms and conditions under the Tariff shall apply as if fully stated herein.

F. Rates and Charges:

Rates and charges for MMNGS service shall be billed to Supplier pursuant to the Tariff.

G. Incorporation by Reference:

A copy of the currently-effective form of Rate Schedule MMNGS is attached hereto and is incorporated herein. If there is any inconsistency between this Agreement and Rate Schedule MMNGS, either as presently effective or as amended, then the provisions of Rate Schedule MMNGS shall apply.

H. Notices:

All notices, invoices and other correspondence sent pursuant to this Agreement shall be addressed to the following parties:

To Company: National Fuel Gas Distribution Corporation Transportation Services Department 6363 Main Street Williamsville, NY 14221

To Supplier:

I. Limitation on Company's Liability:

Company shall not be liable for any error in judgment or any mistake of law or fact or any act done in good faith in the exercise of the powers and authority herein conferred or for any loss, damage, delay or failure to perform in whole or in part resulting from causes beyond Company's control, including, but not limited to, fires, strikes, insurrections, riots, embargoes, shortages in supplies, delays in transportation, or requirements of any governmental authority. Furthermore, in no event shall Company be liable for consequential, punitive, incidental, indirect or special damages in the provision of services hereunder.

J. Supplier Indemnity Obligations:

Supplier shall indemnify, save harmless and, at Company's option, defend Company from and against any and all losses, claims, demands, damages, costs (including, without limitations, reasonable attorneys' fees), expenses, liabilities, proceedings, suits, actions, restrictions, injunctions, fines, judgments, penalties and assessments which Company may suffer for, on account of, by reason of or in connection with any adverse claim of any person or persons to the gas purchased by Company under Rate Schedule MMNGS of the Tariff, regarding cashout purchases of Burner Tip Net Surplus Imbalances, and in connection with any bodily injury, including death to any person or persons (including, without limitation, MMT Customers' employees) or any damage to or destruction of any property, including, without limitation, loss of use thereof, arising out of, in any manner connected with or resulting from the goods, work or services furnished by Supplier with respect to this Agreement. The provisions of this Paragraph J shall survive the termination or expiration of this Agreement.

K. Entire Contract:

This Agreement and express incorporation sets forth the entire contract between the parties concerning the subject hereof, and supersedes all prior and contemporaneous written or oral negotiations and agreements between them concerning the subject hereof.

L. Modification of Agreement:

Any amendment to this Agreement may be made in the sole discretion of Company so long as such changes are not inconsistent with the applicable Tariff(s) and any modification of this Agreement must be in writing and signed by both parties.

M. Interpretation of Agreement:

The interpretation, construction, and performance of this Agreement shall be in accordance with the laws of the Commonwealth of Pennsylvania, without recourse to the law regarding the conflicts of law, and the parties to this Agreement hereby submit and consent to the jurisdiction of the courts of the Commonwealth of Pennsylvania (including, without limitation, the federal courts located within the Commonwealth of Pennsylvania) in any action brought to enforce (other otherwise relating to) this Agreement.

N. Drafting Presumptions:

No presumption shall operate in favor of Supplier or against Company as a result of drafting this Agreement.

O. Waiver:

No waiver by any party of any one or more defaults by the other in performance of any provisions of this Agreement shall operate or be construed as a waiver of any other default or defaults, whether of a like or different character.

P. Assignment:

Supplier shall not assign this Agreement, or any of its rights, duties or obligations hereunder without the prior written consent of the Company.

Q. Severability:

If any provision of this Agreement is determined to be invalid or unenforceable or contrary to Commission rules or law, the provision shall be deemed to be void as of the date of this Agreement and shall not be part of this Agreement and shall otherwise be severable from the remainder of this Agreement and shall not cause the invalidity or unenforceability of the remainder of this Agreement. If any provision of this Agreement does not comply with any law, ordinance or regulation of any governmental or quasi-governmental authority, now existing or hereinafter enacted, such provision shall to the extent possible be interpreted in such a manner so as to comply with such law, ordinance or regulation, or if such interpretation is not possible, it shall be deemed amended to satisfy the requirements thereof.

R. Company's Pennsylvania Gas Tariff:

Service under this Agreement is in accordance with Company's Tariff, as amended from time to time. If there is any inconsistency between this Agreement and the Tariff, either as presently in effect or as amended, then the provisions of the Tariff shall apply.

S. Applicable Laws:

Unless specified otherwise, business transactions under this Agreement shall be governed by the Pennsylvania Public Utility Code and the rules and regulations of the Commission.

T. Switching:

Unauthorized Customer switches, called "slamming," are strictly prohibited. Suppliers shall be subject to penalties under applicable laws, rules and regulations of the Commission for any confirmed slamming activities.

IN WITNESS WHEREOF, the parties, intending to be legally bound, have caused this Agreement to be signed by their duly authorized officers as of the day and year first above written.

WITNESS:

Company Representative
Title:

WITNESS:

Supplier Representative
Title:

4. Small Aggregation Transportation Supplier Service Agreement

SERVICE AGREEMENT FOR

SMALL AGGREGATION TRANSPORTATION SUPPLIER SERVICE

AGREEMENT made as of the day of	, 20, ("SATS Service
Agreement") by and between	, a
corporation having offices at	("SATS Supplier")
and National Fuel Gas Distribution Corporation, a New Y	ork corporation, with offices at 6363
Main Street, Williamsville, New York, 14221-5887 ("Com	ipany).

WHEREAS, effective April 1, 1999, the Company offers a program in which it provides gas transportation service to residential and small commercial customers of the Company, and offers gas aggregation service to suppliers;

WHEREAS, under the program, the Company's Pennsylvania customers will have the opportunity to secure their gas supplies from the participating suppliers that have been qualified to participate in the program and the customers will then continue to use the Company, to transport their gas supplies;

WHEREAS, the SATS Supplier in the program shall be assuming responsibilities which have heretofore been obligations of the Company;

WHEREAS, the SATS Supplier desires to participate in the program under Rate Schedule SATS and the Company and the SATS Supplier both desire to ensure that the Company's SATC Customers continue to receive adequate and reliable service both in terms of gas supplies as well as transportation;

WHEREAS, SATS Supplier wishes to do all things necessary to effectuate services under Company's Program as set forth under Rate Schedule SATS;

WHEREAS, Company is willing to provide such services to SATS Supplier as are necessary and sufficient to effectuate the Program under the Rate Schedules SATS and SATC in accordance with all applicable laws, rules, regulations, permits, orders and authorizations.

NOW THEREFORE in consideration of the mutual promises and covenants contained in this SATS Service Agreement, the SATS Supplier and the Company agree to the following terms and conditions:

I.

DEFINITIONS

Words and phrases in this Agreement not defined below shall have the same meaning as utilized in the Company's tariff for gas service under Rate Schedule SATS.

Billing Cycle	The regularly occurring period, of approximately 30 days, in which a customer's consumption is measured and the customer is billed for gas service. A Billing Cycle need not coincide with a calendar month.
Commission	The Pennsylvania Public Utility Commission.
Control Date	Customer meter read (estimated or actual) date used to determine end and start of the billing cycle for the customer.
Customer List	List of customers eligible to receive service provided by SATS Suppliers under Rate Schedule SATS.
SATS	Small Aggregation Transportation Supplier Service under Rate Schedule SATS.
SATC	Small Aggregation Transportation Customer Service under Rate Schedule SATC.
SATC Customer	Transportation service customer under Rate Schedule SATC who has selected an SATS Supplier.
SATC Group	The Supplier's group of SATC Customers.
SATS Supplier	Third-party Supplier and Signatory to this SATS Service Agreement who has met the necessary criteria for participation under Rate Schedule SATS.
Program	System-Wide Customer Choice program under Rate Schedules SATS and SATC by which retail customers may purchase gas supply from either the Company or a SATS Supplier.
Third-Party Supplier	A non-utility supplier of natural gas commodity service to retail end users.

II.

TERM

The initial term of this SATS Service Agreement shall be for a period ending ______, 20____, and renewable annually for successive terms ending each ______ thereafter unless canceled by default of any terms or conditions hereof, or by the Company or the SATS Supplier on sixty (60) days written notice prior to the end of a term, or otherwise by mutual agreement.

III.

DESIGNATION OF SATS SUPPLIER

Company shall accept each SATC Customer's designation and appointment of an SATS Supplier, and identification of an SATC Group, upon the terms and conditions contained in Rate Schedules SATS and SATC and this SATS Service Agreement.

IV.

SATS SUPPLIER REQUIREMENTS

A. General

As a condition of qualifying for service under Rate Schedule SATS, SATS Supplier shall satisfy the criteria set forth in the Rate Schedule SATS. With regard to financial fitness requirements, SATS Supplier acknowledges that its creditworthiness may be periodically reviewed during service hereunder, and any security requirement may be modified as determined by the Company to accommodate changes in the SA TS Supplier's financial standing or the Aggregated Daily Delivery Quantity ("ADDQ") for SATS Supplier's SATC Group, as such ADDQ is defined in the Rate Schedule SATS. SATS Supplier further agrees to comply with operational fitness standards set forth in Rate Schedule SATS, and shall meet such additional standards as required by the Commission.

B. Creditworthiness

The SATS Supplier shall, upon request, provide the Company, on a confidential basis, with balance sheet and other financial statements, and with appropriate trade and banking references. The Company shall perform a credit analysis and determine an appropriate security requirement according to the criteria set forth in the tariff SATS Supplier agrees that, in the event it defaults on its obligations under this SATS Service Agreement, Company shall have the right to use cash deposits or the proceeds from any bond, irrevocable letter of credit, or other financial instrument or guarantee to satisfy SATS Supplier's obligations under this SATS Service Agreement. These proceeds may be used to secure additional gas supplies including payment of the costs of the gas supplies themselves, the costs of transportation, storage, gathering and other related costs incurred in bringing those gas supplies into the Company's system. The proceeds from such instruments shall also be used to satisfy any outstanding claims that the Company may have against SATS

Supplier, including imbalance charges, cash-out charges, pipeline penalty charges, and other amounts owed to the Company, and arising from, SATS Supplier's participation in the Program.

C. Termination of Participation.

In the event SATS Supplier elects, or is forced, to terminate its participation in the Program in accordance with the provisions of this SATS Service Agreement, it shall continue its obligation to maintain its financial security instrument until it has satisfied all of its outstanding claims of the Company.

D. Standards of Conduct.

In addition to the above financial requirements, the Company may impose reasonable standards of conduct for SATS Supplier, as a prerequisite for their participation in the Program. SATS Supplier acknowledges that in its capacity as a SATS Supplier in this program, it has a continuing responsibility to conduct its business in a legal and ethical manner. If, as a result of SATC Customers' complaints, and/or from its own investigation, the Company and/or the Commission determines that SATS Supplier is not operating under this SATS Service Agreement in an ethical and/or legal manner, then the Company shall have the unilateral right to cancel this SATS Service Agreement and deny SATS Supplier's further participation in this program.

E. SATS Supplier List.

Company will maintain a list of SATS Suppliers who have met the program's financial and performance requirements. This list will be made available to customers upon request.

V.

SERVICE PROVIDED UNDER THIS AGREEMENT

A. Identification of SATC Customers

SATC Customers shall be identified by the SATS Supplier on a list electronically communicated to the Company showing the name and nine digit account number of each SATC Customer for which SATS Supplier has obtained written consent to supply that customer under the Program. During the Enrollment Period for the Program, as such is defined in the Rate Schedule SATS, such list shall be provided weekly. Each SATC Customer's enrollment in SATS Supplier's SATC Group shall be subject to confirmation by the Company. If customer indicates it did not enroll, customer will not be enrolled. Thereafter, SATS Supplier will notify the Company of any SATC Customer that is deleted from SATS Supplier's SATC Group pursuant to the SATS Rate Schedule by providing the Company with a list showing such deletion(s) from the SATC Group no later than ten (10) business days prior to the SATC Customer's Control Date. Failure to provide the Company with such notification will be construed as SATS Supplier's assent that the SATC Group has not changed.

B. Transportation General Terms and Conditions

Page SFA-29

SATS Supplier is bound by the general terms and conditions applicable to transportation customers, as applicable to transportation customers, as provided in the Pennsylvania Public Utility Commission (P.A. P.U.C.) tariff Number 9.

C. Deliveries of SATS Supplier Gas Suppliers

SATS Supplier will deliver natural gas to the Company's City Gate for transportation to SATC Customers included in SATS Supplier's SATC Group. Except for capacity retained by the Company, the SATS Supplier will be required to provide sufficient transportation and storage capacity to meet the estimated extreme day requirements of their SATC Group. The requirements are set out in the Special Provisions, Section C, 1-4 of Rate Schedule SATS.

D. Information Provided

SATS Supplier warrants that all information provided to the Company for the purpose of qualifying for service under the Rate Schedule SA TS is true, timely and accurate.

E. Obligation To Deliver

SATS Supplier acknowledges that its obligation to deliver natural gas for its SATC Customers will not be abated under any circumstances, including a breach of the obligations by any SA TC Customer to the SATS Supplier, except for events of Force Majeure as specified in the Rate Schedule SATS or actions by the Company that prevent performance by SATS Supplier.

- F. Marketing Practices
 - 1. SATS Supplier shall not telemarket to customers between the hours of 9:00 p.m. and 8:00 a.m., and;
 - 2. SATS Supplier shall make no further contact with customers who have stated to the SATS Supplier that they wish not to be contacted.
- G. Fuel Retention

In addition to any retainage required for deliveries of supplies into any interstate pipeline, as provided by that pipeline's tariff from time-to-time, SATS Supplier acknowledges that Company shall retain a percentage of the total volumes received by Company for the account of SATS Supplier for loss allowance, as provided under Rate Schedule SATS. Any SATS Supplier deliveries into interstate pipeline capacity retained by the Company shall also require the appropriate retainage as provided by that pipeline's tariff from time-to-time.

H. Rate Schedule SATS

All other terms and conditions under the Rate Schedule SATS, and the Program approved by the Commission, and Company's tariff apply as if fully stated herein.

VI.

COMPANY'S DUTIES AND OBLIGATIONS

A. The Company shall accept SATS Supplier's SATC Group, subject to check at any time by the Company, and shall provide all services required by its tariff to effectuate service to such group under Rate Schedule SATS.

B. The Company intends to have the capability to bill on a daily basis. However, until further notice, the Company shall bill the SATS Supplier on a monthly basis for services rendered or to be rendered. When daily billing is practicable and where the Company determines appropriate, upon notice, shall bill the SATS Supplier on a daily basis for services rendered or to be rendered.

VII.

RATES AND CHARGES

A. SATS Rates

Rates and charges for SATS Service shall be billed to SATS Supplier pursuant to Rate Schedule SATS and the General Terms and Conditions Relating to Transportation Service. Rates and charges for SATC Service shall be billed by the Company directly to SATC Customers.

- B. Billing Service
 - 1. Unless SATS Supplier elects the Utility Single-Bill Method described in 2 below, SATC Customers shall be billed by the Company for services provided under Rate Schedule SATC. SATS Supplier shall be responsible for billing its SATC Customers for SATS Supplier's services, subject to the consumer protection requirements contained in the Rate Schedule SATS and the Commission's regulations and policies.
 - 2. By signing below the SATS Supplier elects that the Company will bill the SATC Customer for gas supplies sold by the SATS Supplier to SATC Customers, subject to the terms stated herein. Supplier hereby elects the Company Billing Service and agrees to purchase Company's billing service as provided pursuant to this ARTICLE VII, Section B.

SATS Supplier Signature

(name and title of Officer or authorized representative)

a. SATS Supplier elects to have the Company bill its SATS Customers for its gas supplies. SATS Supplier understands that the Company shall provide billing services pursuant to the requirements of its Transportation Tariffs.

b. The rate to be charged by the Company to the SATS Supplier for such billing service shall be \$.20 for each bill rendered to an SATC Customer. For any additional services provided to the SATS Supplier, such as providing bill inserts, an additional charge shall be negotiated and described and separately as an amendment to this SATS Service Agreement.

c. The Company shall provide the SATS Supplier with meter reading information and other reports in the Company's standard electronic format on a basis corresponding to the SATC Customers' Billing Cycles. The SATS Supplier shall provide the Company with all required SATS Supplier billing and rate information necessary for Customer billing as determined by the Company. The SATS Supplier shall provide such billing information in the Company's required format. The SATS Supplier shall provide the Company with said SATS Supplier billing information no later than three (3) business days before the last day of the month.

d. The SATS Supplier agrees all payments received by the Company first be applied to amounts due the Company, including installment payments of amounts due the Company under an existing payment plan. The SATS Supplier agrees that SATC Customers with arrearages that do not have a valid payment plan with the Company shall be required to execute a payment plan with the Company prior to participation in the Program.

e. To the extent the Company provides a budget billing service option, if a budget payment customer falls behind in its budget payments, any payments. received shall be first applied to the Company's account for the Customer, until the Company's account is made current.

f. If the Company provides billing service for the SATS Supplier, the Company, at its sole discretion may offer to purchase the SATS Supplier's accounts receivable at a discounted rate.

VIII.

INCORPORATION BY REFERENCE

Rate Schedule SATS is incorporated in this SATS Service Agreement as if fully stated herein. If there is any inconsistency between this SATS Service Agreement and Rate Schedule SATS, in its current form or as amended by the Commission, then the provisions of Rate Schedule SATS shall apply.

IX.

NOTICES

All notices (except for charts and readings), invoices and other correspondence sent pursuant to this SATS Service Agreement shall be addressed to the following parties:

To Company:	National Fuel Gas Distribution Corporation Transportation Services Department 6363 Main Street Williamsville, New York 14221-5887
To SATS Supplier:	

Х.

LIMITATION ON COMPANY'S LIABILITY

Company shall not be liable to SATS Supplier for any error in judgment or any mistake of law or fact or any act done in good faith in the exercise of the powers and authority herein conferred or for any loss, damage, delay or failure to perform in whole or in part resulting from causes beyond Company's control, including, but not limited to, fires, strikes, insurrections, riots, embargoes, shortages in supplies, delays in transportation, or requirements of any governmental authority. Furthermore, in no event shall Company be liable to SATS Supplier for consequential, punitive, incidental, indirect or special damages in the provision of services hereunder.

