

Consultancy for standardizing the contracts for supply and pipeline transportation of natural gas in Colombia

June 21, 2011

Report 3

Team Leader:

- Paul Milgrom, paul@auctionomics.com

Additional team members:

- Bob Broxson, FTI Consulting, Bob.Broxson@fticonsulting.com
- Gustavo Suarez Camacho, Gsuarez@suzalegal.com
- Silvia Console Battilana, silviacb@auctionomics.com

Auctionomics and FTI consulting

209 Hamilton, Suite 220

CA 94301, Palo Alto

United States

Introduction 3

Our Approach 5

“Other” Terms 6

Summary of Recommendations 9

Market Characteristics and Evolving Contract Standards..... 11

Discussion of Colombian Law and Regulations..... 14

Results of Standardization in US and Europe 15

Recommendations Regarding the Number of Contracts..... 19

Conditional Firm Contract 21

Option Contract 22

Portfolio Sales for Suppliers Could Bring Clarity to Firm Sales 22

Liquidity and Damages..... 24

Terms to Be Standardized..... 25

Transportation Agreements 32

Conclusions..... 35

Introduction

A well-functioning natural gas market must rely on a system of regulations, policies and contracts that are easy to understand, reward good performance and enhance efficiency. Developing such a system requires a coordinated effort among many parties – essentially everyone in the industry, because the system must properly balance the needs of all the parties. In Colombia these parties include the government, producers, transporters, electric generators, distribution companies and commercial agents selling to retail customers.

Market development, however, is not a single event, but an ongoing process. Two reasons account for the continuous nature of market development. First, even if the environment itself were stable, the process of development takes time to implement and leads to new experiences and understandings that enable further constructive changes. Second, circumstances often change both predictably and unpredictably. New sources of supply and demand emerge and old sources grow or shrink. Sources of supply or demand may become more or less concentrated, changing the need or costs or benefits of various kinds of regulation.

Nevertheless, government regulations play a central role in the development of efficient markets. They can establish a structure in which all parties are confident about the rules and can compete on appropriately balanced terms.

CREG has already taken some initial steps to promote market development by retaining consultants focusing on the development of standardized contracts, auctions for firm

natural gas supplies and the formalized development of a secondary or spot market. More importantly, the government has commenced initiatives to introduce new regulatory policies and decrees that will provide more effective oversight and more transparency for all participants in the market and help eliminate regulatory uncertainties that have inhibited private contracting. With the introduction of new regulations, participants will be in a better position to be proactive in meeting the requirements of the market and effective in managing the energy needs of all Colombians.

The new policies, as presented in the “proposed decree” of 2011, will place the Colombian natural gas market on a transition path similar to the one taken in other open markets around the world. In the North American and European markets, the proactive steps of the governments, in consultation with industry, to bring about significant revision of regulatory policy, allowed for an orderly transition from a highly regulated market to a more open structure, with only minor disruptions.

Our task in this report is to make recommendations about contract standardization for the Colombian natural gas markets. Standardization is just one element in achieving an open market, but it is very crucial to success. But even standardization is not a one-step process. In the North American and European markets, the standardization process that began in 1985 still continues. In these two markets, the standardization process, although encouraged by regulators, was primarily led by the industry, with representatives of all sectors of the natural gas market participating. Similarly, while the Colombian effort has been initiated by the government, its success will depend crucially

on the industry's assuming an important role to insure that the contract terms which are introduced and adopted will protect the rights and legitimate interests of all parties.

In this report, we make recommendations regarding specific terms that should be standardized in the Colombian market. By adopting the standard definitions of these recommended terms, it is our view that the Colombian market will see more balance and consistency in its contracting and commercial practices.

Our Approach

We have approached the challenge of creating standardized terms by taking account of several factors and engaging in a series of steps, as follows:

First, we needed a clear understanding of the goals of the proposed reforms and the constraints imposed by law and regulation. Our understanding is that Colombian laws and regulations determine both. Our understanding of how Colombian law affects our efforts is recorded in a separate section of this report.

Second, we have reviewed approximately 450 Colombian contracts from recent years to achieve an understanding of the terms that have been used and the extensive variations among them.

Third, with CREG's leadership, we have participated in interviews with market participants. This helped to ensure that we have correctly understood both the current situation in Colombia and the practical factors which the participants regard as most important for our task of evaluating current contracts and making recommendations about standard contracts.

Fourth, we have conducted an historical analysis of the development of other natural gas markets, particularly in North America and Europe, finding that the problems associated with non-standard contracts that are currently being tackled in Colombia have close historical precedents in those other markets. Historical accounts of the problems created by non-standard contracts are directly applicable to the Colombian situation.

Fifth, we have reviewed the standard contract forms in Europe and North America as possible models that hold some lessons for Colombia. Still, we have identified differences between the Colombian market and these other natural gas markets that need to be analyzed for deciding about contract design.

Finally, to make a disciplined evaluation of how these differences between the natural gas markets in Colombia and other countries affect the most efficient contracting solutions, we take an analytical approach founded in “law-and-economics.” This approach analyzes how laws and contracts affect the economic efficiency of markets, particularly when parties are sometimes unable to perform their obligations or find performance to be very costly. We attach an appendix to this report describing the nature, origins and impact of the law-and-economics approach.

“Other” Terms

The main portion of this report focuses on particular terms that are ripe for standardization. In *the terms of reference* for this consultancy, we were also specifically asked to make recommendations about certain other elements of standardized

contracts, with the bulleted points below offered as leading examples. Most of these require only brief comment, which we supply here.

- *Contract Units.* The units for measurement of natural gas are neither a point of confusion for market participants nor one that affects parties' interests differently. The most common contracting unit in Colombian contracts is the MMBTU, and we propose that unit initially, in the hopes that it can become a consensus choice.
- *Amounts.* For purposes of contract standardization alone, there is no need to restrict the permissible contract amounts: the amounts could be any suitable quantities agreed by the buyer and seller. There could possibly be a small issue for the auction design, where some might believe it desirable to express quantities in multiples of a fixed unit, or to require certain minimum amounts for economy of trading. We defer to the auction consultancy for a recommendation on this matter.
- *Duration or Term.* The duration or term of a contract does not generally need to be standardized and can be left to industry participants. Any auction of contracts will require standard durations, and we expect that suppliers may offer to provide longer terms in the auction in exchange for a higher premium. We leave the specification of these durations to the auction consultancy.
- *Quality.* We understand that natural gas quality standards in Colombia are established by the CREG as is delineated in Section 6.3 of Resolution 071/99, RUT, and are incorporated by reference in the contracts utilized in the Colombian natural gas market.

- *Maximum interruptions.* This appears to be a contentious issue among some industry participants. Our proposal limits interruption in firm contracts, particularly as they relate to Exempting Events. This puts the responsibility for interruptions on the party most able to control them and, with prices determined in the market, any extra cost incurred by producers would be reflected in the contract price.
- *Damages for breach.* As discussed in this report, the economically efficient damages for breach depend on the nature of the secondary market and whether there is price regulation. As market and pricing information in Colombia becomes more readily available with the transition to a more open market, a “local” price or “Index” can eventually be created to provide a basis for the calculation of damages for breach. Until such an index comes into existence, we recommend that Colombia adopt the use of a third party or independent price that can be utilized in these calculations. We make a specific index recommendation in the next section.
- *Warranties.* Warranties are primarily concerned with buyer creditworthiness. We do not recommend standardization of this term except for the auction. Policies about buyer creditworthiness will also determine who is eligible to bid for how much gas in any proposed auction, and that affects the likely competitiveness of the auction. Recommendations about warranties need to be coordinated with the auction consultancy.

Summary of Recommendations

An important key to contract standardization for the natural gas market is that certain critical terms must be uniformly defined and accord well with best practice for the industry. These terms form the foundation of executing transactions which are consistent, understandable and equally enforced across the industry. Following are the terms that we recommend for standardization. Particular recommended definitions of these terms follow later in this report:

1. Firm Commitment
2. Interruptible Commitment
3. Force Majeure
4. Default
5. Special Circumstances, Exempting Events

As natural gas markets have developed in the international arena, these terms have come to be defined on a consistent basis in standardized contracts. While individual countries may have laws or codes that define these terms, it is important that the meaning of these terms also be clear within the context of the particular market and the commercial transactions that are executed therein. It is not realistic to expect that the “final” best definitions of terms for this market will be reflected in our initial recommendation. Over time, performance and market interactions will allow for the development of improved and more comprehensive definitions for the Colombian market. This will be similar to the process in other markets, which have developed contract terms and refined them with ever-increasing precision, leading to lower costs

and greater efficiency. As the market matures, other terms may be introduced to enhance market functionality further. For example, as the flow of information improves in the marketplace, definitions, or terms related to an “index” pricing may be introduced. This will be an indicator that the market is progressing. The use of this type of information will also be helpful in calculation of potential damages for default, a common term in the industry.

Our final recommendation concerns the index to be used for damage calculations. Since 1977, regulations have prescribed that the price for the La Guajira field is to be calculated and updated in February and August of each year. In calculating this price, the government currently uses third party information, specifically the Platts Gulf Coast Residual Fuel Oil Price Index, to determine the updated price for each period. As a gas price index, this appears flawed, because any gas index based on fuel oil prices is vulnerable to changes in the ratio of gas prices to oil prices.

We have analyzed this price index for the period of 2000 to present and compared it to the Henry Hub Monthly Index. Since 2009, the calculated La Guajira and Henry Hub prices have become increasingly correlated to one another. For the first five months of 2011, the la Guajira price has been essentially identical to the Henry Hub Index.

Because of the concentration in the Colombian market, it is likely that a Colombian gas price index that might be developed over the next few years would have a risk of manipulation. It is therefore our recommendation that the Colombian natural gas industry adopt the Henry Hub Index to calculate breach damages. Because decisions

about breach are made on a daily basis, we recommend that damages be based on the Henry Hub Index on the day of breach.

Market Characteristics and Evolving Contract Standards

As described in our recent report, “History of Standardization of Natural Gas Contracts”, historical processes to reach an open market take time and a progression of both regulatory and legal changes coupled with an acceptance by the industry of a need for change in the way companies do business. In the United States and Canada, for instance, until about 1985, the markets were highly regulated and controlled by a relatively small number of participants, with the vast majority of natural gas purchased, transported and sold by a single vertically integrated entity. In turn, once the gas was sold, it was distributed to commercial, industrial and retail customers by a local monopolistic entity, the Local Distribution Company (LDC). The prices and tariffs across the supply chain were controlled by local, state and federal government agencies and there was effectively no competition in the market, other than where multiple pipelines served a particular market. Natural gas prices were set at a national level. As the move towards deregulation became a reality, the controls were gradually removed, and voluntary market transactions dictated the price of gas. The market grew in sophistication, as companies adjusted to the new market-based reality, and prices became responsive to economic forces of supply and demand. The pipeline companies moved towards a shipper-only model, and the LDC’s were opened up to allow customers access to the market, and the ability to buy directly from producers and market agents. Along with the deregulation of the market came the introduction of independent or third party merchant or trading companies.

Initially, each of these market participants developed its own distinctive contract, which dictated the specific terms desired by that company. The result was a “negotiation” as to whose contract would be used as the base, and then a negotiation as to the desired terms of the contract. The contracting costs were high because of these additional steps required to transact business. As described in our earlier reports, in the early to mid-1990’s (late 1990’s in Europe) there was a move in the industry to develop standardized contracts. The result was the development of standard contracts that were accepted across the industry. The contract forms included the Gas Industry Standards Board (GISB) form contract in the USA, the GasEDI standard form contract in Canada and the European Federation of Energy Traders (EFET) standard form contract in Europe. The GISB was ultimately replaced by the North American Energy Standards Board (NAESB) form contract, which remains in use today.

Both the European and North American markets are significantly larger than that of Colombia and this larger size is a distinct advantage with regard to standardization because there is not as much focus on a singular geographic region. For instance, the US natural gas market consumes approximately 23 Trillion Cubic Feet (TCF) of natural gas annually. In non-winter months, demand is approximately 55 Billion Cubic Feet (BCF) per day, with demand peaking in the winter at approximately 70 BCF. With this significant market and supply size, and the addition of over 3 TCF of storage capacity, the US market provides much more capability to respond to individual supply disruptions and market fluctuations. In Colombia, the gas market is much smaller – approximately 1,000,000 MMBtu (or 1 BCF) per day – with supply coming from two major sources. Another important difference is that Colombia lacks the underground

storage capacity that is used in North American (and Europe) both to adapt to interruptions and to match seasonal variations in demand. For all of these reasons, supply disruptions that would be considered minor and easily manageable in North America or Europe are much more significant in Colombia. The standardization process must take account of all these differences, including provisions and language that fit Colombia's unique market circumstances.