XI.

SATS SUPPLIER INDEMNITY OBLIGATIONS

SATS Supplier shall indemnify, save harmless and, at Company's option, defend Company from and against any and all losses, claims, demands, damages, costs (including, without limitations, reasonable attorney's fees), expenses, liabilities, proceedings, suits, actions, restrictions, injunctions, fines_judgments, penalties and assessments which Company may suffer for, on account of, by reason of or in connection with service provided by the SATS Supplier under Rate Schedule SATS pursuant to this SATS Service Agreement, and in connection with any bodily injury, including death to any person or persons (including, without limitation, SATS Suppliers' employees) or any damage to or destruction of any property, including without limitation, loss of use thereof, arising out of, in any manner connected with or resulting from the goods, work or services furnished by SATS Supplier with respect to this SATS Service Agreement. Provided, however, Supplier will have no such liability arising solely from the delivery of gas as provided by this SATS Service Agreement. The provisions of this Article XI. shall survive the termination or expiration of this SATS Service Agreement.

XII.

MISCELLANEOUS

A. Entire Contract

This SATS Service Agreement and express incorporations sets forth the entire contract between the parties concerning the subject hereof, and supersedes all prior and contemporaneous written or oral negotiations and agreements between them concerning the subject hereof.

B. Modification of Agreement

Any amendment to this SATS Service Agreement may be made in the sole discretion of Company so long as such changes are not inconsistent with the applicable tariff(s) and any modification of this SATS Service Agreement must be in writing and signed by both parties.

C. Interpretation of SATS Service Agreement

The interpretation, construction, and performance of this SATS Service Agreement shall be in accordance with the laws of the Commonwealth of Pennsylvania, without recourse to the law regarding the conflicts of law, and the parties to this SATS Service Agreement hereby submit and consent to the jurisdiction of the courts of the Commonwealth of Pennsylvania (including, without limitation, the federal courts located within the Commonwealth of Pennsylvania) in any action brought to enforce (or otherwise relating to) this SATS Service Agreement.

D. Drafting Presumptions

No presumption shall operate in favor of SATS Supplier or against Company as a result of drafting this SATS Service Agreement.

E. Waiver

No waiver by any party of anyone or more defaults by the other in performance of any provisions of this SATS Service Agreement shall operate or be construed as a waiver of any other default or defaults, whether of a like or different character.

F. Assignment

SATS Supplier shall not assign this SATS Service Agreement, or any of its rights, duties or obligations hereunder without the prior written consent of the Company.

G. Severability

If any provision of this SATS Service Agreement is determined to be invalid or unenforceable or contrary to Commission rules or law, the provision shall be deemed to be void as of the date of this SATS Service Agreement and shall not be part of this SATS Service Agreement and shall otherwise be severable from the remainder of this SATS Service Agreement and shall not cause

Page SFA-34

the invalidity or unenforceability of the remainder of this SATS Service Agreement. If any provision of this SATS Service Agreement does not comply with any law, ordinance or regulation of any governmental or quasi-governmental authority, now existing or hereinafter enacted, such provision shall to the extent possible be interpreted in such a manner so as to comply with such law, ordinance or regulation, or if such interpretation is not possible, it shall be deemed amended to satisfy the requirements thereof.

H. Construction with Rate Schedule SA TS

Service under this SATS Service Agreement is in accordance with the Rate Schedule SATS, as amended from time to time. If there is any inconsistency between this SATS Service Agreement and the Rate Schedule SATS, either as presently in effect or as amended, then the provisions of the Rate Schedule SATS shall apply.

I. Regulatory Approval

The parties shall use their best efforts to obtain, maintain and extend such Commission authorizations as may be necessary to permit the full performance of this SATS Service Agreement after the date hereof in accordance with its terms.

J. The respective obligations of the parties under the SATS Service Agreement are subject to valid laws, orders, rules and regulations of the Commission or other duly constituted authorities having jurisdiction.

K. SATS Supplier agrees to provide Company with a copy of all contracts for the purchase of gas to be transported hereunder, redacted for confidential pricing language. SATS Supplier also agrees to provide Company with each and every amendment to said contracts within seven (7) days of its effective date.

L. SATS Supplier agrees to provide Company with a copy of all contracts for comparable capacity it shall use to meet its customers' estimated extreme day requirements, also redacted for confidential pricing language.

IN WITNESS WHEREOF, the parties, intending to be legally bound, have caused this SATS Service Agreement to be signed by their duly authorized officers as of the day and year first above written.

("SATS Supplier")

Officer	r or authorized representative
Name:	
Title:	

NATIONAL FUEL GAS DISTRIBUTION CORPORATION ("Company")

Officer or author	orized representative
Name:	
Title:	

I

5. Billing Service Agreement for Consolidated Billing Service

Billing Service Agreement for Consolidated Billing Service Under Rate Schedule SATS – Small Aggregation Transportation Supplier Service

BILLING SERVICES AGREEMENT ("Agreement") entered into this _____ day of

_____, 20____, by and between National Fuel Gas Distribution Corporation ("Company") and ______ ("Marketer") (the "Parties").

WHEREAS Marketer is receiving service from Company as a "Supplier" under Rate Schedule SATS, Small Aggregation Transportation Supplier Service ("SATS" or "SATS tariff"), such service classification being contained and subsumed in Company's tariff, Supplement No. 90 to Gas – Pa. P.U.C. No. 9 ("Tariff");

WHEREAS by means of such SATS service Marketer purchases natural gas commodity on behalf of Small Aggregation Transportation Customer Service ("SATC Customers" or "Customers") on Company's system and causes such natural gas commodity to be delivered to the Company for redelivery, or transportation, by the Company to Marketer's Customers;

WHEREAS as a result, Marketer is interested in charging such Customers ("Customer Accounts") for Marketer's commodity service ("Marketer charges"), and Company is interested in charging the same Customers for Company's transportation and other services ("Company charges"), on a single bill that includes Marketer charges and Company charges;

WHEREAS Marketer has elected to receive, and Company agrees to provide, a consolidated billing service ("CBS"), commencing July 15, 2010, pursuant to the SATS tariff;

WHEREAS, with respect to Customer Accounts under the following rate schedules listed under the SATC tariff: (1) Residential, (2) Small Commercial and Public Authority with annual consumption less than 250 Mcf per year, (3) Small Commercial and Public Authority with annual consumption between 250 and 1,000 Mcf per year, and (4) Small Volume Industrial customers with annual consumption less than 1,000 Mcf per year; Marketer has requested that Company purchase, free and clear of all liens, claims and encumbrances, without recourse except as described in this Agreement, all amounts billed by Company hereunder on Marketer's behalf and make payments to Marketer relating to such purchases;

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants, conditions and terms set forth below, and intending to be legally bound hereby, Marketer and Company agree as follows:

A. Applicable Tariff and Operating Procedures

1. Tariff and Operating Procedures. The terms and conditions of the Tariff, SATS agreements, Gas Transportation Operating Procedures ("GTOP" or "Operating Procedures") and the Pennsylvania Public Utility Commission ("Commission") Regulations, as applicable, are fully incorporated in this Agreement except as otherwise expressly stated herein.

2. Tariff Controls. If there is any inconsistency between this Agreement and the Tariff (including the SATS tariff contained within the Tariff), in its current form or as subsequently amended, then the provisions of the Tariff shall apply.

B. Consolidated Billing and Purchase of Accounts Receivable

1. Billing Service. Pursuant to the SATS tariff, Marketer hereby elects to receive CBS and authorizes Company to perform certain retail billing functions for Marketer's Customers, as defined in the SATS tariff and the Commission Regulations, including invoicing, remittance processing and customer service activities. Marketer and Company shall comply in every respect with the provisions of CBS under the SATS tariff, Company's Tariff and, where applicable, the Commission Regulations. 2. Purchase of Accounts Receivable.

For Customer Accounts listed under the Company's SATC Rate a. Schedule: (1) Residential, (2) Small Commercial and Public Authority with annual consumption less than 250 Mcf per year, (3) Small Commercial and Public Authority with annual consumption between 250 and 1,000 Mcf per year, and (4) Small Volume Industrial customers with annual consumption less than 1,000 Mcf per year and subject to the other terms and conditions of this Agreement: Marketer hereby assigns, sells and conveys to Company free and clear of all liens, claims and encumbrances, and Company agrees to purchase without recourse except as described in sections B.11 and B.12 below, Marketer's right, title and interest in all accounts receivable, being amounts due from all such Customers as shown on CBS bills issued by Company on and after the later of July 17, 2010 or the effective date of this Agreement and past due amounts due from such Customers on consolidated bills issued previously under any prior consolidated billing service agreement with Company, provided that such prior amounts are included in the consolidated bill balance as of July 17, 2010 ("Purchased Customer Accounts").

b. Title to Marketer's Purchased Customer Accounts shall pass to Company as of the date bills are issued by Company (the "Billing Date"), and as of such Billing Date Marketer shall have no rights in or to the Purchased Customer Accounts and shall not seek to collect in any manner such amounts from Customers or pledge or attempt to encumber such amounts as security. Provided, however, that title shall pass back to Marketer to the extent that such receivables are returned to Marketer pursuant to Section B.12.a. 3. Rate-Ready Service. CBS is a "rate ready" service. Marketer shall provide to Company all rates, charges and other information, including if applicable Customer Account information, necessary for billing purposes, in a form and manner determined by Company, at least four (4) business days prior to the Customers' Meter Read Date. Such information shall be deemed received for processing only upon Company's express confirmation of receipt. Company shall not be responsible for billing errors or delays caused by Marketer's failure to timely and properly provide accurate billing information to Company. Marketer agrees to indemnify Company against any and all actions, charges, complaints, proceedings, liabilities, damages, penalties and fines resulting from errors caused by untimely or inaccurate information provided by Marketer.

4. Bills Based on Meter Reads. Bills issued by Company shall be based on actual or estimated meter readings retrieved by Company in the manner, and according to procedures, utilized for Company's general billing practices. Meter readings are recorded for billing purposes on the Meter Read Date or on such other special reading date as the Company may determine appropriate. Marketer will not be responsible for billing errors resulting from meter reading inaccuracies or errors. Consumption adjustments shall be reflected on subsequent Customer bills in the ordinary course of billing. Company reserves the right; however, to issue make-up bills to Customers if justified by the circumstances and as permitted by the Commission Regulations and Company's Tariff.

5. Bill Content. CBS bills will display Marketer's charges. The Company will calculate the Customer's total Marketer charge(s) by multiplying the commodity rate(s), provided by Marketer, by the consumption determined by Company. CBS bills will also identify Marketer as the Customer's natural gas Marketer, and will set forth a phone number at

which Marketer can be reached for Customer inquiries. Company's charges will also be displayed on the bill in the manner prescribed by the Tariff and Commission directives, orders, rules and regulations.

6. Taxes. Company is not responsible for paying or remitting to the applicable taxing authorities, on behalf of Marketer, of any federal, state or local taxes as a result of this Agreement. Company will calculate and identify the sales and use tax applicable to Marketer's charges and will provide such calculations to Marketer. Marketer shall be liable for and pay all such taxes and shall indemnify, defend and hold harmless Company from and against any and all liability for such taxes and any interest, penalties and attorney fees.

7. Late Payment Charges. Late payment charges ("LPC") shall be assessed on Customers by the Company for untimely payment of amounts billed. The LPC for unpaid Company charges shall be 1.5% per month (also assessed on unpaid LPCs), or as otherwise directed by the Commission. The LPC for unpaid Marketer charges shall be 1.5% per month, provided, however, that for Customer Accounts that are not Purchased Customer Accounts, the LPC shall be designated by Marketer (subject to Company's billing capabilities) pursuant to Marketer's agreement with the Customer. The LPC, if assessed, shall be inclusive of all billed charges. To the extent necessary, Marketer hereby grants, assigns and delegates to Company all of Marketer's rights to assess and collect an LPC on the Marketer's charges included in the CBS bill. LPC proceeds collected on Purchased Customer Accounts shall be retained by the Company. LPC proceeds collected on Customer Accounts that are not Purchased Customer Accounts shall be remitted to Marketer. 8. Budget Billing. Company offers budget billing plans through CBS for both the Company delivery charges and Marketer supply charges as a Customer option and will provide such services according to Company procedures for Budget Billing.

9. Authorized Payment Agencies. Customers may pay CBS bills at authorized payment agencies in the same manner as is permitted for Company bills.

10. Billing and Collection Procedures; Security Interest; Setoff.

a. Company charges and Marketer charges will be shown on CBS bills and collected by Company. Company shall have the exclusive right to receive and process Customer payments, and will perform for itself and on behalf of Marketer, required billing and collection activities on Customer Accounts in conformance with the Pennsylvania Public Utility Code ("Code") and applicable Commission Regulations.

b. Marketer hereby grants, assigns and delegates to Company all of Marketer's rights under Pennsylvania law and regulations to terminate and suspend Marketer's service to a Customer who fails to make full payment of all amounts due for such service on the CBS bill. Because the Company takes ownership of Marketer's receivables as provided herein, there is no distinction between Marketer's supply service and the Company's distribution service for termination purposes, and as a result the Company does not terminate Marketer supply service to a customer without also terminating the Company's distribution service.

c. Company agrees to indemnify Marketer against any and all actions, charges, complaints, proceedings, liabilities, damages, penalties and fines resulting from Company's failure to properly apply Chapter 14 of the Code and applicable Chapter 56 regulations for billing and collection activities as provided in this Agreement.

Version 2.8190

d. Company shall terminate its transportation service and the Marketer's commodity service where: (i) the Customer fails to make full payment of all amounts due on the CBS bill; (ii) the Customer Account is a Purchased Customer Account; and (iii) the Marketer has executed and furnished Company with an affidavit from an officer of Marketer attesting to the representation and warranty set forth below at section C 5. The Company's receipt of such properly executed affidavit shall be a condition of service under this Agreement. Marketer will indemnify Company for any cost, expense, or penalty incurred if any of Marketer's Customer's service is terminated for non-payment and the Customer establishes that it did not receive such notification.

e. Any Customer payment or portion thereof that is billed by Company and received by Marketer shall be held by Marketer as the property of Company and shall be remitted in full to Company within three (3) business days without any deduction or set-off by Marketer.

f. For Customer Accounts that are not Purchased Customer Accounts, Marketer agrees to permit Company to set-off any unsatisfied Marketer obligations to Company with proceeds received from Customers' payments of Marketer charges, with the remainder, if any, remitted to Marketer in the ordinary course. Marketer hereby grants a security interest in such Customer Accounts and Company may in its discretion perfect a security interest in such Customer Accounts to the extent necessary in order to give effect to this Agreement.

11. Purchase Amount. Subject to the other terms and conditions of this Agreement: For Purchased Customer Accounts, Company shall pay Marketer an amount equal to _____% for residential amounts billed (inclusive of taxes pursuant to above section B.6), and _____% of non-residential amounts billed (also inclusive of taxes) hereunder. Company will remit such payment to Marketer, via wire transfer or such other means as may be mutually agreeable, each Billing Date through the billing month. For current balances on Purchased Customer Accounts, Company will remit payment twenty (20) days for residential accounts and fifteen (15) days for non-residential (plus two (2) business days for processing) following the Billing Date (or the next following business day if the 15th or 20th day falls on a bank holiday or a Company holiday) of all Marketer charges billed to Customers in the previous month. For Budget Billing CBS bills, the amount purchased shall be based on the total billed amount without regard to current debit or credit balances.

12. Other Deductions.

a. Company's payment obligation to Marketer in accordance with above section B 11 shall be subject to netting of all amounts owed to Company by the Marketer for SATS services and/or other charges under the Tariff or GTOP, including (but not limited to):

- Special meter read fees;
- Customer usage history fees;
- Gas imbalance charges;
- Billing and payment processing charges;
- Amounts due under other Marketer accounts;
- · Amounts disputed by Marketer's Customers as described below; and
- At the time the amount is written off by the Company or when

Customer's service is restored with a different marketer, billed amounts in excess of the

amount necessary to restore Customer service pursuant to the Code, the Commission's Regulations and all applicable Tariff provisions.

Such amounts deducted from Company's payment to Marketer in accordance with section B.11 shall be itemized and described by Company at the time of payment. At Marketer's request, Company agrees to provide Marketer with calculations and other documentation supporting such deductions.

b. Disputed Amounts. An amount is deemed disputed if a Customer initiates a bill complaint with the Commission questioning the validity of Marketer's bill, charges or services. A Customer's claim of inability to pay or inaccurate meter reading shall not constitute a dispute for purposes of Company's obligation to pay Marketer amounts billed.

13. Bill Format. Company shall determine CBS bill format subject to changes at Company's discretion and to accommodate bill content requirements under the applicable directives of the Commission. The bill at a minimum will include the Marketer's name and phone number including area code. At Marketer's option, Marketer's logo will be printed (according to the capabilities of CBS) so long as Marketer's logo is provided in an acceptable electronic format at least thirty (30) days before it is used. Both Parties' bill message spacing shall be governed by the Parties' agreement and CBS capabilities but shall not be less than four hundred eighty (480) characters for either Party. Information required by statute, regulation or order shall be printed on or inserted into CBS bills without additional charge so long as inserts do not exceed one-half ounce in weight. Additional bill inserts may be provided at negotiated rates. Company reserves the right to reject bill message or bill insert content requested by Marketer if Company, in its sole judgment, finds such content inappropriate or otherwise offensive.

14. Customer Inquiries. Company will receive and endeavor to process Customer inquiries relating to the CBS bill. Provided, however, that Customer inquiries relating to Marketer's rates or services shall be directed to Marketer's phone number shown on the bill. Marketer shall remain obligated to maintain a system capable of handling Customer complaints and shall comply with the Commission's regulations in responding to customer complaints.

15. Security Deposits. For Purchased Customer Accounts, Marketer hereby grants, assigns and delegates to Company Marketer's complete right to obtain security deposits and other forms of security. Existing deposits held on Purchased Customer Accounts shall be refunded to Customer or transferred to Company within five (5) days of commencement of service hereunder.

C. Representation and Warranties

1. Agreement Not for the Benefit of Third Parties. Marketer warrants and hereby agrees that it is not entitled to and shall not pledge Company's credit for any purpose whatsoever. This Agreement is for the benefit of the Parties hereto and not for the benefit of third parties, except to the extent of any amounts payable to Marketer under this Agreement to the extent Marketer grants a security interest to its bona fide lender in amounts due to Marketer pursuant to this Agreement.

2. Marketer Eligibility. Marketer represents and warrants, and shall demonstrate at Company's request, that it has satisfied all requirements to qualify as an eligible gas marketer in Pennsylvania for service to the class of Customers served under this Agreement, and will continue to be in compliance with such requirements and subsequently adopted laws and regulatory requirements throughout the term of this Agreement.

3. No Encumbrances. Marketer warrants and shall demonstrate to Company that Purchased Customer Accounts are unencumbered and not subject to a security interest or lien held by a third party. Marketer further warrants that it will not allow any interest or permit any third party to assert a claim of any type on those Purchased Customer Accounts or any new Purchased Customer Accounts opened during the term of this Agreement.

4. Late Payment Charge. Marketer represents and warrants that Marketer's Customers billed under this Agreement have received notice that an LPC of 1.5% per month shall be assessed as described in this Agreement and any and all Customer Accounts or portions thereof are subject to an LPC at such rate.

5. Service Termination. In addition to any Company notification, Marketer represents and warrants and shall demonstrate at Company's request that it has notified its current Customers and will notify its future Customers that Company is permitted to terminate the Customer for non-payment of Marketer charges.

6. Marketer Charges. Marketer represents and warrants that Marketer charges reflect and are limited exclusively to charges for Marketer's gas commodity service or other authorized charges as provided under the SATS tariff or Commission regulations, orders or directives.

7. Security Deposits. Marketer represents and warrants that deposits previously held on Purchased Customer Accounts will be returned to Customers or refunded to Company within five (5) business days of commencement of service hereunder.

D. Consumer Protections

Page SFA-47

Unless and until the Commission adopts generic standards governing sales and marketing practices of Suppliers, Marketer shall observe and comply with the National Fuel Gas Distribution Corporation Marketing Standards approved by the Commission.

E. Term of Agreement

Service shall commence under this Agreement on July 15, 2010 or the later of the date an executed copy of this Agreement is received or the date set forth on the signature page attached hereto and continues on a month-to-month basis unless terminated as follows: Either Party shall have the right to terminate this Agreement on thirty (30) days written notice; provided, however, that this Agreement may be terminated by Company (i) on one (1) day's written notice if the SATS agreement is terminated for any reason or if Marketer or a creditor commences a proceeding or any other action under any law relating to bankruptcy, insolvency, reorganization or relief of debtors, seeking to have an order for relief entered with respect to Company or any creditor, or seeking to adjudicate Marketer as bankrupt or insolvent, or seeking reorganization, dissolution, winding up, liquidation or other relief with respect to Marketer or Marketer's debts, or seeking appointment of a receiver, trustee, custodian or other similar official for Marketer, or Marketer makes a general assignment for the benefit of Marketer's creditors; (ii) on not less than fifteen (15) days written notice if Marketer breaches any provision hereof and does not cure said breach within the fifteen (15) day period, such fifteen (15) day periods to run concurrently; or (iii) on one (1) day's written notice following issuance of an order or ruling by the Commission materially impacting any of the terms or conditions herein. Marketer may terminate this Agreement on not less than fifteen (15) days notice prior to the next meter read date if Marketer shall determine in good faith, but in its sole discretion, that any material adverse change has occurred in the prospects or financial condition of the

Company, or in the ability of the Company to pay and perform its obligations to Marketer. Termination of this Agreement shall not suspend or discontinue Marketer's right to offer dual billing.

F. Miscellaneous

1. Liability. Company shall not be liable for any damages arising from CBS bills rendered based on untimely or inaccurate rate information provided by Marketer. Company's total cumulative liability to Marketer for all claims of any kind associated with Company's performance under this Agreement shall in no case exceed the payment or remittance amounts otherwise due under this Agreement. In no event, shall Company be liable for special, punitive, indirect or consequential damages, nor shall any action or inaction on Marketer's part, constitute a waiver by Company of any cause of action or defense. Company shall have no obligation to pursue, or assist Marketer in pursuing, any claim Marketer may have against any third party with respect to receivables returned pursuant to Section B.12.a. However, the Company will provide Marketer with updated account information including mailing information via normal data transfer channels while the Customer is active with the Marketer. Active Marketers will continue to have access to customer information via the Company's Customer Information Inquiry Screen on the secure portion of the Company's website.

2. Further Indemnification. Marketer, to the fullest extent allowed by law, shall indemnify, defend and hold harmless and shall reimburse Company, from and against any and all damages, losses, liabilities, obligations, judgments, orders, writs, injunctions, decrees, fines, penalties, taxes, costs, suits, charges, expenses (including attorneys' fees), claims, investigations, proceedings, or causes of action (collectively, "Damages") which may at any time be imposed on, incurred by, or asserted against Company by third parties (including

Customers) that are directly or indirectly caused by, arise out of or under, associated with, incident to or in connection with this Agreement, including, but not limited to any of the following: (i) Marketer's acts or omissions regarding Customer Accounts or Marketer charges; (ii) any claim, demand, cause of action, litigation, suit, proceeding, hearing or investigation (collectively, "Claims") by any persons for payments based upon any agreement or understanding alleged to have been made by such person, directly or indirectly, with Marketer or any of its representatives, in connection with any of the transactions contemplated by this Agreement; (iii) any Claims with respect to the action or inaction of Marketer or its representatives, which is contrary to the requirements of this Agreement; (iv) any inaccuracy in or other breach of any representation or warranty made by Marketer in this Agreement; (v) any failure by Marketer to perform or comply, in whole or in part, with any covenant, agreement or provision of this Agreement; and (vi) any costs and expenses, including reasonable fees and attorneys' fees associated with all Damages incurred by Company in connection with any Claims subject to indemnification rights as provided herein.

3. Force Majeure. Any delays in or failure of performance by the Parties shall not constitute a default and shall be excused under this Agreement, if and to the extent such delays or failures of performance are caused by occurrences that are both: (1) beyond the reasonable control of the Parties, including, but not limited to, acts of God, compliance with any order or request of any governmental or judicial authority, compliance with Company's public service obligations, riots or strikes or other concerted acts of workers, storms, fires, floods, and accidents; and (2) beyond the ability of the Parties to prevent, by the exercise of reasonable diligence.

4. Additional Personnel. Marketer agrees that Company shall have no obligation to Marketer to add personnel, equipment or facilities in order to perform any activities under this Agreement.

5. Notice. Any notice to be provided under this Agreement will be deemed given, and any other document to be delivered hereunder will be deemed delivered, if in writing and (a) delivered by hand, (b) deposited for next business day delivery (fee prepaid) with an established overnight delivery service, or (c) mailed by certified mail (return receipt requested) postage prepaid, addressed to the recipient at the address set forth below for that Party (or at some other address as that Party may from time-to-time designate by giving written notice thereof).

Notice to:	National Fuel Gas Distribution Corporation
	Rates & Regulatory Affairs
	6363 Main Street
	Williamsville, NY 14221
	Fax No.: 716-857-7254
Attention:	Ty Holt

Marketer:

6. Financing Statements. At Company's request, Marketer shall execute and deliver to Company all financing statements, and amendments thereof, and other documents and instruments that Company may request to perfect, protect or establish the security interests granted hereunder or to provide notice of Company's purchase of Marketer's Purchased Customer Accounts, or Company may execute and file any financing statements and

Page SFA-51

07/31/1819/19

amendments without Marketer's signature which Marketer hereby authorizes. Marketer hereby ratifies and consents to the filing of any such financing statements by Company prior to the date this Agreement is executed.

7. Complete Agreement. This Agreement is the complete agreement between the Parties as to the subject matter hereof. All prior contracts, commitments, proposals and negotiations concerning the subject matter hereof are superseded and merged herein.

8. Amendments. Notwithstanding any provision of this Agreement, Company may at any time propose and file with the Commission changes to the rates, terms and conditions of the Tariff, and/or Operating Procedures. Such amendment or modification shall be effective with respect to service pursuant to this Agreement on the date specified by the Commission.

9. Assignment. Neither Party shall assign any of its rights or obligations under this Agreement without the prior written consent of the non-assigning Party, which consent shall not be unreasonably withheld, except that Marketer, upon ten (10) days' prior written notice to Company, may assign all or any part of the monies payable by Company under this Agreement without the consent of Company, to any party, lender, or financial institution. Marketer shall at all times remain liable for the repayment on demand to Company of all obligations owed Company. No assignment of this Agreement shall relieve the assigning Party of its obligations under this Agreement until such obligations are expressly assumed by the assignee in writing.

10. Waiver and Modification. No modification or waiver of all or any part of this Agreement will be valid unless in writing and signed by the Parties. No such waiver shall apply prospectively to subsequent events unless expressly stated. No delay or failure on Company's part in exercising any right, privilege or option hereunder shall operate as a waiver of such or of any other right, privilege or option. 11. Dispute Resolution. Dispute resolution procedures, if utilized, shall be governed by the Commission.

12. Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of Pennsylvania, without regard to conflict of law principles.

13. Venue. At Company's option, all actions and proceedings based on, arising from or relating to this Agreement shall be litigated in the Court of Common Pleas of Erie County Pennsylvania. Marketer consents to the jurisdiction of such court and waives any and all rights to transfer or change the venue of any such action or proceeding to any other court.

14. Waiver of Jury Trial. MUTUAL WAIVER OF RIGHT TO JURY TRIAL. MARKETER AND COMPANY EACH HEREBY WAIVE THE RIGHT TO TRIAL BY JURY IN ANY ACTION BASED UPON, ARISING FROM, OR IN ANY WAY RELATING TO: (I) THIS AGREEMENT, OR ANY SUPPLEMENT OR AMENDMENT HERETO; OR (II) ANY OTHER PRIOR, PRESENT OR FUTURE INSTRUMENT OR AGREEMENT BETWEEN COMPANY AND MARKETER; OR (III) ANY CONDUCT, ACTS OR OMISSIONS BY COMPANY OR MARKETER OR ANY OF COMPANY'S OR MARKETER'S RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, ATTORNEYS OR ANY OTHER PERSONS AFFILIATED WITH COMPANY OR MARKETER; IN EACH OF THE FOREGOING CASES, WHETHER SOUNDING IN CONTRACT OR TORT OR OTHERWISE.

15. Captions and Headings. The captions and headings herein are for convenience only and are not to be construed as a part of this Agreement, nor shall the same be construed as defining or limiting in any way the scope or intent of the provisions hereof.

The above terms and conditions are acknowledged and agreed as of this _____ day of

_

_____, 20____.

MARKETER

By _____ Signed

Print Name & Title

National Fuel Gas Distribution Corporation

By _____ Signed

Print Name & Title

I

6. Billing Service Agreement for Consolidated Billing Service - Affidavit

		AFFIDAVIT
STATE OF	_)	SS.:
COUNTY OF)		
1. My name is		I am an officer of
		("Natural Gas Supplier " or "NGS"). My
business address is		

2. I am familiar with a certain Billing Services Agreement for

Consolidated Billing Services Under Rate Schedule SATS – Small Aggregation

Transportation Supplier Service between National Fuel Gas Distribution

Corporation ("Company") and NGS dated _____ ("Agreement").

3. With respect to NGS customers receiving bills under the Agreement,

NGS will notify current customers and will notify future customers that

Company is permitted to terminate the Customer for non-payment of NGS

charges billed by Company pursuant to the Agreement.

 I make this affidavit with the knowledge my statement at above paragraph no. 3 is a condition of NGS's continued receipt of service under the Agreement.

AFFIANT

Sworn before me this ____ day of _____, 20__:

Notary Public My term expires:_____

7. National Fuel System Administrator Security Process Agency Agreement

AGENCY AGREEMENT

Applicable for use on the National Fuel Gas Supply Corporation ("NFG"), Empire Pipeline, Inc. ("Empire"), and National Fuel Gas Distribution Corporation ("Distribution") systems

Internal Tracking - Agency Agreement No. _____6

This Agency Agreement ("Agreement") is entered into effective as of the Effective Start Date specified below, by and between ______ ("Principal") and ______ ("Agent"), which for existing Principals shall be the date the National Fuel Gas Supply Corporation's ("NFG") FERC gas tariff implementing the National Fuel System Administrator Security Process ("SA System") becomes effective or for new Principals the date specified below.

WHEREAS, Principal is an entity that ships gas or produces natural gas that is received into NFG, Empire or Distribution's ("Transporter") system subject to provisions specified in applicable tariffs (either FERC for NFG or Empire or the New York Public Service Commission approved tariff and/or Pennsylvania Public Utility Commission approved tariff for Distribution (collectively or individually, "Tariff") (as supplemented by Distribution's Gas Transportation Operating Procedures Manual ("GTOP") for the applicable state jurisdiction);

WHEREAS, Principal has rights and obligations with Transporter;

WHEREAS, Principal desires to transfer certain rights and obligations to Agent; and Agent is willing to act as agent for Principal, as described herein;

NOW THEREFORE, Principal and Agent agree as follows:

Principal hereby authorizes Agent to exercise the rights and/or perform the obligations ("Agency Business Functions") as set forth in Exhibit A and as described on NFG's web site to enter meter/index readings. Such authorization shall begin on the Effective Start Date and end on the End Date, as defined below. Agency Business Functions will be as permitted and described on NFG's web site. Exhibit A is incorporated by reference and made a part of this Agreement for all purposes. Principal and Agent agree that they are required to comply with all provisions of the contracts listed on Exhibit A and all provisions of Transporter's Tariff and GTOP.

Effective Start Date: The Agreement start date shall be for activity for Gas Day ______.⁷ This Agreement must be executed, via NFG's web site or, if unavailable, then by email delivery to Transporter (as specified on Transporter's web site) of a fully executed Agreement, at least two (2) business days prior to the Effective Start Date, unless otherwise allowed by Transporter.

End Date: Principal's designation and appointment of Agent shall end upon termination by either Party, unless otherwise allowed by Transporter; provided however, that this Agreement may be terminated at any time by the Principal or Agent, but no such termination shall be effective as to Transporter until terminated via NFG's web site by the terminating party. By execution hereof, Agent accepts its designation and appointment as agent for Principal and agrees to act as agent for Principal in accordance with the terms hereof. Agent shall clearly specify it is acting on behalf of Principal in all actions taken in its role of Agent. Communications with, or actions by, Agent shall be deemed communications with, or actions by, Principal, and Principal accepts and agrees that Transporter may rely on all such communications by Agent on behalf of Principal rendered under the terms of this Agreement.

⁶ The Agency Agreement No. will be assigned upon implementation of the SA System. After implementation, the Agency Agreement No. will be assigned upon executing the agreement.

⁷ The Effective Start Date shall be the date NFG's FERC Gas tariff implementing the SA System becomes effective. For Agreements entered into after that date, the Effective Start Date is that specified within this Agreement.

In the event that a communication(s) or action(s) taken by Principal and Agent are, in Transporter's sole opinion, inconsistent or conflicting, with respect to the Agency Business Functions and contracts listed on Exhibit A, then Principal understands and agrees that Transporter shall comply with the later communication or action taken by Principal or Agent, provided that such communication or action is not inconsistent with Transporter's Tariff and/or GTOP, including applicable deadlines therein, or the terms of the applicable contract, in Transporter's sole opinion.

Correspondence concerning the above-mentioned delegated duties shall be directed to Agent and Principal at the following address:

Principal Contact Person:	
Address:	
-	
Telephone:	
Fax:	
Email Address: _	
Agent Contact Person:	
Address: _	
-	
Telephone:	
Fax:	
Email Address:	

Principal shall remain liable to Transporter for all of its obligations as Principal under the contracts listed on Exhibit A, including but not limited to all payments to Transporter of all fees and charges for any services rendered under Transporter's Tariff and/or GTOP. Principal and Agent, each, hereby indemnify and hold Transporter harmless from any and all liabilities, losses, damages, expenses and other obligations of any nature whatsoever that Transporter may suffer as a result of any and all claims, demands, costs, attorney fees and judgments against Transporter resulting from Transporter's reliance on communications and actions of Agent, including but not limited to payment made by Transporter to Agent or actions taken by Transporter pursuant to Agent's communication(s), action(s) or inaction(s) given on behalf of Principal pursuant to this Agreement.

This Agreement shall be subject to all applicable governmental statutes, orders, rules, and regulations and Transporter's Tariff and/or GTOP as it exists from time-to-time, and is contingent upon the receipt and continuation of all necessary regulatory approvals or authorizations upon terms acceptable to Transporter. This Agreement shall be void and of no force and effect if any necessary regulatory approval or authorization is not so obtained or continued.

The interpretation and performance of this Agreement shall be in accordance with the laws of the state of New York without regard to choice of law doctrine that refers to the laws of another jurisdiction.

In the event of a conflict between the provisions of this Agreement and the provisions of Transporter's Tariff and/or GTOP, the provisions of the Tariff and/or GTOP shall govern.

The Parties agree and stipulate that the services to be performed pursuant to this Agreement by each Party are uniquely tied to the Parties performing the services. Therefore the rights and obligations pursuant to this Agreement may not be assigned. The parties acknowledge that the execution of this Agreement via NFG's web site shall constitute a valid enforceable agreement and shall legally bind the parties accordingly.

PRINCIPAL

AGENT

By:__

(Principal Name)

(Agent Name)

(Please Sign)

By: ____ (Please Sign)

Name: ______(Please Print)

Name: ______(Please Print)

Title: ______ (Must be an authorized officer)

RENEWABLE NATURAL GAS INTERCONNECTION AGREEMENT

THIS INTERCONNECTION AGREEMENT (the "Agreement") is made and entered into this day of ______, by and between ______, by and between _______, hereinafter, "Operator" or "RNG Operator,"

and

NATIONAL FUEL GAS DISTRIBUTION CORPORATION, 6363 Main Street, Williamsville, New York, 14221-5887, hereinafter, "NFGDC."