One implication of the greater liquidity and flexibility of more developed markets is that interruptions in supply are more easily accommodated. This allows greater reliance on firm gas contracts with appropriate damage clauses. By including damage terms that relate failures to deliver gas to spot market prices, producers are provided with incentives for what is sometimes called "efficient breach," which means that gas supplies will be interrupted whenever any event happens that makes the cost of delivering gas higher than its value to the system. In a system like Colombia's with no developed storage capacity, no good substitute for production from the two major fields, and only a small secondary market, the contracts for gas-fired power plants, or any buyer requiring firm gas supplies, need very firm assurances of physical delivery of gas, especially in times of greatest supply interruption.

Another factor of significance in Colombia is the independence of the two major pipeline systems. If there is a standardization process across the pipelines' contracts, it should focus on areas where the two main systems share commonality in regulation and operations. In other markets it is not unusual – in fact it is common – for pipelines to have differing tariffs while operating under the same regulations. One way to allow the pipeline systems to interact in support of both the primary and secondary markets would

be to establish Pooling Points on the systems that would allow the various participants to exchange gas supplies across the two currently separated systems. This has been successfully done in other countries, but would require some cooperation from the pipelines. An example of how this could work would be to establish a Pooling Point at La Guajira Field where both pipelines have a presence. Those producers with production at both La Guajira and Cusiana could establish accounts to exchange gas supplies at these two major supply points and could potentially mitigate some percentage of supply disruptions at one field with gas from another. This is only an example, and the physical parameters have not been reviewed to determine the probability of success. Nonetheless, similar exchange mechanisms are commonly used in other markets and may be beneficial for Colombia.

[Discussion of Colombian Law and Regulations](#)

Pursuant to articles 73 and 74 of Law 142 of 1994, contract standardization must be carried out within the scope of the powers and authorities vested in the Comisión de Regulación de Energía y Gas -CREG- (Energy and Gas Regulatory Commission), in order to foster competitiveness between natural gas service providers, increase efficiency and quality of the services rendered, and avoid anti-competitive practices or an abuse of dominant position. Considering that under several regulations some terms may have different scope or meaning, as noted in previous reports, we recommend unifying the scope of the terms used by service providers and by the regulatory agency so as to avoid different interpretations that adversely affect regulatory efficiency and compromise attainment of its goals.

Likewise, contract standardization should be carried out pursuant to the principles provided for in the preliminary title of the above-mentioned domicile public services law, and in keeping with its previously mentioned goals, which are repeatedly stated throughout the statute in compliance with constitutional provisions. Additionally, as provided for in the law, contractual terms shall be governed by private law, and particularly subordinated to public order imperative legal provisions, as well as to special rules provided for in articles 35 and 38 of Law 142 of 1994, and applicable CREG resolutions – it is understood that the resolutions may be modified by the regulatory commission – unless otherwise expressly provided by law.

Put less formally, this means that despite the legislative parameters that guide these regulations and the awarding of contracts to natural gas public service providers, CREG may exercise its discretionary authority to regulate all matters falling under its sphere of competence.

[Results of Standardization in US and Europe](#)

As we have described in our earlier reports, standardization enhances efficiency by allowing the parties to focus on execution of transactions rather than in negotiating individual contracts. At the beginning of the move to standardization in the North American markets, there was a clear and explicit recognition of the problems caused by non-standard contracts. Below, we quote from a 1996 presentation by Carolyn Hazel, Senior Counsel at ConocoPhillips emphasizing exactly that point.

“While all of these changes have been helpful, current gas marketing practices in general do not meet the time requirements imposed by the commercial environment of the spot market. First, each marketing company blithely charges its marketers to use its own model form. Therefore, in each new prospective commercial relationship, the party

perceiving itself to have the lesser economic clout must review, consider and negotiate the base terms and conditions proposed by the other party. To exacerbate this situation, most marketers revise their base terms and conditions periodically, requiring repeated review and negotiation of contracts between old trading partners. Finally, the vocabulary for spot gas contracts is not standard. Therefore, even where base terms and conditions are neatly in place between parties, the traders do not remember the specific vocabulary used in a specific agreement, so that the vocabulary used on the transaction confirmation (which was drafted for use with a different base contract) does not match the vocabulary used in the base contract, resulting in considerable ambiguity.”¹

The “ambiguity” to which Hazel refers was rampant in the North American natural gas market and the desire to solve the ambiguity problem contributed momentum to the drive for standardization, which has succeeded in drastically reducing the cost of doing business. In concluding her comments on contracting practices, Ms. Hazel made a statement that is relevant today for markets like Colombia, describing the misunderstanding, confusion and economic loss that are suffered when there are too many different contract versions, and potentially hundreds of interpretations of the contract language.