<u>WITNESSETH</u>

WHEREAS, NFGDC is a public utility authorized and obligated to receive and transport natural gas and to provide retail natural gas service subject to the jurisdiction of the Public Service Commission of the State of New York hereinafter, "NYSPSC"; and

WHEREAS, NFGDC is a public utility authorized and obligated to receive and transport natural gas and to provide retail natural gas service subject to the jurisdiction of the Pennsylvania Public Utility Commission, hereinafter, "PAPUC"; and

WHEREAS, by means of facilities operated by it, Operator proposes to deliver Renewable Natural Gas ("RNG") into facilities owned and operated by NFGDC in the State of New York or into facilities owned and operated by NFGDC in the Commonwealth of Pennsylvania; and

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements hereinafter contained, NFGDC and Operator agree as follows:

ARTICLE 1. DEFINITIONS

1.1 "Receipt Point" means the point of interconnection between Operator's Plant and the facilities of NFGDC located immediately upstream of NFGDC's measurement facility which is used to identify such point of interconnection in Exhibit A.

<u>1.2 "Exhibit A" means the document entitled "Exhibit A" which is attached hereto (and by such attachment, made a part hereof), as said document may be amended or supplemented, from time to time.</u>

<u>1.3 "Exhibit B" means the document entitled "Exhibit B" which is attached hereto (and by such attachment, made a part hereof), as said document may be amended or supplemented, from time to time specific to RNG.</u>

<u>1.4 "Exhibit C" means the document entitled "Exhibit C" which is attached hereto (and by such attachment, made a part hereof), as said document may be amended or supplemented, from time to time specific to RNG.</u>

<u>1.5 "Btu" or "British Thermal Unit" means, generally, the amount of heat required to raise the temperature of 1 pound of liquid water by 1°F at a constant pressure of one atmosphere and is a measure of heat value (energy content). Btu is calculated in conformance with applicable ANSI/API and A.G.A. recommendations.</u>

<u>1.6 "Cubic Foot" means the volume of gas contained in one (1) cubic foot of space at a standard pressure of fourteen and seventy-three hundredths (14.73) pounds per square inch absolute and a standard temperature of sixty degrees Fahrenheit (60° F), under standard gravitational force.</u>

<u>1.7 "Mcf" means one thousand (1,000) cubic feet of gas, determined on the measurement basis set forth in this Agreement.</u>

<u>1.8 "Meter Location" means the state, New York or Pennsylvania, in which an individual meter on Exhibit A is geographically located.</u>

1.9 "NFGDC's Tariff" or "Tariff" means NFGDC's Schedule For Gas Service Applicable In The Entire Territory (PSC No. 9 – GAS, as amended from time to time, or any superseding tariff), for gas delivered by Operator in New York or Rates, Rules And Regulations Governing The Furnishing of Natural Gas Service (Gas--Pa. P.U.C. No. 9, as amended from time to time, or any superseding tariff) for gas delivered by Operator in Pennsylvania. Meter Location determines the applicable Tariff.

1.10 "Gas Transportation Operating Procedures Manual" or "GTOP" is a document describing operating procedures, protocols and business practices for transportation service, as amended from time to time. The GTOP applicable to RNG delivered by Operator in New York is filed with the NYSPSC and the GTOP applicable to RNG delivered by Operator in Pennsylvania is filed with the PAPUC. Each GTOP is posted on the NFGDC web site. Meter Location determines the applicable GTOP.

<u>1.11 "Day" means the twenty-four (24) hour period commencing at an hour specified in the Tariff of an interstate pipeline delivering gas to NFGDC at a city gate station, or as otherwise specified in NFGDC's GTOP.</u>

<u>1.12</u> "Month" means the period commencing on the first Day of a calendar month and ending immediately prior to the commencement of the first Day of the next calendar month.

1.13 "Operator's Gas" means the RNG delivered into NFGDC's facilities at any given time at any given Receipt Point.

1.14 "Commission" means the NYSPSC or PAPUC depending on Meter Location.

1.15 "NFGDC Contacts Addendum" means the document so entitled which is attached hereto (and by such attachment, made a part hereof), providing NFGDC contact information pertinent to this Agreement. Said document may be amended or supplemented, from time to time by NFGDC and communicated to Operator through facsimile, e-mail or a posting to the NFGDC website.

<u>1.16 "RNG Operator Contacts Addendum" means the document so entitled which is attached hereto</u> (and by such attachment, made a part hereof), providing Operator contact information pertinent to this Agreement. Said document may be amended or supplemented, from time to time by Operator and communicated to NFGDC as provided therein.

<u>1.17 "Gas Scheduling" means the administrative function(s) of arranging for Operator's RNG to be</u> delivered for the account of NFGDC transportation customers and/or their suppliers, including nominations, confirmations, pool assignments and related activities.

1.18 "Renewable Natural Gas" or "RNG" means the gas produced by Operator at its Plant which meets NFGDC RNG Quality Standards, specified in Exhibit B, as well as the gas quality standards specified in NFGDC's Tariff.

1.19 "Plant" means the digester, gasifier, and other upgrading and processing facilities used to produce biomethane. Such Plants shall be limited to non-hazardous landfills, dairy farms, wastewater treatment plants, food waste processing facilities and Plants producing NFGDC approved syngas.

<u>1.20 "Security Requirement Amount" means the dollar amount of security NFGDC deems appropriate, in its sole discretion, based upon circumstances attributable to the Operator and Operator's facility.</u>

1.21 "Hazardous Waste Landfill" refers to the facilities as defined by the United States Environmental Protection Agency – 40 CFR 260.10, New York State Department of Environmental Conservation – 6 NYCRR Part 370.2 or Pennsylvania Solid Waste Management Act, 35 Pennsylvania Statutes (Pa. Stat.) 6018.101 to 6018.1003 and rules at 25 Pennsylvania Code (Pa. Code) 260a to 270a, and 25 Pa. Code 298

ARTICLE 2. DELIVERY OF RNG INTO NFGDC FACILITIES

2.1 Operator shall not deliver (or permit the delivery of) any RNG into any facility owned or operated by NFGDC other than at a Receipt Point identified on Exhibit A at the time of such delivery (the "Exhibit A Receipt Point(s)"). No Receipt Point shall be deemed to have been added to Exhibit A, and Exhibit A shall not be deemed to have been otherwise amended or supplemented, unless and until such amendment or supplement of Exhibit A shall be evidenced by a writing executed by Operator and NFGDC.

2.2 Operator warrants and represents as follows:

2.2.1 All gas delivered into NFGDC's facilities at any one Receipt Point shall be RNG produced exclusively from Plant(s) configured to deliver to such Receipt Point.

2.2.2 RNG delivered into NFGDC's facilities was not collected from a Hazardous Waste Landfill including landfills permitted by the Department of Toxic Substances Control.

2.2.3 RNG produced or scheduled by Operator to be produced from additional Plant(s) flowing through a Receipt Point identified in Exhibit A shall be authorized and RNG received therefrom accepted by NFGDC at the designated Receipt Point so long as:

2.2.3.1 Operator provides NFGDC with 30 days written notice of its intent to add Plant(s), together with the scheduled turn-on date; and

2.2.3.2 The Plant has been tested by or caused to be tested by NFGDC and the results therefrom meet NFGDC's satisfaction;

2.2.3.3 The criteria contained in paragraph 2.2.3.2 shall also apply to new or different RNG that is formulated with new or modified feedstock source at an existing Plant already flowing through a Receipt Point identified on Exhibit A.

2.2.3.4 The criteria contained in paragraph 2.2.3.2 shall also apply to new or different Plant operations including installation of new processing equipment or modification to existing processing equipment.

2.3 Operator shall deliver RNG at a pressure sufficient to enable such RNG to enter NFGDC's facilities against the pressure prevailing therein from time to time, provided, however, that Operator shall not deliver RNG at any Receipt Point at a pressure in excess of the pressure designated by NFGDC.

2.3.1 Sufficient delivery pressure does not guarantee access to NFGDC's facilities. In addition to pressure, nearby distribution system market demand and the priority of service of the parties shipping gas from the Receipt Point(s) shall also be determinative for the purpose of access to NFGDC's facilities.

2.4 Operator shall not install or operate (or permit any other entity to install or operate) compression facilities in order to deliver RNG into any NFGDC facility ("NFGDC-Related Compression Operations") without the express prior written consent of NFGDC, which consent shall not be unreasonably withheld.

2.5 Operator warrants that all NFGDC-Related Compression Operations shall be conducted in a manner (i) so as to prevent the pulsations therefrom from interfering with NFGDC's measurement at any Receipt Point, and (ii) so that compressed RNG will be delivered to NFGDC at a temperature not exceeding seventy-three degrees Fahrenheit (73° F). Operator shall ensure safeguards to prevent compressing air (e.g. low pressure shut off or oxygen shut off) into NFGCD's system are present and operational.

2.6 Operator shall give NFGDC written notice at least fourteen (14) days prior to the commencement of (and any material change in) authorized NFGDC-Related Compression Operations.

2.7 Operator shall give NFGDC written notice at least twenty-four (24) hours prior to any material change in the maintenance routine applicable to any compressor used in NFGDC-Related Compression Operations. For purposes of this subsection, "material" shall mean any change that may produce a variance in RNG volumes or pressure.

2.8 In the event that the installation, operation and/or maintenance of Operator's compressor used in NFGDC-Related Compression Operations requires (in NFGDC's reasonable judgment) modification(s) to any facility owned or operated by NFGDC, the cost of such modification(s) shall be borne by Operator. Operator shall consult with NFGDC so as to assist NFGDC in ascertaining the extent to which such modification may be indicated, and on the basis of such consultation and NFGDC's own judgment, NFGDC shall endeavor to notify Operator of its determination prior to the date scheduled by Operator for such installation, operation and/or maintenance. Notwithstanding NFGDC's efforts to provide such notice to Operator, Operator shall remain solely responsible for costs incurred by NFGDC in the event resulting and reasonably unforeseen modification of NFGDC facilities are required.

2.9 Operator shall, at its own cost and expense, (i) obtain, provide NFGDC with, and maintain any easement(s) or other land interest(s) which, in NFGDC's judgment as to type and extent, are reasonably necessary for the installation, operation and maintenance of NFGDC's receipt and related measurement facilities; and (ii) upon NFGDC's request, provide NFGDC with a copy of the recorded instruments evidencing such land interests and NFGDC's beneficial interest therein.

2.10 Receipt facilities shall be installed, owned and maintained by and at the expense of either NFGDC or Operator according to the below schedule. Such equipment shall be installed at each Exhibit A Receipt Point facility, which, in NFGDC's reasonable judgment, may be necessary to accommodate the deliveries of RNG received and projected to be received by it at the Receipt Points. The normal operation, calibration, maintenance, adjustment and repair of the measurement equipment shall be performed by the owner of the equipment. Modifications to Receipt Facilities resulting from changes in Operator's operations shall be performed at Operator's cost and expense. The Receipt Facilities shall be operated in accordance with the applicable specifications of the Gas Measurement Committee of the Natural Gas Department of the American Gas Association, as amended from time to time, or in accordance with any other mutually agreeable standard commonly accepted in the industry.

<u>Equipment</u>	Install By	<u>Own By</u>	<u>Maintain By</u>	Paid By
Meter/Recording	<u>NFGDC</u>	<u>NFGDC</u>	NFGDC	<u>Operator</u>
Meter run and valves Regulator Drying Equipment Odorizing Equipment	NFGDC Operator Operator NFGDC	NFGDC NFGDC Operator NFGDC	NFGDC NFGDC Operator NFGDC	<u>Operator</u> <u>Operator</u> <u>Operator</u> <u>Operator</u>

07/31/1819/19

Gas Transportation Operating Procedures Manual

<u>"Pop-offs"/Relief valves</u> <u>Mainline valve</u> <u>Heaters</u> <u>Water separator/drips</u> <u>Communications facilities</u> <u>Telemetrics/Teleflow</u> <u>Gas Quality Equipment</u>	Operator NFGDC Operator Operator Operator NFGDC NFGDC	NFGDC NFGDC Operator Operator Operator NFGDC NFGDC	NFGDC NFGDC Operator Operator NFGDC NFGDC	Operator Operator Operator Operator Operator Operator Operator
Real-Time Analyzer	NFGDC	NFGDC	NFGDC	<u>Operator</u>

2.11 Operator shall pay to NFGDC the Receipt Facility Maintenance Fee(s), if any, which shall be applicable, from time to time, pursuant to the provisions of NFGDC's Tariff. In this connection, Operator agrees that NFGDC shall have the unilateral right, exercisable at its sole option, to file with any regulatory authority having jurisdiction, and to make effective, (i) initial and revised rates and charges applicable to NFGDC's operations hereunder, (ii) changes in any provision of the General Terms and Conditions of NFGDC's Tariff applicable to NFGDC's operations hereunder, and (iii) the terms and conditions of this Agreement (hereinafter, collectively, the "Receipt Parameters"). NFGDC agrees that Operator may protest or contest any such filing and/or may seek from any duly constituted regulatory authority having jurisdiction such revision of any one or more of the Receipt Parameters as may be necessary or appropriate to cause the same to be, in all respects, just and reasonable.

2.12 Operator shall, at its own cost and expense, provide, operate and maintain in safe and efficient operating condition such regulators, relief valves, and other equipment as may be necessary in NFGDC's reasonable judgment to avoid excessive pressures (and the risk of such pressures) in facilities owned and operated by NFGDC or its customers.

2.13 Operator acknowledges that:

2.13.1 The Receipt Points identified in Exhibit A are located on NFGDC's gas distribution facilities;

2.13.2 NFGDC must, at all times, be in a position to operate, maintain, enhance, and/or replace any one or more of its facilities in such a manner, at such times, and under such circumstances as will enable it to furnish and provide facilities and service which are safe and adequate and in all respects just and reasonable;

2.13.3 The maximum and/or minimum delivery pressures or other parameters applicable to Operator's delivery of RNG into NFGDC's facilities may vary from time to time, in light of the above, and in order to enable NFGDC to satisfy its retail market requirements, including but not limited to its firm service obligations, transportation obligations, and to ensure the maintenance of safe operating conditions throughout its system, including, but not limited to, the maintenance, enhancement and/or improvement of its facilities;

2.13.4 Operator acknowledges NFGDC's right (a) to restrict and/or completely stop Operator's deliveries at any one or more Receipt Points insofar as reasonably necessary in NFGDC's judgment to accommodate the above requirements, and/or (b) to designate and redesignate, from time to time, the maximum pressure or other delivery parameter(s) temporarily applicable to deliveries of RNG by Operator at any one or more Receipt Points; and

2.13.5 Without limitation of the remedies available to NFGDC in respect of any breach of this Agreement, a breach of any one or more of the obligations undertaken by Operator under paragraphs 2.1, 2.2, 2.3 and 2.5 of this Article 2, or under any of the paragraphs of Article 4, shall constitute a material breach of this Agreement.

ARTICLE 3. MEASUREMENT

<u>3.1 Measurement of Operator's RNG shall be in accordance with the Tariff and GTOP requirements</u> applicable to gas delivered into NFGDC's facilities for transportation service and/or applicable to production facility gas measurement.

<u>3.2 The unit of volume for purposes of measurement of the RNG delivered into NFGDC's facilities at the respective Exhibit A Receipt Points shall be Mcf.</u>

3.3 The total heating value of the RNG delivered into NFGDC's facilities at the respective Exhibit A Receipt Points shall be determined by chromatographic analysis using equipment provided at Operator's expense but installed, owned and maintained by NFGDC. The unit of measurement of heating value shall be Btu.

3.4 If undertaken at Operator's request, NFGDC's test of the accuracy of any meter or other measurement equipment owned and used by NFGDC to measure volumes of RNG delivered into its facilities shall be arranged and conducted, insofar as reasonably practicable, so as to permit representatives of Operator to be present. If, upon any such test (whether conducted at Operator's request or upon NFGDC's own initiative) any such meter or measurement equipment shall be found to be inaccurate, NFGDC shall adjust the same as soon as practicable to read correctly; and

3.4.1 If such inaccuracy is less than three percent (3%), the previous readings shall be deemed correct, and, in the event such test was conducted at Operator's request, Operator shall bear all costs of such test;

3.4.2 If such inaccuracy is three percent (3%) or more, the previous readings shall be corrected to zero (0) error for the period of time during which such meter or other measurement equipment is known or agreed to have been inaccurate. If the length of such period of inaccuracy is not known or agreed upon, such correction shall be made for a period equal to one-half (½) of the time which has elapsed since the date of the last calibration, provided, however, that such correction period shall not exceed thirty (30) days.

If any such meter or other measurement equipment is out of service, or inaccurate by three percent (3%) or more, under circumstances where the correction of previous readings of such equipment to "zero (0) error" is not feasible, then the volume of RNG delivered during the period shall be estimated (a) by using data recorded by any check-measuring equipment, if installed and registering accurately, or (b) if such check-measuring equipment is not installed or registering inaccurately, by correcting the error if the percentage of error is ascertainable by calibration, test or mathematical calculation, or (c) if neither such method is feasible, by estimating the quantity delivered based upon deliveries under similar conditions during a period when equipment was registering accurately.

ARTICLE 4. GAS QUALITY

4.1 Operator understands and acknowledges that while NFGDC will continuously monitor, test, or otherwise inspect Operator's RNG prior to the delivery thereof into NFGDC's facilities, this does not mean that every Constituent of Concern, as identified in Exhibit B – Table 1, will be continuously monitored and tested. Operator further acknowledges that, irrespective of the contractual disposition of Operator's RNG, all such RNG may be commingled with, and become an inseparable part of, the gas supply used by NFGDC to satisfy its obligations to its retail and transportation customers. Accordingly, Operator expressly warrants and represents that (i) Operator's RNG shall, in all respects and at all times, consist solely of RNG which is merchantable and fit for use by NFGDC's retail customers, and (ii) without limitation of the generality of the foregoing, Operator's RNG shall at all times, and in all respects, shall conform to the Tariff and GTOP requirements applicable to gas delivered into NFGDC's facilities for transportation service, and meet at least the following minimum quality specifications:

<u>4.1.1 Operator's RNG shall be entirely free of all hydrocarbon liquids and other material in liquid form, including, without limitation, water, glycol, brines, condensate and oil;</u>

4.1.2 All RNG delivered by Operator to NFGDC hereunder into NFGDC's facilities through any Receipt Point listed on the attached Exhibit A shall be dehydrated by Operator for removal of water present therein in a vapor state to a level determined acceptable by NFGDC, at its sole discretion, from time to time. In no event shall the acceptable level, as determined by NFGDC, be required to be less than the maximum water vapor (H₂O) per million cubic feet level specified in the Tariff;

4.1.3 Operator's RNG shall be entirely free of NOx compounds;

<u>4.1.4 Operator's RNG must also comply with all additional requirements specified in Exhibit B, including but not limited to, having a composition that does not exceed the threshold level for any Constituent of Concern identified in Exhibit B – Table 1.</u>

4.2 To the extent accepting Operator's RNG does not prevent gas delivered to customers from being merchantable and fit for use in its retail markets, NFGDC shall have the option (but never the obligation), to relax RNG quality requirements, from time to time, by describing permissible variations in its GTOP.

4.3 Except as identified in 2.10 above, Operator shall furnish, install, operate, maintain and keep in efficient and safe operating condition, at Operator's sole cost and expense, such drips, separators, dehydrators, alcohol bottles, gas cleaners, treatment facilities, equipment to provide real-time gas quality analysis ("Real-Time Analyzer"), automated shut-off valves and any other devices or equipment as may be or become reasonably necessary to effect compliance with the quality specifications set forth in this Article.

<u>4.4 Operator shall inform NFGDC of changes in its RNG feedstock source prior to such changes or as soon as practicable thereafter.</u>

4.5 In addition to any other remedy which may be available to NFGDC hereunder, or under any provision of law, in respect of Operator's undertakings expressed in this Article, NFGDC shall have and be entitled to exercise any one or more of the following rights, options and remedies, on a non-exclusive basis, in the event of any breach by Operator of any one or more of said undertakings, to wit:

4.5.1 Upon notice to Operator, treat or process Operator's RNG, at Operator's sole cost and expense, insofar as reasonably necessary in NFGDC's judgment to cause the same to conform to the quality specifications set forth in this Article;

4.5.2 Continue to receive Operator's RNG, with or without treatment or processing thereof;

4.5.3 Discontinue receiving Operator's RNG at the affected Receipt Point(s) until the occasion(s) for the exercise of a remedy by NFGDC has, in NFGDC's reasonable judgment, been corrected;

4.5.4 Terminate this Agreement as respects the delivery of Operator's RNG into NFGDC's facilities at the affected Receipt Point(s) in the event that, in NFGDC's reasonable judgment, the occasion for NFGDC's exercise of a remedy cannot be corrected at a reasonable cost in a reasonable time;

4.5.5 Require Operator to cease receiving into Operator's facilities RNG feedstock attributable to the source which occasioned NFGDC's exercise of a remedy; and

4.5.6 Clean-up and/or repair, at Operator's sole cost and expense, all facilities, equipment and apparatus affected by the occasion for NFGDC's exercise of a remedy. NFGDC shall endeavor to notify the Operator prior to taking such remedial action.

ARTICLE 5. CHART CHANGES AND INDEX READINGS

5.1 Insofar as applicable, Operator shall, at its own cost and expense, read each rotary, ultrasonic or turbine meter associated with any Exhibit A Receipt Point on the first (1st) working day of each month and shall enter associated meter readings online through a secure web site as provided in NFGDC's GTOP all such meter reading information to NFGDC on or before the fifth (5th) working day of each month.

5.32 All written correspondence concerning measurement shall be addressed to "NATIONAL FUEL GAS DISTRIBUTION CORPORATION" at the address provided for Gas Measurement in the NFGDC Contacts Addendum.

5.3 Operator understands that NFGDC is not able to account for and/or allocate Operator's RNG without using the meter reading information (as the case may be) referred to in this Article. Accordingly, given (i) the incremental expense and other costs which will be incurred by NFGDC in the event of its tardy receipt of the meter reading information referred to in this Article; (ii) the difficulty of quantifying such costs and expenses, and (iii) the inconvenience and practical infeasibility of otherwise providing an adequate remedy in respect of Operator's breach of its undertakings expressed in this Article, it is agreed as follows:

In the event that either of the following conditions are met, to wit: (i) Operator shall fail to provide any meter reading information as stipulated in this Article, or (ii) NFGDC shall fail to receive said meter reading information on or before the fifth (5th) working day following the date stipulated in this Article, then NFGDC shall be relieved of any obligation to account for any of the production in a timely manner but will endeavor to account for such production in the next accounting period.

ARTICLE 6. TERM

6.1 This Agreement shall have no force or effect unless and until it shall have been executed by each of the parties identified on the first page hereof and by each of the parties identified in the Addendum thereto, if any (the "Effective Date"). Thereafter, and unless and until NFGDC shall have notified each of the other parties who executed this Agreement (the "Non-NFGDC Parties") that all applicable RNG disposition agreements have become effective, no right or entitlement shall accrue to any Non-NFGDC Party due to the execution of this Agreement.

6.2 The term of this Agreement shall extend until the first anniversary of the Effective Date, and, unless otherwise lawfully terminated, this Agreement shall continue in effect thereafter, until the same is terminated by any party to this Agreement, if any, by written notice to all other such parties, no later than thirty (30) days prior to the beginning of a calendar month.

6.3 Notwithstanding any other provision of this Agreement, and in addition to any other right or remedy available to NFGDC hereunder or under any provision of law, NFGDC shall have the following rights, exercisable at NFGDC's sole option, to wit:

6.3.1 Terminate this Agreement and remove all Receipt Facilities at the Exhibit A Receipt Points, or suspend or cease receiving Operator's RNG at any one or more of the Exhibit A Receipt Points, upon thirty (30) days' prior written notice to Operator, in the event that Operator should for any reason experience a loss or cancellation of the security required to be provided by Operator pursuant to Article IX hereof; and

6.3.2 Terminate this Agreement as to the affected Receipt Point(s) and remove all Receipt Facilities at the affected Receipt Point(s), or suspend or cease receiving Operator's RNG at any affected Receipt Point(s), upon thirty (30) days' prior written notice to Operator, in the event that Operator should (i) fail to provide satisfactory title to the production or (ii) repeatedly violate, in NFGDC's sole opinion, the standards contained in Article 4.

ARTICLE 7. GOVERNMENTAL REGULATION

7.1 This Agreement and the respective obligations of the parties hereunder shall be subject to all valid applicable federal, state and local laws, orders, rules and regulations, whether in effect on the date hereof, or becoming effective thereafter. The parties shall be entitled to regard all laws, orders, rules and regulations issued by any federal, state or local regulatory or governmental body as valid and may act in accordance therewith until such time as same shall have been invalidated by final judgment (no longer subject to judicial review) of a court of competent jurisdiction. Neither party shall be held in default for failure to perform hereunder if such failure is due to compliance with laws, orders, rules or regulations of any such duly constituted authorities. Nothing contained herein, however, shall be construed as affecting any party's right(s) to contest the validity or applicability of any such law, order, rule or regulation.

ARTICLE 8. FORCE MAJEURE

8.1 In the event either NFGDC or Operator is rendered unable, in whole or in part, by force majeure to carry out their respective obligations under this Agreement, other than to make payments due hereunder or to maintain minimum RNG quality specifications, it is agreed that the obligations of the party claiming such inability to perform, so far as they are affected by such force majeure, shall be suspended from the inception of and during the continuance of such inability so caused but for no longer period; provided that the party claiming such inability gives notice and reasonably full particulars of such force majeure event relied upon; and provided further that the party claiming such inability shall promptly and diligently take such action as may be necessary and reasonably practicable to correct, or cause to be corrected, such inability.

8.2 The term "force majeure" as employed herein shall mean, without limitation, acts of God, Governmental action or regulation, strikes, lockouts or other industrial disturbances, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, tornadoes, storms, storm warnings, floods, washouts, arrests and restraints of governments and people, civil disturbances, explosions, breakage or accidents to machinery or pipelines, the necessity for making repairs to or alterations of machinery or pipelines, freezing of pipelines, and any other causes, whether of the kind herein enumerated or otherwise, not under or within the control of the party claiming inability to perform and which, by the exercise of reasonable diligence, such party is unable to prevent or overcome.

8.3 The settlement of strikes, lockouts or any such labor disputes shall be entirely within the discretion of the party having the difficulty, and the above requirement that any force majeure event shall be remedied promptly and diligently shall not require the settlement of strikes, lockouts or other labor disputes by acceding to the demands of any opposing party when such course is inadvisable in the discretion of the party having the difficulty.

8.4 Force majeure shall not include failure or disruption of technical systems or products within the reasonable control of the party claiming force majeure which arise as a result of any leap year.

ARTICLE 9. NOTICE

9.1 Every notice, request, statement, bill or invoice provided for in this Agreement shall be in writing, unless otherwise provided herein, and shall be sent by prepaid mail, facsimile, or by overnight delivery, addressed to the party to whom given, at such party's address stated below, or at such other address as such party may in and by such notice direct hereafter. Facsimile notices, requests, statements, bills or invoices shall be deemed given only when facsimile receipt is confirmed.

<u>9.1.1 Notice to NFGDC shall be sent to the address provided for Notices in the NFGDC Contacts</u> Addendum.

9.1.2 Notice to Operator shall be sent to the address provided for Notices in the RNG Operator Contacts Addendum.

9.2 Operator shall provide NFGDC with a current telephone number, facsimile number and Email address at which Operator or Operator's representatives may be contacted at all hours using the Operator Contacts Addendum or other mutually agreeable form that minimally provides the same information contained therein. For themselves and their agents, NFGDC and Operator agree to the recording of all telephone conversations during which NFGDC notifies Operator to suspend or cease deliveries into any facility owned or operated by NFGDC.

ARTICLE 10. OPERATOR'S CREDITWORTHINESS

10.1 At its sole option, NFGDC may (i) suspend its receipt of Operator's RNG, or (ii) terminate this Agreement, in the event that Operator is or has become insolvent or fails within a reasonable period, upon NFGDC's request, to demonstrate creditworthiness, or in the event that Operator incurs a poor credit history with respect to any service provided by NFGDC or as established by a reliable reporting agency.

10.2 As a demonstration of Operator's creditworthiness and as security in respect of any remedy afforded NFGDC under this Agreement or under any provision of law, Operator agrees to provide NFGDC with security in an amount, not less than Ten Thousand Dollars (\$10,000), or as determined by NFGDC ("Security Requirement Amount"), prior to the Effective Date, and to keep in force throughout the term of this Agreement, any one of the following:

10.2.1 A security cash deposit equal to the Security Requirement Amount, to be held in a non-interestbearing general account by NFGDC;

10.2.2 An irrevocable letter of credit issued by a financial institution acceptable to NFGDC and in a form acceptable to NFGDC with a face amount of the Security Requirement Amount; or

10.2.3 At NFGDC's sole discretion, a copy of the most recent audited financial statements of Operator (or of a guarantor of Operator's performance hereunder) showing a net worth in excess three times the Security Requirement Amount, or a copy of the most recent unaudited financial statements of Operator (or of a guarantor of Operator's performance hereunder) showing a net worth of at least four three times the Security Requirement Amount, in which event, Operator shall also provide NFGDC with evidence of its ownership of unencumbered assets valued, in the aggregate, in excess of the Security Requirement Amount in each state in which Operator conducts any business with NFGDC.

10.2.4 Security, in a form acceptable to NFGDC, provided on behalf of Operator by a creditworthy third party, including but not limited to a marketer, individual, or other entity.

10.3 NFGDC reserves the right to require Operator to establish or demonstrate its creditworthiness, from time to time, during the term of this Agreement.

ARTICLE 11. TITLE TO GAS

11.1 Nothing in this Agreement shall affect the title to Operator's RNG.

11.2 Operator shall indemnify NFGDC against, and hold it harmless from, and undertake the defense of NFGDC with respect to, all suits, actions, claims, debts, accounts, damages, costs, losses and expenses (including attorneys' fees) arising from or out of adverse claims of any and all persons or entities to

Operator's RNG, or to royalties, overriding royalties or other payments with respect thereto, or to taxes, licenses, fees, or charges with respect to Operator's RNG or the disposition thereof (hereinafter, respectively "Adverse Claim To Operator's RNG"). Except insofar as Operator is in breach of its obligations or has an obligation to indemnify and save NFGDC harmless pursuant to this section 11.2, NFGDC agrees to indemnify and save Operator harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising out of adverse claims of any and all persons to the RNG after receipt by NFGDC of Operator's RNG for redelivery by NFGDC (whether by means of transportation service or NFGDC commodity service) according to NFGDC's Tariff.

11.3 In the event of any Adverse Claim To Operator's RNG, NFGDC may, at its sole discretion, suspend receipts of Operator's RNG at the Receipt Point(s) where the affected RNG is delivered into NFGDC's facilities (without incurring any liability to Operator or any other entity interested in Operator's RNG) until such claim is finally determined and the prevailing party(ies) agree(s) to be bound by this Agreement, or until Operator furnishes NFGDC a bond, in form and amount and with sureties acceptable to NFGDC, conditioned to hold NFGDC harmless from any such Adverse Claim To Operator's RNG, or until Operator demonstrates, to NFGDC's satisfaction, that such RNG subject to an adverse claim does not constitute any portion of Operator's RNG

<u>11.4 Operator agrees to provide NFGDC, upon request, evidence reasonably satisfactory to NFGDC of</u> <u>Operator's right to handle and deliver into NFGDC's facilities, one hundred percent (100%) of the gas</u> <u>comprising Operator's RNG.</u>

ARTICLE 12. REMEDIES

12.1 In addition to any other remedy available to NFGDC under this Agreement or any provision of law, Operator shall indemnify NFGDC against, hold it harmless from, and undertake the defense of NFGDC with respect to all suits, actions, claims, losses, damages (including punitive damages and economic losses), injuries (including personal injury and death), debts, accounts, costs and expenses (including attorneys' fees and other expenses incurred by NFGDC in responding to, and in partial or full satisfaction of, any such suits, actions, claims, losses, damages and injuries) related to and/or arising from or out of any breach by Operator of any provision of this Agreement.

12.2 Under no circumstances shall NFGDC be liable to Operator or any third party for any direct, special, indirect, incidental, punitive or consequential losses or damages of any kind whatsoever (including, but not limited to, lost business, lost profits, lost revenues, or lost data) however arising, whether claims for said losses or damages are premised on agreement, tort (including negligence), strict liability or otherwise, irrespective of the number or nature of the claims.

ARTICLE 13. MISCELLANEOUS

13.1 This document shall *not* be construed as an agreement running with the land.

13.2 Operator shall release, protect, defend, indemnify and save harmless NFGDC, its affiliates and related companies and their directors, officers and employees, from and against each and every suit, demand or cause of action and any and all liabilities, expenses, liens, losses, claims, damages, costs (including court costs and reasonable attorneys' fees) for or based upon personal injury, disease or death, or on account of property damage, resulting from, in connection with, or in any way arising out of, relating to, or incident to its activities under this Agreement, except to the extent such damage, injury, or loss is caused in whole or in part by the negligence or willful misconduct of NFGDC. For purposes of enforcing this paragraph, Operator waives as a complying employer its immunity provided under the Pennsylvania Worker's Compensation Laws and/or related laws rules and regulations.

13.3 Operator shall comply with the insurance requirements set forth in Exhibit C to this Agreement.

13.4 Operator covenants and represents that no "hazardous substance" as that term is defined in the Federal Comprehensive Environmental Response Compensation Liability Act (CERCLA), petroleum or petroleum products, "asbestos-containing material" as that term is defined in 40 CFR Part 61 Subpart M, polychlorinated biphenyls (PCBs), "solid waste" as that term is defined in the Federal Resource Conservation Recovery Act (RCRA) or other toxic, hazardous, or deleterious substance (individually or collectively referred to herein as an "Environmentally Deleterious Substance"), is currently at, or will be leaked, spilled, deposited, conveyed through the Interconnect or otherwise released by Operator on, at, adjacent to or through NFGDC's property. If any Environmentally Deleterious Substance is released or discovered on, at, through or adjacent to said property, Operator shall immediately notify NFGDC of the discovery and existence of said Environmentally Deleterious Substance. In the event of Operators breach of the covenants and representations contained in this section, the full responsibility for the handling, investigation, remediation, treatment, storage or disposal of any such Environmentally Deleterious Substance, including the management and handling of such materials in compliance with all federal, state, or local laws, rules, regulations pertaining to the protection of the environment ("Environmental Laws"), shall remain with Operator and Operator shall indemnify NFGDC for any loss, injury, damage to persons or property, or fines, penalties or compliance order issued by any governmental agency pursuant to any Environmental Law relating to the existence of such Environmentally Deleterious Substance on, at, or adjacent to said. This section shall survive the termination of this Agreement.

13.5 No change, modification or alteration of this Agreement shall be or become effective until executed in writing by the parties hereto, and no course of dealing between the parties shall be construed to alter the terms hereof, except as expressly stated herein.

13.6 No waiver by any party of any one or more defaults by the other in the performance of any provision of this Agreement shall operate or be construed as a waiver of any other default or defaults, whether of a like or of a different character.

13.7 Not less than five (5) working days prior to the first day of each calendar month during the term of this Agreement, Operator shall provide NFGDC with update(s), if any, to the identity of the entity and person who shall conduct Gas Scheduling for Operator's RNG at each of the Exhibit A Receipt Points. In the absence of Operator's timely notification to this effect, NFGDC may (but shall not be obligated to) deem the authority of the entity and person identified in Operator's last previous timely notification to continue until its receipt of the Operator's next timely notification under this paragraph.

13.8 Any company which shall succeed by purchase, merger or consolidation of the RNG related properties, substantially as an entirety, of NFGDC or of Operator, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Agreement. Either party may, without relieving itself of its obligations under this Agreement, assign any of its rights hereunder to a company with which it is affiliated, but otherwise, no assignment of this Agreement or of any of the rights or obligations hereunder shall be made unless there first shall have been obtained the consent thereto in writing of the other party. Consent shall not be unreasonably withheld.

13.9 The headings contained in this Agreement are intended solely for convenience and do not constitute any part of the agreement between the parties and shall not be used in any manner in construing this Agreement.