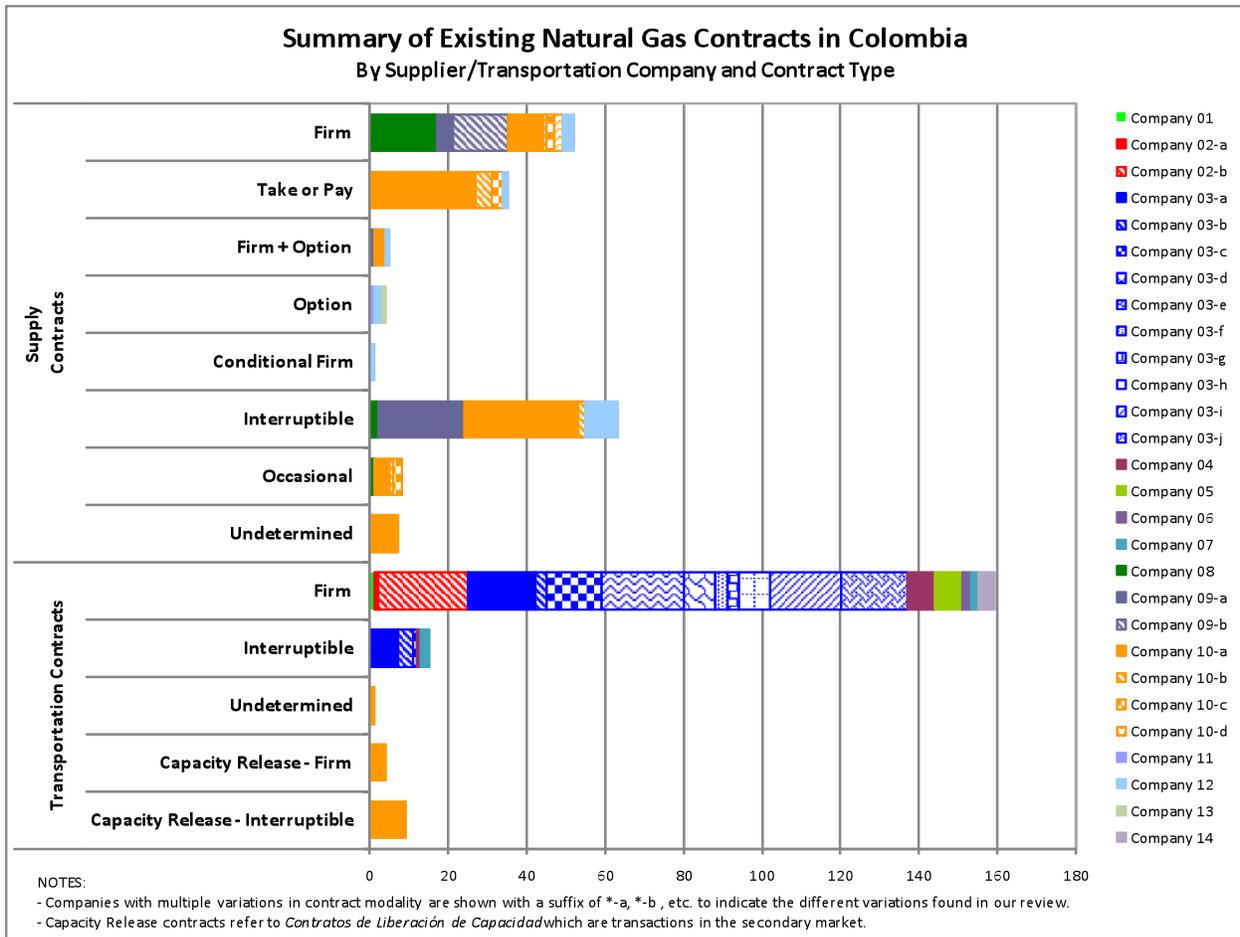
“Considering the number of companies buying and selling gas each day and each month, it is reasonable to estimate that tens of thousands of spot transactions are concluded each month. Because of the extremely compressed negotiation time for these transactions, many (if not most) of these transactions are concluded with delinquent, inadequate, ambiguous or absent documentation. Further, the differences among the general terms and conditions in most contracts in use in today’s spot market are not substantive, but rather reflect different drafting styles and vocabularies. The differences in well drafted spot contracts very rarely have distinct commercial value and therefore do not deserve extensive negotiation. The industry would therefore be well served to embrace a standard form for the spot market business. The GISB standard contract offers a very workable, balanced solution to the current waste of time and monies spent fitting antiquated contracting practices to a very new and different commercial reality.”²

Today, the successor to the GISB contract, the NAESB Standard Form, is not only utilized for spot transactions, but for long term transactions as well.

¹ “How and When to Use Gas Industry Standards Board (GISB) Contract For Short-Term Sales of Natural Gas”, Origins of the GISB Standard Form Contract, Carolyn S. Hazel

² Ibid.

As we have emphasized, development is not a single event, but a process, and standardization is a part of the process. When the GISB contract was adopted in the late 1990's, it was just one step along a path. A review of the many revisions to the GISB, and then the NAESB Standard Form is a testament to the fact that the need for adaptation never ends, even if the passage of time makes revisions less frequent. Colombia is just at the beginning of this process. In a our recent report entitled "Contract Review and Regulatory Comments," we included the following chart, documenting the large number of contract forms used in the Colombian natural gas market in recent years.



3

As Carolyn Hazel emphasized in 1996, the large number of contracts used in the market reflects the numbers of different contract drafters, but may not reflect any important differences in the meaning or interpretation of the terms. This also appears true in Colombia, and that is why we will recommend adopting certain standardized contract terms with a limited number of contract types. By adopting a smaller number of contracts with known terms, the Colombian market will be in a better position to attend to the critical issues facing the industry; finding more natural resources and delivering them efficiently and economically into the market.

³ “Report on Existing Natural Gas Contracts in Colombia,” Paul Milgrom, Bob Broxson and Gustavo Camacho.

In one of our industry participant meetings a participant remarked that “our base contracts are modeled after the GISB form.” While this is likely a true statement, “modeled after” is not sufficient for an effective contracting regime. The hallmark of an effective standardized contract environment is that all of the terms are essentially identical, and any veering from the standard forms is noted in special sections of the standard contracts. Typically, these changes are not related to the primary, standardized terms of the contract, but to issues like credit assurance and customized default language.

[Recommendations Regarding the Number of Contracts](#)

We are recommending a significant streamlining of the contracts in the Colombian natural gas market to four (4) types of agreements:

- Firm
- Interruptible
- Conditional Firm
- Option contracts

In truth, many “types” of agreements are regularly entered into on the same contract form in many markets. As is seen below, the confirmation page of the NAESB Standard Form allows for Firm, Interruptible and Firm (Variable Quantity) transactions. The key to executing under this type of form is to clearly spell out the obligations and unique requirements of the transaction. This form would also be workable for gas sold in the firm auction.

TRANSACTION CONFIRMATION
FOR IMMEDIATE DELIVERY

EXHIBIT A

Letterhead/Logo	Date: _____, _____ Transaction Confirmation #: _____			
This Transaction Confirmation is subject to the Base Contract between Seller and Buyer dated _____. The terms of this Transaction Confirmation are binding unless disputed in writing within 2 Business Days of receipt unless otherwise specified in the Base Contract.				
SELLER: _____ _____ Attn: _____ Phone: _____ Fax: _____ Base Contract No. _____ Transporter: _____ Transporter Contract Number: _____	BUYER: _____ _____ Attn: _____ Phone: _____ Fax: _____ Base Contract No. _____ Transporter: _____ Transporter Contract Number: _____			
Contract Price: \$ _____/MMBtu or _____				
Delivery Period: Begin: _____, _____ End: _____, _____				
Performance Obligation and Contract Quantity: (Select One) <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top; padding: 2px;"> Firm (Fixed Quantity): _____ MMBtus/day <input type="checkbox"/> EFP </td> <td style="width: 33%; vertical-align: top; padding: 2px;"> Firm (Variable Quantity): _____ MMBtus/day Minimum _____ MMBtus/day Maximum subject to Section 4.2. at election of <input type="checkbox"/> Buyer or <input type="checkbox"/> Seller </td> <td style="width: 33%; vertical-align: top; padding: 2px;"> Interruptible: Up to _____ MMBtus/day </td> </tr> </table>		Firm (Fixed Quantity): _____ MMBtus/day <input type="checkbox"/> EFP	Firm (Variable Quantity): _____ MMBtus/day Minimum _____ MMBtus/day Maximum subject to Section 4.2. at election of <input type="checkbox"/> Buyer or <input type="checkbox"/> Seller	Interruptible: Up to _____ MMBtus/day
Firm (Fixed Quantity): _____ MMBtus/day <input type="checkbox"/> EFP	Firm (Variable Quantity): _____ MMBtus/day Minimum _____ MMBtus/day Maximum subject to Section 4.2. at election of <input type="checkbox"/> Buyer or <input type="checkbox"/> Seller	Interruptible: Up to _____ MMBtus/day		
Delivery Point(s): _____ (If a pooling point is used, list a specific geographic and pipeline location):				
Special Conditions: _____ _____				
Seller: _____ By: _____ Title: _____ Date: _____	Buyer: _____ By: _____ Title: _____ Date: _____			

The European Federation of Energy Traders (EFET) standard form agreement is slightly different in that there are several Annexes which allow for the execution of various types of transactions under its General Agreement. They are as follows:

1. Annex 2A “Confirmation of Individual Contract (Fixed Price)”
2. Annex 2B “Confirmation of Individual Contract (Floating Price)”
3. Annex 2C “Confirmation of Individual Contract (Call Option)”
4. Annex 2D “Confirmation of Individual Contract (Put Option)”

Each Annex allows for the execution of a unique transaction (potentially unlimited) under the same General Agreement, which includes the unique terms and conditions for the type of deal that is struck between the parties. This type of certainty in the contract allows for efficient contracting processes and allows the parties to include specific terms that may impact one transaction, but not any other. This form also allows for the inclusion or exclusion of specific issues, such as “Planned Maintenance” and “Long Term Force Majeure Limit.” Copies of these four (4) annexes are attached to this report as Annex “A.” Either of these standard forms of agreement provides a significant level of flexibility in terms of executing transactions, and could be of benefit to the unique circumstances facing the natural gas market in Colombia.

Conditional Firm Contract

The conditional firm contract that we propose is similar to the ones that have been used by gas-fired electrical generators to sell their firm gas in periods of normal electricity

demand. The contracts transfer the rights and obligations of the seller (historically, an electricity generator) under its firm gas contracts to the buyer, except that the seller of a conditional firm contract may take the gas under the condition that the price of electricity exceeds a scarcity value (which has been specified by the electricity regulator).

Option Contract

The option contract that we propose is complementary to the conditional firm contract, enabling producers to sell both in tandem, for example in the proposed auctions. It provides its holder with the right to take delivery of firm gas under the condition that the price of electricity exceeds a scarcity value (which has been specified by the electricity regulator).

Portfolio Sales for Suppliers Could Bring Clarity to Firm Sales

On several occasions during our industry meetings, gas producers in Colombia have expressed to us their hesitance to commit a majority of gas supply on a firm basis, despite the preference of buyers for firm gas contracts. To explain their position, the producers cited regulatory issues and, in particular, uncertainties about what a firm commitment might mean in current and potential future Colombian gas regulations. In recent years, the Colombian government has issued decrees (Decreets 2687 and 4670 /2008; 1514, 2730 and 2807 / 2010) related to firm gas sales, amongst other regulated matters. Currently the Ministry of Mines and Energy is preparing another Decree derogating those mentioned above and additionally Decree 3428/2003. This explains, in our view, why CREG has not yet regulated the numerous subjects covered by the recent decrees. In view of these wide ranging regulatory rulings, producers have made

the decision to hold volumes off the market for firm sales until there is clarity in the regulations, or new proposed rules for the market. With the release of the proposed decree, there is hope among many industry participants that a higher level of gas can be committed to the market on a firm basis.

It is imperative that the industry in Colombia find a workable solution to issues regarding security of supply and delivery of sufficient quantities of natural gas to consumers across the country. One method to assure such a result is a portfolio approach to natural gas sales. The producing sector holds the key to the success of the natural gas industry because they are the parties responsible for making sure gas supplies are available. As previously stated, the producers have offered less “firm” gas supply to the market due to uncertainty with regard to regulations. It is our proposal that the appropriate government authority establish a minimum threshold for gas supplies offered for firm sales to the market.

The best solution to the problem of low levels of firm gas supplies being committed to the market is to implement a satisfactory legal definition of “firm” that brings certainty to the market. As an interim and far less satisfactory solution, the government should mandate that producers supply a minimum fraction of their production in the form of firm agreements. A similar mandate might also be necessary in the auction process, to ensure that the auctions are offering the product that natural gas customers wish to buy.

With appropriate production requirements, producers should be able to meet all of their firm commitments and still have a reserve of gas that can be offered as interruptible until such time as it is necessary to use its “spare” capacity to meet its firm demand.

This reserve will be especially helpful in times of planned maintenance, or even when unplanned maintenance issues arise. In our interviews, some parties have objected to this proposed solution, arguing that the producers should not have the opportunity to sell interruptible gas or participate in a secondary or spot market. But if only firm contracts were sold, the uncertainties of supply and lack of storage in Colombia's market would require allowing even firm contracts to be subject to various discretionary exceptions, so that producers could manage supply variations. It is better to add certainty to the market by having at least some supply be protected from all but the most exceptional interruptions.