13.10 With respect to Meter Location, this Agreement shall be construed, enforced and interpreted in accordance with the laws of

13.10.1 the State of New York, excluding, however, any such law which would direct the application of the law of another jurisdiction. The parties (i) submit to the jurisdiction of the United States District Court for the Western District of New York, and, in the event that such court lacks subject matter jurisdiction, to the New York State Supreme Court, Erie County, and, as respects those matters which are subject to the exclusive or primary jurisdiction of the NYSPSC, and (ii) waive any right or entitlement which they or any of them might otherwise have to cause any dispute arising under this Agreement to be adjudicated, determined or resolved pursuant to the law of any other jurisdiction, or, in or by any other court(s) or tribunal(s). Provided, however, that the parties may bring disputed matters before the NYSPSC according to dispute resolution procedures under NFGDC's Interconnection Rules and Procedures set forth in NFGDC's GTOP.

13.10.2 the Commonwealth of Pennsylvania, excluding, however, any such law which would direct the application of the law of another jurisdiction. The parties (i) submit to the jurisdiction of the United States District Court for the Western District of Pennsylvania, and, in the event that such court lacks subject matter jurisdiction, to the Court of Common Pleas of Erie County, Pennsylvania, and, as respects those matters which are subject to the exclusive or primary jurisdiction of the PAPUC, and (ii) waive any right or entitlement which they or any of them might otherwise have to cause any dispute arising under this Agreement to be adjudicated, determined or resolved pursuant to the law of any other jurisdiction, or, in or by any other court(s) or tribunal(s). Provided, however, that the parties may follow the dispute resolution procedures applicable to Suppliers as set forth in NFGDC's Tariff under Rate Schedule SATS, Special Provision § U(19), as revised.

13.11 So that there will be certainty as to the actual agreement between the parties, it is mutually understood and agreed that this Interconnection Agreement, the Exhibit A, the Exhibit B and the Exhibit C attached hereto, as the same may be impacted by any applicable provision of NFGDC's Tariff and GTOP, are intended to constitute the final expression, as well as the complete, exclusive and integrated statement, of the terms of the parties' agreement relative to the interconnection and other transactions described therein. If there is any inconsistency between this Agreement and the Tariff, either as presently in effect or as amended, then the provisions of the Tariff shall apply.

<u>13.12 No presumption shall operate in favor of or against either party hereto as a result of any responsibility</u> either party may have had for drafting this Agreement.

(OPERATOR)

NATIONAL FUEL GAS DISTRIBUTION CORPORATION

<u>By</u>	<u>By:</u>
Name:	Name:
Title:	<u>Title:</u>
Date:	Date:

RENEWABLE NATURAL GAS INTERCONNECTION AGREEMENT NFGDC CONTACTS ADDENDUM

CONTACT INFORMATION: 24-Hour Telephone: (800) 444-3130 EMERGENCIES ONLY

NATIONAL FL	JEL GAS DISTRIBUTION CORPORATION
Legal/Contract Notices/Contracting	Legal Department
	1100 State Street
	<u>Erie, PA 16504</u>
	Facsimile: (814) 871-8061
	Attn. Nathaniel Ehrman
	Email: EhrmanN@natfuel.com
Gas Measurement/Gas Testing	Gas Measurement Department
	717 State Street – Suite 700
	Erie, PA 16501
	Phone (844) NFG-WELL (844) 634-9355
	Facsimile: (814) 871-8672
	Email: NFG_GM@natfuel.com
Field Operations/Meter Sets	Gas Measurement Department
	717 State Street – Suite 700
	Erie, PA 16501
	Phone (814) 871-8539
	Facsimile: (814) 871-8672
	Email: CampbellC@natfuel.com
Gas Scheduling	Transportation Service Department
	6363 Main Street
	Williamsville, NY 14221
	Phone (716) 857-7232
	Facsimile: (716) 857-7479
	Email: TSSsupport@natfuel.com
Credit	Credit & Receivables Management
	6363 Main Street
	Williamsville, NY 14221
	Phone (716) 857-7616
	Facsimile: (716) 857-7479
	Email: KawalerskiS@natfuel.com

	E NATURAL GAS INTERCONNECTION AGREEMENT NG OPERATOR CONTACTS ADDENDUM
CONTACT INFORMATION: R	NG Operator:
Legal/Contract Notices	
	Name:
	Address:
	Title:
	City/State/Zip:
	Phone(1):
	Phone(2):
	Facsimile:
	Email:
Emergency (24-Hour)	
	Name:
	Address:
	Title:
	City/State/Zip:
	Phone(1): Phone(2):
	Facsimile:
	Email:
Field/Coo Testing/Operations	
Field/Gas Testing/Operations	Neme
	Name: Address:
	Title:
	City/State/Zip:
	Phone(1):
	Phone(2):
	Facsimile:
	Email:
Accounting/Invoices	
-	Name:
	Address:
	Title:
	City/State/Zip:
	Phone(1):
	Phone(2):
	Facsimile:
Other	Name:
Other:	Name: Address:
	Title:
	City/State/Zip:
	Phone(1):
	Phone(2):
	Facsimile:
	Email:
Indeted Addendume should be cant to	NFGDC by facsimile: (814) 871-8061 or mailed.

RENEWABLE NATURAL GAS INTERCONNECTION AGREEMENT

<u>Between</u>

NFGDC and

EXHIBIT A

Receipt Points(s):

I

RENEWABLE NATURAL GAS INTERCONNECTION AGREEMENT

Between

NFGDC and ____

("RNG Operator")

EXHIBIT B **Renewable Natural Gas Quality Standards**

Renewable Natural Gas Quality Standards are based on the feedstock source utilized at the RNG Operator's Plant to generate Biogas that is processed and treated to produce RNG. RNG constituent testing shall be based on the following table:

	<u> TABLE 1: C</u>	onstituen	ts of Con	cern (COC	<u>C)</u>	
		Testing Required				
Parameter	<u>Threshold</u> <u>Level</u>	Landfill	<u>Dairy,</u> Swine	WWTP	Food Waste	<u>Gasifier,</u> <u>Syngas</u>
Water Content	<u>7 lbs. vapor</u> per MMcf **	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	Yes	Yes
<u>Sulfur (S)</u>	20 grains of total S per ccf	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	Yes	Yes
Hydrogen Sulfide (H ₂ S)	0.3 grain of H ₂ S per ccf **	Yes	Yes	<u>Yes</u>	Yes	Yes
Carbon Dioxide	<u>2 vol% **</u>	Yes	Yes	Yes	Yes	Yes
Carbon Dioxide and Nitrogen	<u>5 vol% **</u>	<u>Yes</u>	Yes	<u>Yes</u>	Yes	Yes
Oxygen	0.2 vol% **	Yes	Yes	Yes	Yes	Yes
Siloxanes	<u>0.1 mg Si/m³</u>	Yes	<u>N/A</u>	Yes	Yes	<u>N/A</u>
Ammonia	<u>0.001 vol%</u>	Yes	Yes	Yes	<u>Yes</u>	<u>Yes</u>
<u>Hydrogen</u>	<u>0.1 vol%</u>	Yes	Yes	Yes	<u>Yes</u>	Yes
Mercury	<u>0.08 mg/m³</u>	Yes	<u>N/A</u>	Yes	Yes	Yes
Biologicals	<u>≠</u>	Yes	Yes	Yes	Yes	<u>N/A</u>
Volatile Metals						
Arsenic	<u>0.38 mg/m³</u>	Yes	<u>N/A</u>	<u>N/A</u>	Yes	Yes
<u>Antimony</u>	<u>9 mg/m³</u>	Yes	<u>N/A</u>	<u>N/A</u>	Yes	Yes
<u>Copper</u>	<u>0.9 mg/m³</u>	Yes	<u>N/A</u>	<u>N/A</u>	Yes	Yes
<u>Lead</u>	<u>1.125 mg/m³</u>	Yes	<u>N/A</u>	<u>N/A</u>	<u>Yes</u>	<u>Yes</u>
Volatile Organic Compounds						
<u>Ethylbenzene</u>	<u>120 ppmv</u>	Yes	<u>N/A</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
<u>Toluene</u>	<u>3600 ppmv</u>	Yes	<u>N/A</u>	Yes	<u>Yes</u>	<u>Yes</u>
Semi-volatile Organic Compounds						
<u>n-Nitroso-di-n-</u> propylamine	<u>0.12 ppmv</u>	<u>Yes</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	Yes

		Testing Required				
Parameter	<u>Threshold</u> <u>Level</u>	Landfill	<u>Dairy,</u> Swine	<u>WWTP</u>	<u>Food</u> Waste	<u>Gasifier,</u> Syngas
Halocarbons						
p-Dichlorobenzenes	<u>19 ppmv</u>	Yes	<u>N/A</u>	Yes	<u>Yes</u>	<u>Yes</u>
Vinyl Chloride	<u>6.6 ppmv</u>	Yes	<u>N/A</u>	Yes	Yes	Yes
Aldehydes and Ketone	<u>es</u>					
Methacrolein	<u>5.55 ppmv</u>	Yes	Yes	Yes	Yes	Yes
Polychlorinated biphenyls (PCBs)	Below Detectable Limit	<u>Yes</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>Pesticides</u>	Below Detectable Limit	<u>Yes</u>	<u>N/A</u>	<u>Yes</u>	Yes	<u>N/A</u>

TABLE 1. Constituents of Concern (COC) continued

≠ 4 x 10⁴ /scf (qPCR per APB, SRB, IOB^a group) and commercially free of bacteria of >0.2 microns
 ** Tariff specified limit.

Note: If mixed feedstock sources are utilized by the RNG Operator, NFGDC may test for all COCs.

RENEWABLE NATURAL GAS INTERCONNECTION AGREEMENT

Between

NFGDC and

("RNG Operator")

EXHIBIT C

Insurance Requirements

RNG Operator shall furnish insurance listed below. Insurance shall be placed with insurance carriers acceptable to NFGDC. Any insurance carrier providing such insurance must have at least an A- rating and financial category of VII or better as defined by A. M. Best. RNG Operator shall maintain this insurance at all times during performance of this Contract. In addition, if insurance is written on a "claims-made" basis, such insurance shall be maintained by RNG Operator for a minimum period of three years after the completion of the Contract. RNG Operator may elect to extend the discovery period under the existing policy for not less than three years.

RNG Operator, and any subcontractors, shall have NFGDC named as an additional insured under the insurance policies required below (with the exception of the professional liability policy (if applicable) and the workers' compensation policy which shall include alternate employer endorsement), including any excess or umbrella policies for ongoing/current and completed operations. The coverage must be provided on a primary non-contributing basis and the limits will be exhausted before any other insurance is to apply.

RNG Operator shall require all subcontractors to the extent such are permitted, to furnish insurance listed below and such insurance shall be in accordance with all requirements of this section. In the event that subcontractors' insurance does not meet the minimum requirements, RNG Operator's insurance will respond.

Each insurance policy required by this section shall contain a waiver of the right of subrogation, as well as the right of set off and any right of deduction, by the respective underwriter(s) of such policy, and shall be endorsed to provide for severability of interest, cross liability or cross suit protection, so that each insured is treated separately under the policy. The waiver of the right of subrogation, setoff and deduction shall also extend to parent companies, subsidiaries and affiliates of NFGDC and the officers, directors, agents, and employees of such entities. These provisions must survive expiration, termination or cancellation of this Contract.

<u>RNG</u> Operator or subcontractor that is a legally permitted and qualified self-insurer in the state in which services are to be performed, may furnish proof that it is such a self-insurer and evidence of any excess coverage. RNG Operator will maintain financial responsibility of any-self-insured retention or deductible.

The Following Insurance Policies Are Required

Workers' Compensation and Employer's Liability Insurance - RNG Operator or subcontractor, shall maintain Workers' Compensation and Employer's Liability Insurance of the state in which the services are to be performed.

a) RNG Operator shall determine if the work to be performed under this Contract requires coverage by any Federal Compensation statutes including, but not limited to, the Longshoremen's and Harbor Workers' Compensation Act or Jones Act and provide such coverage. b) The Commercial Umbrella and/or Employer's Liability limits must be in an amount not less than the amount for each accident included in the workers' compensation policy or separately obtained in those states that do not provide employer liability under the workers' compensation policy.

Commercial General Liability and Commercial Umbrella Liability Insurance - Commercial general liability insurance and commercial umbrella liability insurance with a combined limit for Bodily Injury and Property Damage of not less than \$5,000,000 each occurrence. Such insurance policies must include, at a minimum, coverage for contractual liability, personal injury and advertising, broad form property damage, premises/operations, independent operators, and products and completed operations and shall remain in force for a period of at least 5 years after completion of the work. Any exclusion for "Explosion", "Collapse" and/or "Underground" (XCU) operations shall be removed from such coverage RNG Operator, and any subcontractors, shall have NFGDC named as an additional insured including any excess or umbrella policies for ongoing/current and completed operations.

Business Automobile Liability and Commercial Umbrella Liability Insurance - Business automobile liability insurance and commercial umbrella liability insurance with a combined single limit of not less than \$5,000,000 each occurrence. Such insurance policies must include, at a minimum, coverage for owned, hired and non-owned vehicles and related equipment.

Professional Liability Insurance - Professional liability insurance with a limit of not less than \$5,000,000 each claim and aggregate. This is to provide coverage for claims arising out of the performance of professional services under this Contract and caused by any error, omission, or negligent act for which RNG Operator is held liable. RNG Operator shall maintain this insurance for a minimum period of three years after the completion of the Contract. (The Professional Liability Insurance requirement is applicable if the RNG Operator or subcontractor performs professional services for any reason as part of the Contract.)

Certificates of insurance shall state that the insurance carrier has issued the policies providing for the insurance specified herein, that such policies are in force, that NFGDC is an additional insured under the policies for ongoing/current and completed operations, that all policies contain contractual liability coverage, and RNG Operator will give NFGDC thirty (30) days prior written notice of any material change in, non-renewal, or cancellation of, such policies. If such insurance policies are subject to any exceptions to the terms specified herein, such exceptions shall be explained in full in such certificates. NFGDC may, at its discretion, require RNG Operator, or any subcontractor to obtain insurance policies that are not subject to any exceptions to the terms specified herein. For such time as insurance is required under this Contract, RNG Operator shall provide NFGDC with annual current certificates of insurance 15 days prior to the anniversary date of each policy evidenced. At the request of NFGDC, RNG Operator shall provide NFGDC with current copies of all insurance policies and related endorsements required under this section.

FAILURE TO MAINTAIN THE INSURANCE COVERAGE PROVIDED HEREIN THROUGHOUT THE LIFE OF THIS CONTRACT SHALL CONSTITUTE A MATERIAL BREACH OF THE CONTRACT. IT IS THE RNG OPERATOR'S OBLIGATION TO PROVIDE NFGDC WITH CURRENT CERTIFICATES OF INSURANCE.

Certificate of Insurance Requirements

a) Before entering the project site or starting work, the RNG Operator will give the NFGDC a certificate of insurance issued by a duly authorized representative of their insurer certifying that at least the minimum coverages required herein are in effect. The NFGDC will have the right, but not the obligation, of prohibiting the RNG Operator or sub-RNG Operator from entering the project site until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by the NFGDC. Certificates of insurance shall be sent to:

> National Fuel Risk Management Department P. O. Box 2081 Erie, PA 16512

- b) Failure of the NFGDC to demand such certificate or other evidence of full compliance with these insurance requirements or failure of the NFGDC to identify a deficiency from evidence provided will not be construed as a waiver of the RNG Operator's obligation to maintain insurance.
- c) The acceptance of delivery by the NFGDC of any certificate of insurance evidencing the required coverages and limits does not constitute approval or agreement by the NFGDC that the insurance requirements have been met or that the insurance policies shown in the certificates of insurance are in compliance with the requirements.
- <u>d)</u> If the RNG Operator fails to maintain the insurance as set forth herein, the NFGDC will have the right, but not the obligation, to purchase said insurance at the RNG Operator's expense.
 <u>Alternatively, the RNG Operator's failure to maintain the required insurance may result in termination of this Contract at the NFGDC's option</u>
- e) If any of the coverages are required to remain in force after final payment, an additional certificate evidencing continuation of such coverage will be submitted with the RNG Operator's final invoice.



This Data Security Agreement ("Agreement") effective, is madeand entered into thisday of, 20by and between NationalFuel Gas Distribution Corporation ("Company"), with offices at 6363 Main Street,Williamsville, NY and, an Energy Service Entity ("ESE") withoffices at; and togetherwith Company the ("Parties" and each, individually, a "Party").