We call this proposed solution, in which producers are regulated to offer a minimum quantity and a minimum fraction in the form of firm contracts, the "portfolio approach." It is tailored to the natural gas infrastructure in Colombia, including the limited number of producing areas, two non-integrated pipeline systems and a lack of storage capacity. These factors require a contracting and market structure that realistically accommodates fluctuations in natural gas supply.

Liquidity and Damages

Liquidity of the natural gas market refers to market participants' abilities to buy or sell meaningful quantities of natural gas at known prices. Normally, good liquidity requires the participation of many willing buyers and sellers. Having accurate, available pricing information allows for better price discovery in the market, whether for long- or short-term transactions, and promotes greater efficiency in the allocation of the available gas.

There are two important connections between the existence of liquid secondary markets and contract terms. In a liquid market, posted prices provide a useful, objective estimate of the cost incurred by either party if the other fails to perform. As secondary markets mature and become liquid, standard contracts should incorporate damages clauses that link damages to secondary market prices. Thus, good secondary markets enable writing better contracts.

But there is also a reverse connection: contract standardization promotes more liquid secondary markets, for two reasons. First, standardization allows potential participants to know and describe more easily what is being offered or demanded. And second, it reduces the cost of making transactions, since there are fewer terms to study and negotiate. These effects both tend to increase the liquidity of secondary markets.

In Colombia, there is a secondary market for natural gas, but this market has few actual participants. Also, the current central bulletin board does not provide posted prices to enable buyers and sellers to find one another and transact deals. The development of this market is the subject of a different CREG consultancy.

[Terms to Be Standardized](#)

There are many terms in a natural gas contract. In the context of standardizing contracts, there are those terms which contain the intent and understanding of the parties to an agreement. Each country has an overarching set of laws that can impact these terms, but in every market the terms and conditions are laid out in precise form in the context of that market. While the suggested terms below are being recommended by our team, it is important to emphasize that they will ultimately be subject to

interpretation of the laws and courts of Colombia. In this light, we recommend the following definitions for standardization in the Colombian market.

Firm Commitment. In current practice, the definition of “Firm” varies among contracts and is ripe for standardization in a way that applies to both purchases and sales of natural gas and to transportation. Our recommendation is that the Colombian natural gas industry adopt the definition as found in the NAESB Standard Form 6.3.1 dated September 5, 2006, which reads as follows:

““Firm” shall mean that either party may interrupt its performance without liability only to the extent that such performance is prevented for reasons of Force Majeure; provided, however, that during Force Majeure interruptions, the party invoking Force Majeure may be responsible for any Imbalance Charges as set forth in Section 4.3 related to its interruption after the nomination is made to the Transporter and until the change in deliveries and/or receipts is confirmed by the Transporter”.

Based upon the review of a broad sample of natural gas contracts currently utilized in the Colombian market, a similar definition reflects at least the understanding of the majority of industry participants with whom our team has met, or from whom we have received written comments. Certainly what will make this definition effective will be a clear and enforceable definition of Force Majeure or a similar term, as we discuss later in this report. The EFET General Agreement does not contain a definition of “Firm,” but speaks in terms of Default or Failure to Deliver. While this may be a workable agreement, we recommend the language above due to its straightforward wording and clarity.

Interruptible Commitment. The term “Interruptible” has taken on different meanings throughout this Standardization Consultancy. In our report outlining the review of natural gas contracts in Colombia, we generally stated that many of the firm contracts appeared to be interruptible while some of the interruptible contracts took on the characteristics of firm agreements. This was confirmed in one of the recent industry conference calls when one of the participants stated essentially this same thought, “many of our firm contracts look interruptible while the interruptible contracts look firm.” For the market to serve the varying needs of different customers and for our portfolio suggestion to succeed, it is essential that there be a clear distinction between the terms “firm” and “interruptible” in the Colombian market. Gas production subject to interruption will play an important role in any natural gas market that allows for effective management of supply. Based on these observations, we recommend that the participants in the Colombian market adopt the following, or similar definition of “Interruptible.”

"Interruptible" shall mean that either party may interrupt its performance at any time for any reason, whether or not caused by an event of Force Majeure, with no liability, except such interrupting party may be responsible for any Imbalance Charges as set forth in Section 4.3 related to its interruption after the nomination is made to the Transporter and until the change in deliveries and/or receipts is confirmed by Transporter."⁵

In making this recommendation, we recognize that terms intermediate between the suggested firm and interruptible terms would be possible. Compared to these

⁵ NAESB Standard Form 6.3.1 September 5, 2006

alternatives, however, these two types of contracts – Firm and Interruptible –are simple, clear and familiar, and they have been used effectively in other markets to create value for buyers and sellers. These characteristics make them a natural choice for use in the Colombian market as well.

Force Majeure. Likely the most controversial term discussed throughout this process, Force Majeure is one of the most crucial and critical terms in a natural gas contract, regardless of market locale. It is this single term, and its correct use, that allows the natural gas market to maintain stability in the face of disruptive events, whether caused by nature or some other uncontrollable or “irresistible” force. Like nearly every other society, Colombia has a definition of Force Majeure within its “Code of Law.” It is the understanding of this team that Colombia’s Force Majeure definition dates back to the 1850’s, and actually stems from the Napoleonic Code from as far back as approximately 1804. Recognizing that such laws exist is important, but it is the view of our team that there is sufficient flexibility within this Code of Laws to allow a definition of Force Majeure that is tailored specifically to the development of a healthy natural gas industry. A close reading of Force Majeure language from other markets reveals language that is very similar across jurisdictions and therefore instructive to the Colombian market. Included in this report are two Standard Definitions of Force Majeure. Below is the Force Majeure definition from the NAESB, and language from the EFET General Agreement is attached as Annex C.

“FORCE MAJEURE

- 1.1.1. Except with regard to a party's obligation to make payment(s) due under Section 7, Section 10.4, and Imbalance Charges under Section 4, neither party shall be liable to the other for

failure to perform a Firm obligation, to the extent such failure was caused by Force Majeure. The term "Force Majeure" as employed herein means any cause not reasonably within the control of the party claiming suspension, as further defined in Section 1.1.2.

- 1.1.2. Force Majeure shall include, but not be limited to, the following: (i) physical events such as acts of God, landslides, lightning, earthquakes, fires, storms or storm warnings, such as hurricanes, which result in evacuation of the affected area, floods, washouts, explosions, breakage or accident or necessity of repairs to machinery or equipment or lines of pipe; (ii) weather related events affecting an entire geographic region, such as low temperatures which cause freezing or failure of wells or lines of pipe; (iii) interruption and/or curtailment of Firm transportation and/or storage by Transporters; (iv) acts of others such as strikes, lockouts or other industrial disturbances, riots, sabotage, insurrections or wars, or acts of terror; and (v) governmental actions such as necessity for compliance with any court order, law, statute, ordinance, regulation, or policy having the effect of law promulgated by a governmental authority having jurisdiction. Seller and Buyer shall make reasonable efforts to avoid the adverse impacts of a Force Majeure and to resolve the event or occurrence once it has occurred in order to resume performance.
- 1.1.3. Neither party shall be entitled to the benefit of the provisions of Force Majeure to the extent performance is affected by any or all of the following circumstances: (i) the curtailment of interruptible or secondary Firm transportation unless primary, in-path, Firm transportation is also curtailed; (ii) the party claiming excuse failed to remedy the condition and to resume the performance of such covenants or obligations with reasonable dispatch; or (iii) economic hardship, to include, without limitation, Seller's ability to sell Gas at a higher or more advantageous price than the Contract Price, Buyer's ability to purchase Gas at a lower or more advantageous price than the Contract Price, or a regulatory agency disallowing, in whole or in part, the pass through of costs resulting from this Contract; (iv) the loss of Buyer's market(s) or Buyer's inability to use or resell Gas purchased hereunder, except, in either case, as provided in Section 11.2; or (v) the loss or failure of Seller's gas supply or depletion of reserves, except, in either case, as provided in Section 11.2. The party claiming Force Majeure shall not be excused from its responsibility for Imbalance Charges.
- 1.1.4. Notwithstanding anything to the contrary herein, the parties agree that the settlement of strikes, lockouts or other industrial disturbances shall be within the sole discretion of the party experiencing such disturbance.
- 1.1.5. The party whose performance is prevented by Force Majeure must provide Notice to the other party. Initial Notice may be given orally; however, written Notice with reasonably full particulars of the event or occurrence is required as soon as reasonably possible. Upon providing written Notice of Force Majeure to the other party, the affected party will be relieved of its obligation, from the onset of the Force Majeure event, to make or accept delivery of Gas, as applicable, to the extent and for the duration of Force Majeure, and neither party shall be deemed to have failed in such obligations to the other during such occurrence or event."

A critical point to be made here is that many of the issues that have been raised by the industry participants over the past several months are covered by the EFET and NAESB clauses. Consider the following NAESB excerpt, "Force Majeure shall include, but not be limited to, the following: (i) physical events such as acts of God, landslides, lightning, earthquakes, fires, storms or storm warnings, such as hurricanes, which result

in evacuation of the affected area, floods, washouts, explosions, breakage or accident or necessity of repairs to machinery or equipment or lines of pipe; (ii) weather related events affecting an entire geographic region, such as low temperatures which cause freezing or failure of wells or lines of pipe; (iii) interruption and/or curtailment of Firm transportation and/or storage by Transporters; (iv) acts of others such as strikes, lockouts or other industrial disturbances, riots, sabotage, insurrections or wars, or acts of terror; and (v) governmental actions such as necessity for compliance with any court order, law, statute, ordinance, regulation, or policy having the effect of law promulgated by a governmental authority having jurisdiction.” This standard contract language covers nearly every type of “irresistible force” event, including most events covered by the “Exempting Events or Special Circumstances” clauses found in natural gas contracts our team has reviewed in Colombia.

While the definitions and conditions of Force Majeure in other venues clearly spell out many of the issues faced by Colombian participants in the natural gas market, there appears to be disagreement among industry participants about the viability of transplanting a standard definition of Force Majeure from another market into the Colombian legal environment. Therefore, we recommend that the standard contract should continue to utilize the definition of Force Majeure found in the Colombian legal code, but that a combined “Colombian Force Majeure and Exempting Events” clause should be introduced, with Exempting Events defined so that the combined terms cover the same set of events as the Force Majeure clause in the NAESB contracts.

Special Circumstances, Exempting Events. The concentration of Colombia’s gas supplies as well as the absence of substantial gas storage facilities contribute to making

gas supply interruptions in Colombia market more impactful than in North America and Europe. In Colombia, both scheduled and unscheduled maintenance can disrupt the suppliers' ability to deliver gas. This, combined with the lack of highly liquid secondary markets that could help parties to mitigate interruptions, makes it important for Colombian contracts to include terms to govern these foreseeable interruptions.

Clauses governing Special Circumstances and Exempting Events have, in Colombia, become terms that are used to accomplish a contract governance function similar to the Force Majeure clauses in the European and North American markets. In many of our conversations, industry participants point out that these clauses are of such significance that the Colombian market cannot function effectively without them.

We have already described how Exempting Events may be integrated with Force Majeure for Colombia to replicate the effect of the more expansive Force Majeure definition used in other markets. In addition, we recommend that a Special Circumstances clause be included in the standardized contracts adopted by the Colombian market, which allow disruption by either buyer or seller for a fixed number of days per contract year. We recommend that the maximum number of days allowed for interruption be limited to ten days, and that this number of days of interruption should be equal for the buyer and the seller.

We suggest the use of the following language (taken generally from the NAESB Standard Form) be used as the language for Unforeseeable Circumstances,/Exempting Events/Special Circumstances:

"Unforeseeable Circumstances shall include, but not be limited to, the following: (i) physical events such as acts of God, landslides, lightning, earthquakes, fires, storms or storm warnings, such as hurricanes, which result in evacuation of the affected area, floods, washouts, explosions, breakage or accident or necessity of repairs to machinery or equipment or lines of pipe; (iv) acts of others such as strikes, lockouts or other industrial disturbances, riots, sabotage, insurrections or wars, or acts of terror; (v) governmental actions such as necessity for compliance with any court order, law, statute, ordinance, regulation, or policy having the effect of law promulgated by a governmental authority having jurisdiction and (vi) interruption related to the failure of production facilities such as wells, processing and treating facilities."