RECITALS

WHEREAS, ESE desires to have access to certain Company customer information, either customer-specific or aggregated customer information, the Company is obligated to provide information under 52 Pa. Code § 62.76 and/or the Pennsylvania Public Utility Commission ("Commission") has ordered Company to provide to ESE customer information; and

WHEREAS, ESE has obtained consent from all customers for whom the ESE intends to obtain information from Company; and

<u>WHEREAS, Natural Gas Supplier ("NGS"), may utilize a third party to fulfill its</u> Service obligations, including but not limited to, Electronic Data Interchange ("EDI") communications with Company, schedule gas supplies for DMT Service Customer(s), DMLMT Service Customer(s), MMT Customer(s) and/or SATC Customer(s) via Company's Transportation Scheduling System ("TSS") and/or access Confidential Information via Company issued accounts/passwords ; and

<u>WHEREAS, a DMT Service Customer, DMLMT Service Customer or MMT</u> <u>Customer (individually, "Standalone Customer") may schedule its own gas supplies via</u> <u>Company's TSS without an NGS; and</u>

WHEREAS, a Standalone Customer with daily metering and communications equipment which enable the Company to obtain each day meter readings of the volume of gas delivered to the Company for the Customer's account and the volume of gas from the Company used by the Customer each day may access to such information via Company issued accounts/passwords; and

WHEREAS, NGS or Standalone Customer utilization of a third party provider does not relieve NGS or Standalone Customer of their transactional obligation such that they must ensure that the third party provider must comply with all NGS or Standalone Customer obligations; and

WHEREAS, Company and ESE also desire to enter into this Agreement to establish, among other things, the full scope of ESE's obligations of security and confidentiality with respect to the Confidential Information in a manner consistent with the rules and regulations of the Commission and requirements of Company; and

NOW, THEREFORE, in consideration of the premises and of the covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree

as follows:

1. Definitions.

- a. "Confidential ESE Information" means information that ESE is: (A) required by 52 PA Code §§ 59.91-59.99 to enroll the customer or (B) any other information provided by ESE to Company and marked confidential by the ESE, but excludes (i) information which is or becomes generally available to the public other than as a result of a disclosure by Receiving Party or its Representatives; (ii) information which was already known to Receiving Party on a nonconfidential basis prior to being furnished to Receiving Party by Disclosing Party; (iii) information which becomes available to Receiving Party on a nonconfidential basis from a source other than Disclosing Party or a representative of Disclosing Party if such source was not subject to any prohibition against transmitting the information to Receiving Party and was not bound by a confidentiality agreement with Disclosing Party; (iv) information which was independently developed by the Receiving Party or its Representatives without reference to, or consideration of, the Confidential Information; or (v) information provided by the customer with customer consent where the customer expressly agrees that the information is public.
- b. "Confidential Company Information" means information that Company is: (A) required by 52 Pa. Code § 62.76to provide to NGS or Standalone Customer or (B) any other information provided to ESE by Company and marked confidential by the Company at the time of disclosure, but excludes (i) information which is or becomes generally available to the public other than as a result of a disclosure by Receiving Party or its Representatives; (ii) information which was already known to Receiving Party on a non-confidential basis prior to being furnished to Receiving Party by Disclosing Party; (iii) information which becomes available to Receiving Party on a non-confidential basis from a source other than Disclosing Party or a representative of Disclosing Party if such source was not subject to any prohibition against transmitting the information to Receiving Party and was not bound by a confidentiality agreement with Disclosing Party; (iv) information which was independently developed by the Receiving Party or its Representatives without reference to, or consideration of, the Confidential Information; or (v) information provided by the customer with customer consent where the customer expressly agrees that the information is public.
- c. "Confidential Information" means, collectively, Confidential Company Information or Confidential ESE Information.
- d. "Data Protection Requirements" means, collectively, (A) all national, state, and local laws, regulations, or other government standards relating to the protection of information that identifies or can be used to identify an individual that apply with respect to ESE or its Representative's Processing of Confidential Company Information; (B) industry best practices or frameworks to secure

information, computer systems, network, and devices using a defense-in-depth approach, such as and including, but not limited to, NIST SP 800-53, ISO 27001 / 27002, COBIT, CIS Security Benchmarks, Top 20 Critical Controls as best industry practices and frameworks may evolve over time; and (C) Commission rules, regulations, and guidelines relating to confidential data.

- e. "Data Security Incident" means a situation when Company or ESE reasonably believes that there has been: (A) the loss or misuse (by any means) of Confidential Information; (B) the unauthorized acquisition of computerized data that compromises the security, confidentiality, or integrity of Confidential Information, or Private Information, computer systems, network and devices used by a business; (C) any other act or omission that compromises the security, confidentiality, or integrity of Confidential Information, or (D) any material breach of any Data Protection Requirements in relation to the Processing of Confidential Information, including by any current or former <u>Representatives.</u>
- f. "Customer Agent" is a third party that has access to Confidential Information via Company issued accounts/passwords and/or schedules gas on behalf of a NGS. Customer Agent includes, but is not limited to, third party Brokers Nonselling marketer and Nontraditional marketer as defined 52 PA Code § 62.101 that access Confidential Information via Company issued accounts/passwords."
- g. "Standalone Customer" is a customer eligible for natural gas transportation service under 52 PA Code § 60.3 defined in Company's Tariff as a DMT Service Customer, DMLMT Service Customer or MMT Customer, that schedules its own gas supplies via Company's TSS without an NGS.
- h. "NGS" has the meaning set forth in 52 PA Code § 62.72 and as it may be amended from time to time, which is "An entity other than an NGDC, but including NGDC marketing affiliates, which provides natural gas supply services to retail gas customers utilizing the jurisdictional facilities of an NGDC."
- i. "ESE" shall have the meaning set forth in the Recitals and for the avoidance of doubt, includes but is not limited to NGSs or Standalone Customers, Customer Agents and contractors of such entities with which Company electronically exchanges data other than by email and any other entities with which Company electronically exchanges data other than by email or by a publicly available portal.
- i. "PUC" or "Commission" shall have the meaning attributed to it in the Recitals.
- k. "Processing" (including its cognate, "process") means any operation, action, error, omission, negligent act, or set of operations, actions, errors, omissions, or negligent acts that is performed using or upon Confidential Information or Company Data, whether it be by physical, automatic or electronic means, including, without limitation, collection, recording, organization, storage,

access, adaptation, alteration, retrieval, use, transfer, hosting, maintenance, handling, retrieval, consultation, use, disclosure, dissemination, exfiltration, taking, removing, copying, processing, making available, alignment, combination, blocking, deletion, erasure, or destruction.

- I. "Third-Party Representatives" or "Representatives" means those agents, including Customer Agents, acting on behalf of NGSs or Standalone Customers, that are contractors or subcontractors and that store, transmit or process Confidential Company Information. For the avoidance of doubt, Third-Party Representatives do not include ESEs and their members, directors, officers or employees who need to know Confidential Company Information for the purposes of providing Services.
- m. "Services" mean any assistance in the competitive markets provided by ESEs to end use customers or NGSs or Standalone Customers that also require interaction with a Company, including but not limited to the electronic exchange of information with a Company, and must be provided in accordance with the Governing Documents.
- n. "Company Data" means data held by Company, whether produced in the normal course of business or at the request of ESE.
- o. "Tariff" means (Gas--Pa. P.U.C. No. 9 or any superseding tariff).
- p. "DMT Service Customer" means, unless redefined in any superseding tariff, any entity that has executed a DMT Service Agreement with the Company for transportation of gas by the Company under Tariff Rate Schedule For Daily Metered Transportation Service.
- <u>q.</u> "DMLMT Service Customer" means, unless redefined in any superseding tariff, any entity that has executed a DMLMT Service Agreement with the Company for transportation of gas by the Company under Tariff Rate Schedule For Daily Metered Transportation Service.
- r. "MMT Customer" means, unless redefined in any superseding tariff, a customer that receives transportation service from the Company under this rate schedule and receives gas supply from a Monthly Metered Natural Gas Supplier.
- s. "SATC Customer" means, unless redefined in any superseding tariff, a customer that has enrolled to receive gas supply service from a qualified supplier under the Company's Small Aggregation Transportation Supplier Service.
- 2. Scope of the Agreement. This Agreement shall govern security practices of ESEs that have electronic communications, other than email, with the Company and security practices that apply to all Confidential Company Information disclosed to ESE or to which ESE is given access by Company, including all archival or backup copies of the Confidential Company Information held or maintained by ESE (or

it its Representatives) and Confidential ESE Information.⁸ No financial information, other than billing information, will be provided pursuant to this Agreement. If any information is inadvertently sent to ESE or Company, ESE or Company will immediately notify the Company/ESE and destroy any such information in the appropriate manner.

- 3. ESE Compliance with all Applicable Regulatory Requirements. The Parties agree that the 52 PA Code §§ 62.71 -62.81, Company's Tariff and Commission Orders set forth rules governing the protection of Confidential Information (collectively, "Governing Documents") and electronic exchange of information between the Parties, including but not limited to EDI.
 - NGS or Standalone Customer utilizes a Third-Party Representative as a vendor, agent or other entity to provide electronic exchange of information, other than by email, with Company. ESE will require Third-Party Representative to abide by the applicable Governing Documents.
- 4. Customer Consent. The Parties agree that the Governing Documents govern an ESE's obligation to obtain informed consent from all customers about whom ESE requests data from Company. The ESE agrees to comply with the Governing Documents regarding customer consent.
- 5. **Provision of Information.** Company agrees to provide to ESE or its Representatives, certain Confidential Company Information, as requested, provided that: (A) ESE and its Representatives are in compliance with the terms of this Agreement in all material respects; (B) if required by Company, ESE has provided and has required its Representatives to provide, to the satisfaction of Company any Vendor Product/Service Security Assessments or self-attestations (attached hereto as Exhibit A) or such other risk assessment forms as Company may require from time to time ("Assessment") and ESE will comply with the Company Assessment requirements as approved by the Company; (C) ESE (and its Representatives, as applicable) shall have and maintain throughout the term, systems and processes in place and as detailed in the Assessment acceptable to Company to protect system security and Confidential Company Information; and; (D) ESE complies and shall require its Third-Party Representatives who process Confidential Information to comply with Company's Assessment requirements as approved by the Company. Provided the foregoing prerequisites have been satisfied, ESE shall be permitted access to Confidential Company Information and/or Company shall provide such Confidential Company Information to ESE. Nothing in this Agreement will be interpreted or construed as granting either Party any license or other right under any patent, copyright, trademark, trade secret, or other proprietary right or any right to assert any lien over or right to withhold from

⁸ Where an ESE exclusively uses a Third Party Representative(s) to communicate electronically with a utility other than by email and the ESE's Third Party Representative executes a DSA with the utility, a DSA is not required of the ESE.

the other Party any Data and/or Confidential Information of the other Party. Company will comply with the security requirements set forth in its Assessment.

Confidentiality. ESE shall: (A) hold all Confidential Company Information in strict 6. confidence pursuant to the Governing Documents and Commission's orders; except as otherwise expressly permitted by Section 7 herein; (B) not disclose Confidential Company Information to any Third-Party Representatives, or affiliates, except as set forth in Section 7(a) of this Agreement; (C) not Process Confidential Company Information other than for the Services defined in the Recitals as authorized by this Agreement; (D) limit reproduction of Confidential Company Information; (E) store Confidential Company Information in a secure fashion at a secure location that is not accessible to any person or entity not authorized to receive the Confidential Company Information under the provisions hereof; (F) otherwise use at least the same degree of care to avoid publication or dissemination of the Confidential Company Information as ESE employs (or would employ) with respect to its own confidential information that it does not (or would not) desire to have published or disseminated, but in no event less than reasonable care: and (G) to the extent required by the Company, each Representative with a need to know the Confidential Company Information shall sign the Third-Party Representative Agreement set forth as Exhibit B to this Agreement. At all times, Company shall have the right for cause to request reasonable further assurances that the foregoing restrictions and protections concerning Confidential Company Information are being observed and ESE shall be obligated to promptly provide Company with the requested assurances.

Company shall: (A) hold all Confidential ESE Information in strict confidence: except as otherwise expressly permitted by Section 7 herein; (B) not disclose Confidential ESE Information to any other person or entity except as set forth in Section 7(a) of this Agreement; (C) not Process Confidential ESE Information other than for the Services defined in the Recitals as authorized by this Agreement; (D) limit reproduction of Confidential ESE Information; (E) store Confidential ESE Information in a secure fashion at a secure location that is not accessible to any person or entity not authorized to receive the Confidential ESE Information under the provisions hereof; (F) otherwise use at least the same degree of care to avoid publication or dissemination of the Confidential ESE Information as Company employs (or would employ) with respect to its own confidential information that it does not (or would not) desire to have published or disseminated, but in no event less than reasonable care; and (G) to the extent required by ESE, each Representative with a need to know the Confidential ESE Information shall sign the Third-Party Representative Agreement set forth as Exhibit B to this Agreement. At all times, ESE shall have the right for cause to request reasonable further assurances that the foregoing restrictions and protections concerning Confidential ESE Information are being observed and Company shall be obligated to promptly provide ESE with the requested assurances.

This Section 6 supersedes prior non-disclosure agreements between the Parties pertaining to Confidential Information.

7. Exceptions Allowing ESE to Disclose Confidential Company Information.

- a. **Disclosure to Representatives**. Notwithstanding the provisions of Section 6 herein. the Parties may disclose Confidential Information to their Third-Party Representatives who have a legitimate need to know or use such Confidential Information for the purposes of providing Services in accordance with the Governing Documents, provided that each such Third-Party Representative first: (A) is advised by the disclosing Party of the sensitive and confidential nature of such Confidential Information; (B) agrees to comply with the provisions of this Agreement, provided that with respect to Third-Party Representatives and this subsection (B), such Third-Party Representatives must agree in writing to be bound by and observe the provisions of this Agreement as though such Third-Party Representatives were a Party/ESE; and (C) signs the Third-Party Representative Agreement. All such written Agreements with Third-Party Representatives shall include direct liability for the Third-Party Representatives towards Company/ESE for breach thereof by the Third-Party Representatives, and a copy of such Agreement and each Third-Party Representative Agreement shall be made available to Company/ESE upon request. Notwithstanding the foregoing, the Parties shall be liable for any act or omission of a Third-Party Representative, including without limitation, those acts or omissions that would constitute a breach of this Agreement.
- b. **Disclosure if Legally Compelled**. Notwithstanding anything herein, in the event that a Party or any of its Third-Party Representatives receives notice that it has, will, or may become compelled, pursuant to applicable law or regulation or legal process to disclose any Confidential Information (whether by receipt of oral questions, interrogatories, requests for information or documents in legal proceedings, subpoenas, civil investigative demands, other similar processes, or otherwise), that Party shall, except to the extent prohibited by law, within one (1) business day, notify the other Party, orally and in writing, of the pending or threatened compulsion. To the extent lawfully allowable, the Parties shall have the right to consult and the Parties will cooperate, in advance of any disclosure, to undertake any lawfully permissible steps to reduce and/or minimize the extent of Confidential Information that must be disclosed. The Parties shall also have the right to seek an appropriate protective order or other remedy reducing and/or minimizing the extent of Confidential Information that must be disclosed. In any event, the Party and its Third-Party Representatives shall disclose only such Confidential Information which they are advised by legal counsel that they are legally required to disclose in order to comply with such applicable law or regulation or legal process (as such may be affected by any protective order or other remedy obtained by the Party) and the Party and its Third-Party Representatives shall use all reasonable efforts to ensure that all Confidential Information that is so disclosed will be accorded confidential treatment.
- 8. Return/Destruction of Information. Within thirty (30) days after Company's written demand, ESE shall (and shall cause its Third-Party Representatives to)

cease to access and Process Confidential Company Information and shall at the Company's option: (A) return such Confidential Company Information to Company in such manner, format, and timeframe as reasonably requested by Company or, if not so directed by Company, (B) shred, permanently erase and delete, degauss or otherwise modify so as to make unreadable, unreconstructible and indecipherable ("Destroy") all copies of all Confidential Company Information (including any and all extracts, compilations, studies, or other documents based upon, derived from, or containing Confidential Company Information) that has come into ESE's or its Third-Party Representatives' possession, including Destroying Confidential Company Information from all systems, records, archives, and backups of ESE and its Third-Party Representatives, and all subsequent access, use, and Processing of the Confidential Company Information by ESE and its Third-Party Representatives shall cease provided any items required to be maintained by governmental administrative rule or law or necessary for legitimate business or legal needs will not be destroyed until permitted and will remain subject to confidentiality during the retention period. ESE agrees that upon a customer revocation of consent, ESE warrants that it will no longer access through Company Confidential Company Information and that it will Destroy any Confidential Company Information in its or its Third-Party Representative's possession. Notwithstanding the foregoing, ESE and its Third-Party Representatives shall not be obligated to erase Confidential Company Information contained in an archived computer system backup maintained in accordance with their respective security or disaster recovery procedures, provided that ESE and its Third-Party Representatives shall: (1) not have experienced an actual Data Security Incident; (2) maintain Data Security Protections to limit access to or recovery of Confidential Company Information from such computer backup system and; (3) keep all such Confidential Company Information confidential in accordance with this Agreement. ESE shall, upon request, certify to Company that the destruction by ESE and its Third-Party Representatives required by this Section has occurred by (A) having a duly authorized officer of ESE complete, execute, and deliver to Company a certification and (B) obtaining substantially similar certifications from its Third-Party Representatives and maintaining them on file. Compliance with this Section 8 shall not relieve ESE from compliance with the other provisions of this Agreement. The written demand to Destroy or return Confidential Company Information pursuant to this Section may occur if the ESE has been decertified pursuant to the Governing Documents, the Company has been notified of a potential or actual Data Security Incident and Company has a reasonable belief of potential ongoing harm or the Confidential Company Information has been held for a period in excess of its retention period. The obligations under this Section shall survive any expiration of termination of this Agreement. Subject to applicable federal, state and local laws, rules, regulations and orders, at ESE's written demand and termination of electronic exchange of data with Company, Company will Destroy or return, at ESE's option, Confidential ESE Information.

9. Audit. Upon thirty (30) days notice to ESE, ESE shall, and shall require its Third-Party Representatives to permit Company, its auditors, designated

representatives, to audit and inspect, at Company's sole expense (except as otherwise provided in this Agreement), and provided that the audit may occur no more often than once per twelve (12) month period (unless otherwise required by Company's regulators). The audit may include (A) the facilities of ESE and ESE's Third-Party Representatives where Confidential Company Information is Processed by or on behalf of ESE; (B) any computerized or paper systems used to Process Confidential Company Information; and (C) ESE's security practices and procedures, facilities, resources, plans, procedures, and books and records relating to the privacy and security of Confidential Company Information. Such audit rights shall be limited to verifying ESE's compliance with this Agreement, including all applicable Data Protection Requirements. If the ESE provides a SOC Il report or its equivalent to the Company, or commits to complete an independent third-party audit of ESE's compliance with this Agreement acceptable to the Company at ESE's sole expense, within one hundred eighty (180) days, no Company audit is necessary absent a Data Security Incident. Any audit must be subject to confidentiality and non-disclosure requirements set forth in Section 6 of this Agreement. Company shall provide ESE with a report of its findings as a result of any audit carried out by or on behalf of Company. ESE shall, within thirty (30) days, or within a reasonable time period agreed upon in writing between the ESE and Company, correct any deficiencies identified by Company, and provide the SOC II audit report or its equivalent or the report produced by the independent auditor to the Company and provide a report regarding the timing and correction of identified deficiencies to the Company.

- 10. Investigation. Upon notice to ESE, ESE shall assist and support Company in the event of an investigation by any regulator or similar authority, if and to the extent that such investigation relates to Confidential Company Information Processed by ESE on behalf of Company. Such assistance shall be at Company's sole expense, except where such investigation was required due to the acts or omissions of ESE or its Representatives, in which case such assistance shall be at ESE's sole expense.
- 11. Data Security Incidents. ESE is responsible for any and all Data Security Incidents involving Confidential Company Information that is Processed by, or on behalf of, ESE. ESE shall notify Company in writing immediately (and in any event within forty-eight (48) hours) whenever ESE reasonably believes that there has been a Data Security Incident. After providing such notice, ESE will investigate the Data Security Incident, and immediately take all necessary steps to eliminate or contain any exposure of Confidential Company Information and keep Company advised of the status of such Data Security Incident and all matters related thereto. ESE further agrees to provide, at ESE's sole cost: (1) reasonable assistance and cooperation requested by Company and/or Company's designated representatives, in the furtherance of any correction, remediation, or investigation of any such Data Security Incident; (2) and/or the mitigation of any damage, including any notification required by law or that Company may determine appropriate to send to individuals impacted or potentially impacted by the Data

Security Incident; and (3) and/or the provision of any credit reporting service required by law or that Company deems appropriate to provide to such individuals. In addition, within thirty (30) days of confirmation of a Data Security Incident, ESE shall develop and execute a plan, subject to Company's approval, which approval will not be unreasonably withheld, that reduces the likelihood of a recurrence of such Data Security Incident. ESE agrees that Company may at its discretion and without penalty immediately suspend performance hereunder and/or terminate the Agreement if a Data Security Incident occurs and it has a reasonable belief of potential ongoing harm. Any suspension made by Company pursuant to this paragraph 11 will be temporary, lasting until the Data Security Incident has ended, the ESE security has been restored to the reasonable satisfaction of the Company so that Company IT systems and Confidential Company Information are safe and the ESE is capable of maintaining adequate security once electronic communication resumes. Actions made pursuant to this paragraph, including a suspension will be made, or subject to dispute resolution and appeal as applicable, pursuant to the Governing Documents processes as approved by the Commission.

- 12. Cybersecurity Insurance Required. ESE shall carry and maintain Cybersecurity insurance in an amount of no less than \$5,000,000 per incident. Company will maintain at least \$5,000,000 of Cybersecurity insurance.
- 13. No Intellectual Property Rights Granted. Nothing in this Agreement shall be construed as granting or conferring any rights, by license, or otherwise, expressly, implicitly, or otherwise, under any patents, copyrights, trade secrets, or other intellectual property rights of Company, and ESE shall acquire no ownership interest in the Confidential Company Information. No rights or obligations other than those expressly stated herein shall be implied from this Agreement.

14. Additional Obligations.

- a. ESE shall not create or maintain data which are derivative of Confidential Company Information except for the purpose of performing its obligations under this Agreement or as authorized by the Governing Documents. For purposes of this Agreement, the following shall not be considered Confidential Company Information or a derivative thereof: (i) any customer contracts, customer invoices, or any other documents created by ESE that reference estimated or actual measured customer usage information, which ESE needs to maintain for any tax, financial reporting or other legitimate business purposes consistent with the Governing Documents; and (ii) Data collected by ESE from customers through its website or other interactions based on those customers' interest in receiving information from or otherwise engaging with ESE or its partners.
- b. ESE shall comply with all applicable privacy and security laws to which it is subject, including without limitation all applicable Data Protection Requirements and not, by act or omission, place Company in violation of any privacy or security law known by ESE to be applicable to Company.

- c. ESE shall have in place appropriate and reasonable processes and systems, including an Information Security Program, defined as having completed an accepted Attestation as reasonably determined by the Company in its discretion, to protect the security of Confidential Company Information and prevent a Data Security Incident, including, without limitation, a breach resulting from or arising out of ESE's internal use, processing, or other transmission of Confidential Company Information, whether between or among ESE's Third-Party Representatives, subsidiaries and affiliates or any other person or entity acting on behalf of ESE, including without limitation Third-Party Representatives. The Company's determination is subject to the dispute resolution process satisfactory to the Company. In the event the Company and ESE are unable to resolve the dispute by mutual agreement within thirty (30) days of said referral, the dispute shall be referred for mediation through the Commission's Office of Administrative Law Judge. A party may request mediation prior to that time if it appears that informal resolution is not productive.
- d. ESE and Company shall safely secure or encrypt during storage and encrypt during transmission all Confidential Information.
- e. ESE shall establish policies and procedures to provide reasonable and prompt assistance to Company in responding to any and all requests, complaints, or other communications received from any individual who is or may be the subject of a Data Security Incident involving Confidential Company Information Processed by ESE to the extent such request, complaint or other communication relates to ESE's Processing of such individual's Confidential Company Information.
- f. ESE shall establish policies and procedures to provide all reasonable and prompt assistance to Company in responding to any and all requests, complaints, or other communications received from any individual, government, government agency, regulatory authority, or other entity that is or may have an interest in the Confidential Company Information, data theft, or other unauthorized release of Confidential Company Information, disclosure of Confidential Company Information, or misuse of Confidential Company Information to the extent such request, complaint or other communication relates to ESE's accessing or Processing of such Confidential Company Information.
- g. ESE will not process Confidential Company Information outside of the United States or Canada absent a written agreement with Company. For the avoidance of doubt, Confidential Company Information stored in the United States or Canada, or other countries as agreed upon in writing will be maintained in a secure fashion at a secure location pursuant to the terms and conditions of this Agreement.

- **15. Specific Performance.** The Parties acknowledge that disclosure or misuse of Confidential Company Information in violation of this Agreement may result in irreparable harm to Company, the amount of which may be difficult to ascertain and which may not be adequately compensated by monetary damages, and that therefore Company shall be entitled to specific performance and/or injunctive relief to enforce compliance with the provisions of this Agreement. Company's right to such relief shall be in addition to and not to the exclusion of any remedies otherwise available under this Agreement, at law or in equity, including monetary damages, the right to terminate this Agreement for breach and the right to suspend the provision or Processing of Confidential Company Information hereunder. ESE agrees to waive any requirement for the securing or posting of any bond or other security in connection with Company obtaining any such injunctive or other equitable relief.
- 16. Indemnification. To the fullest extent permitted by law, ESE shall indemnify and hold Company, its affiliates, and their respective officers, directors, trustees, shareholders, employees, and agents, harmless from and against any and all loss, cost, damage, or expense of every kind and nature (including, without limitation, penalties imposed by the Commission or other regulatory authority or under any Data Protection Requirements, court costs, expenses, and reasonable attorneys' fees) arising out of, relating to, or resulting from, in whole or in part, the breach or non-compliance with this Agreement by ESE or any of its Third-Party Representatives except to the extent that the loss, cost, damage or expense is caused by the negligence, gross negligence or willful misconduct of Company.
- 17. Notices. With the exception of notices or correspondence relating to potential or pending disclosure under legal compulsion, all notices and other correspondence hereunder shall be sent by first class mail, by personal delivery, or by a nationally recognized courier service. Notices or correspondences relating to potential or pending disclosure under legal compulsion shall be sent by means of Express Mail through the U.S. Postal Service or other nationally recognized courier service which provides for scheduled delivery no later than the business day following the transmittal of the notice or correspondence and which provides for confirmation of delivery. All notices and correspondence shall be in writing and addressed as follows:

If to ESE, to: ESE Name: Name of Contact: Address: Phone: Email:

If to Company, to:Company Name:National Fuel Gas Distribution CorporationName of Contact:Rates and Regulatory Affairs DepartmentAddress:6363 Main Street, Williamsville, NY 14221

Phone:	716-857-6824
Email:	NFGratesPAD@natfuel.com

A Party may change the address or addressee for notices and other correspondence to it hereunder by notifying the other Party by written notice given pursuant hereto.

- **18.** Term and Termination. This Agreement shall be effective as of the date first set forth above and shall remain in effect until terminated in accordance with the provisions of the service agreement, if any, between the Parties or the Governing Documents and upon not less than thirty (30) days' prior written notice specifying the effective date of termination, provided, however, that any expiration or termination shall not affect the respective obligations or rights of the Parties arising under this Agreement prior to the effective date of termination. Company may terminate this Agreement if the ESE loses its status as a Licensed Supplier, has not served customers for two (2) years, or has not had electronic communication, other than by email, with Company for one (1) year. Further, Company may terminate this Agreement immediately upon notice to ESE in the event of a material breach hereof by ESE or its Third-Party Representatives. For the purpose of clarity, a breach of Sections 3-4, 6-11, 13, 14, 16, and 24 shall be a material breach hereof. Upon the expiration or termination hereof, neither ESE nor its Third-Party Representatives shall have any further right to Process Confidential Company Information or Customer Information and shall immediately comply with its obligations under Section 8 and the Company shall not have the right to process Confidential ESE Information and shall immediately comply with its obligations under Section 8.
- 19. Consent to Jurisdiction; Selection of Forum. ESE irrevocably submits to the jurisdiction of the Commission and courts located within the Commonwealth of Pennsylvania with regard to any dispute or controversy arising out of or relating to this Agreement. ESE agrees that service of process on it in relation to such jurisdiction may be made by certified or registered mail addressed to ESE at the address for ESE pursuant to Section 11 hereof and that such service shall be deemed sufficient even under circumstances where, apart from this Section, there would be no jurisdictional basis for such service. ESE agrees that service of process on it may also be made in any manner permitted by law. ESE consents to the selection of the Pennsylvania and United States courts within Erie County, Pennsylvania as the exclusive forums for any legal or equitable action or proceeding arising out of or relating to this Agreement.
- 20. Governing Law. This Agreement shall be interpreted and the rights and obligations of the Parties determined in accordance with the laws of the Commonwealth of Pennsylvania, without recourse to such state's choice of law rules.
- 21. Survival. The obligations of ESE under this Agreement shall continue for so long as ESE and/or ESE's Third-Party Representatives continue to have access to, are

in possession of or acquire Confidential Company Information even if all Agreements between ESE and Company have expired or been terminated.

- 22. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall together constitute one and the same instrument. Copies of this Agreement and copies of signatures on this Agreement, including any such copies delivered electronically as a .pdf file, shall be treated for all purposes as originals.
- 23. Amendments; Waivers. Except as directed by the Commission, this Agreement may not be amended or modified except if set forth in writing signed by the Party against whom enforcement is sought to be effective. No forbearance by any Party to require performance of any provisions of this Agreement shall constitute or be deemed a waiver of such provision or the right thereafter to enforce it. Any waiver shall be effective only if in writing and signed by an authorized representative of the Party making such waiver and only with respect to the particular event to which it specifically refers.
- 24. Assignment. This Agreement (and the Company's or ESE's obligations hereunder) may not be assigned by Company, ESE or Third Party Representatives without the prior written consent of the non-assigning Party, and any purported assignment without such consent shall be void. Consent will not be unreasonably withheld.
- 25. Severability. Any provision of this Agreement which is determined by any court or regulatory body having jurisdiction over this Agreement to be invalid or unenforceable will be ineffective to the extent of such determination without invalidating the remaining provisions of this Agreement or affecting the validity or enforceability of such remaining provisions.
- 26. Entire Agreement. This Agreement (including any Exhibits hereto) constitutes the entire Agreement between the Parties with respect to the subject matter hereof and any prior or contemporaneous oral or written Agreements or understandings with respect to such subject matter are merged herein. This Agreement may not be amended without the written Agreement of the Parties.
- 27. No Third-Party Beneficiaries. This Agreement is solely for the benefit of, and shall be binding solely upon, the Parties and their respective agents, successors, and permitted assigns. This Agreement is not intended to benefit and shall not be for the benefit of any party other than the Parties and the indemnified parties named herein, and no other party shall have any right, claim, or action as a result of this Agreement.
- 28. Force Majeure. No Party shall be liable for any failure to perform its obligations in connection with this Agreement, where such failure results from any act of God or governmental action or order or other cause beyond such Party's reasonable control (including, without limitation, any mechanical, electronic, or communications failure) which prevents such Party from performing under this

Agreement and which such Party is unable to prevent or overcome after the exercise of reasonable diligence. For the avoidance of doubt a Data Security Incident is not a force majeure event.

- 29. Relationship of the Parties. Company and ESE expressly agree they are acting as independent contractors and under no circumstances shall any of the employees of one Party be deemed the employees of the other for any purpose. Except as expressly authorized herein, this Agreement shall not be construed as authority for either Party to act for the other Party in any agency or other capacity, or to make commitments of any kind for the account of or on behalf of the other.
- 30. Construction. This Agreement shall be construed as to its fair meaning and not strictly for or against any party.
- 31. Binding Effect. No portion of this Agreement is binding upon a Party until it is executed on behalf of that Party in the space provided below and delivered to the other Party. Prior to such execution and delivery, neither the submission, exchange, return, discussion, nor the negotiation of this document, whether or not this document is then designated as a "draft" document, shall have any binding effect on a Party.

[signature page follows]

IN WITNESS WHEREOF, the Parties have executed and delivered this Agreement as of the date first above written.

NATIONAL FUEL GAS DISTRIBUTION CORPORATION	ESE
By:	By:
Name:	Name:
Title:	Title:

1

SELF-ATTESTATION OF INFORMATION SECURITY CONTROLS

National Fuel Gas Distribution Corporation ("Company") represents that for all information received from Third Party in response or pursuant to this Self-Attestation that is marked CONFIDENTIAL by Third Party (Confidential Self-Attestation Information) Company shall: (A) hold such Confidential Self-Attestation Information in strict confidence; (B) not disclose such Confidential Self-Attestation Information to any other person or entity; (C) not Process such Confidential Self-Attestation Information outside of the United States or Canada; (D) not Process such Confidential Self-Attestation Information for any purpose other than to assess the adequate security of Third party pursuant to this Self-Attestation and to work with Third party to permit it to achieve adequate security if it has not already done so; (E) limit reproduction of such Confidential Self-Attestation Information; (F) store such Confidential Self-Attestation Information in a secure fashion at a secure location in the United States or Canada that is not accessible to any person or entity not authorized to receive such Confidential Self-Attestation Information under the provisions hereof; (G) otherwise use at least the same degree of care to avoid publication or dissemination of such Confidential Self-Attestation Information as Company employs (or would employ) with respect to its own confidential information that it does not (or would not) desire to have published or disseminated, but in no event less than reasonable care.

The Requirements to complete the Self-Attestation are as follows (check all that apply to Third Party's computing environment, leave blank all that do not apply to Third Party's computing environment. For items that do not apply. If there are plans to address items that do not currently apply within the next 12 months, place an asterisk in the blank and the month/year the requirement is projected to apply to the Third Party's computing environment), comments regarding plans for compliance are encouraged:

 This SELF-ATTESTATION OF INFORMATION SECURITY CONTROLS

 ("Attestation"), is made as of this day of ..., 20 by ..., a third party ("Third Party") to Company.

<u>WHEREAS, Third Party desires to retain access to certain Confidential Company</u> Information⁹ (as defined in this Data Security Agreement), Third Party must THEREFORE self-

⁹ "Confidential Company Information" means, collectively, aggregated and customer-specific information that Company is: (A) required by 52 Pa. Code § 62.76and or (B) any other Data provided to ESE by Company and marked confidential by the Company at the time of disclosure, or (C) a Company's operations and/or systems, including but not limited to log-in credentials, but excludes (i) information which is or becomes generally available to the public other than as a result of a disclosure by Receiving Party or its Representatives; (ii) information which was already known to Receiving Party on a non-confidential basis prior to being furnished to Receiving Party by Disclosing Party; (iii) information which becomes available to Receiving Party on a non-confidential basis from a source other than Disclosing Party or a representative of Disclosing Party if such source was not subject to any prohibition against transmitting the information to Receiving Party and was not bound by a confidentiality agreement with Disclosing Party; (iv) information which was independently developed by the Receiving Party or its Representatives without reference to, or consideration of, the Confidential Information; or (v) information provided by the customer with customer consent where the customer expressly agrees that the information is public.

attest to Third Party's compliance with the Information Security Control Requirements ("Requirements") as listed herein. Third Party acknowledges that non-compliance with any of the Requirements may result in the termination of Company data access as per the discretion of Company, in whole or part, for its or their system(s). Any termination process will proceed pursuant to the Company's Tariff.

- An Information Security Policy is implemented across the Third Party corporation which includes officer level approval.
- An Incident Response Procedure is implemented that includes notification within 48 hours of knowledge of a potential incident alerting utilities when Confidential Company Information is potentially exposed, or of any other potential security breach.
- Role-based access controls are used to restrict system access to authorized users and limited on a need-to-know basis.
- Multi-factor authentication is used for all remote administrative access, including, but not limited to, access to production environments.
- All production systems are properly maintained and updated to include security patches on a periodic basis. Where a critical alert is raised, time is of the essence, and patches will be applied as soon as practicable.
- <u>Antivirus software is installed on all servers and workstations and is</u> <u>maintained with up-to-date signatures.</u>
- <u>All Confidential Company Information is encrypted in transit utilizing</u> <u>industry best practice encryption methods.</u>
- <u>All Confidential Company Information is secured or encrypted at rest utilizing</u> industry best practice encryption methods, or is otherwise physically secured.
- It is prohibited to store Confidential Company Information on any mobile forms of storage media, including, but not limited to, laptop PCs, mobile phones, portable backup storage media, and external hard drives, unless the storage media or data is encrypted.
- All Confidential Company Information is stored in the United States or Canada only, including, but not limited to, cloud storage environments and data management services.
- <u>Third Party monitors and alerts their network for anomalous cyber activity on a 24/7 basis.</u>
- <u>Security awareness training is provided to all personnel with access to</u> <u>Confidential Company Information.</u>
- Employee background screening occurs prior to the granting of access to Confidential Company Information.

	Replication of Confidential Company Information to non-company assets, systems, or locations is prohibited.
	Access to Confidential Company Information is revoked when no longer required, or if employees separate from the Third Party.
<u>Additio</u> <u>Require</u>	nally, the attestation of the following item is requested, but is NOT part of the ements:
	Third Party maintains an up-to-date SOC II Type 2 Audit Report, or other security controls audit report.
	<u>NESS WHEREOF, Third Party has delivered accurate information for this</u> of the date first above written.
Signature:	
Name:	
Title:	
Date:	

THIRD-PARTY REPRESENTATIVE AGREEMENT

 This Third-Party Agreement to be provided to the Company upon request.

 I,
 , have read the Agreement between
 ,

 ("Company") and
 , ("Company") dated
 ,

 20___ (the "Agreement") and agree to the terms and conditions contained therein. My duties and responsibilities on behalf of
 require me to have access to the Confidential Information disclosed by Company to the ESE pursuant to the Agreement.

Signature

Date