This language is found in the Sample Standard Contract we are submitting along with this report as Appendix "D".

Transportation Agreements

Our contracts review revealed a significant amount of variation among agreements entered into by the Transporters. The level of variation, in our view, is unusual when compared to transportation practices in other markets. As we have discussed in our other reports, the pipeline companies in Colombia are regulated in much the same fashion as in other regulated markets. However, upon closer review of the transportation agreements, it is apparent that terms are not consistent across the industry. Within the tariffs of the transportation companies are not only the rates allowed to be levied, but also other clauses which, if enforced, would make the industry operate in a more efficient manner. It is the recommendation of our team that the Colombian transporters adopt business operations that are consistent with the contracts that are in place, and consistent with the established tariffs for each transportation system, particularly in relation to the following:

Firm Transportation. Transporters should adopt the same definition of “Firm” as all other participants in the market: both parties should be required to live up to this standard. Rates for this service should be known and consistently applied across the transportation systems.

Interruptible Transportation. As with the definition of Firm Transportation, the transportation companies should adopt the same definition of Interruptible Transportation as is previously outlined in this report. It is important that there be a clear distinction between firm and interruptible obligations, not only on behalf of the shippers, but by the transportation company, as well. As with gas supply, the role of interruptible transportation can and should play a significant role in the natural gas industry in Colombia. Interruptible transportation rates should be evenly applied across the transportation systems, and the rules associated with interruptibility should be clearly known to all parties.

Force Majeure. Our recommendation for Force Majeure and Exempting Events for Transportation Agreements is the same as for natural gas supply and marketing agreements.

Operating Issues. In the industry discussions we were told that the pipeline companies were inconsistent with regard to; information dissemination, pressure maintenance and daily operation of the respective systems. There should be a consistent enforcement of operating rules in the Colombian market. In particular, the regulations or tariff provisions relating to Quality and Pipeline Pressure should be enforced with consistency across both major pipeline systems. The

tariffs of the companies contain allowances for these issues, and these allowable levels should be maintained by the industry and enforced by the pipeline companies.

Imbalances. Colombia is at some operational risk because it lacks the necessary infrastructure, like underground gas storage, to support its operational needs, particularly in periods of operational difficulties. In order to maintain operational integrity, clear and enforceable rules should be adopted by all transportation companies to ensure the proper functionality of the systems.

Informational Requirements. Throughout discussions with industry participants it was pointed out that operational information for the pipelines systems is not accurate, and in many cases untimely. The current regulations have requirements regarding information that should be available to the market. We recommend that the transportation companies adhere to the current policies and regulations and provide timely information to the industry that includes the following:

- Operational data including:
 - Receipt and Delivery Point Volume Data
 - Operational Constraints on the Systems
- Information regarding the utilization of Firm Capacity
- Capacity Available for long or short term assignment
- Maintenance Issues

Information of this type is of vital importance to the operation of an open market, and will allow for a more efficient industry. This type of information is particularly crucial in a market that is transitioning to a standard operational and contracting environment.

Trading Hubs. In a market in transition, the ability to trade locationally can be valuable. It is our recommendation that the pipelines consider implementing policies that allow for physical trading to occur at “Hubs” or Pooling Points. This type of trading creates an environment with more transparency that will allow for more efficient use of available gas and pipeline resources. The establishment of these Hubs is, in our understanding, a focus of the Consultancy related to the establishment of a Secondary Market in Colombia.

Conclusions

Contractual commitments in any market need to be clear, enforceable, and balanced among the parties. Throughout this process, our team has sought to understand Colombia’s unique operational requirements and to make suggestions compatible with those to allow a smooth transition to a freer, more open, and more efficient market. Significant challenges remain, but many of these can be overcome by progressive regulatory reform and proactive acceptance of a new operating environment by the industry participants. In order for the transition to an open market to begin, a whole series of changes by the regulator and the industry will be required. The government must take action to promote a regulatory policy that allows for the transparent trade of natural gas, and enact policies that make available the highest level of natural gas to

the market. From the industry, it is imperative that contracting policies balance obligations appropriately among all parties, and that buyers, sellers, transporters and other commercial agents face a level playing field. In order to accomplish this, certain terms must be standardized across the industry.

A “Firm” contract should be firm in reality, and not in name only. Interruption should be limited to only those causes excused by Force Majeure and Exempting Events, as described elsewhere in this report. We recommend the Force Majeure and Exempting Events clause we have discussed in this report because it clearly meets all of the needs of the market in Colombia. Certain additions to the clause, or the Transaction Confirmation, can deal with issues such as the maximum length for a Force Majeure or Exempting Event. This type of language exists in standard agreements, as we have shown in the EFET General Agreement. This language could be of value to the Colombian natural gas industry.

“Interruptible contracts” can be valuable to the market as part of a portfolio of producer gas offerings. According to nearly every industry group, firm gas is a priority for the Colombian market. Our suggested portfolio approach allows buyers with the most critical needs to acquire firm gas while still permitting producers to have the flexibility they need in face of normal supply fluctuations.

All of the sectors of an integrated natural gas market must be working well to be successful. It is our view that having contracts with common or standard terms will start the market on the path to success. Beyond standardization of terms, there must also be a free flow of information relating to all aspects of the market, including supply, demand,

transportation and pricing. The industry must be prepared and willing to share information in order to bring maximum value and consistency of performance to the market. We believe that the adoption of all of the terms and activities we have offered through this process will get the Colombian market moving in the right direction and that all participants will benefit.

Appendices

Appendix “A”	“Law and Economics”
Appendix “B”	Suarez Zapata Partners Comments and Analysis on Colombian Law
Appendix “C”	EFET Annex Documents
Appendix “D”	Sample Standard Contract

Appendix A

Law and Economics Approach

The economic analysis of law and contracts is one of the major movements in legal scholarship and analysis of the 20th century.¹ Founded originally in the works of Nobel laureate Ronald Coase² and U.S. Circuit Court Judge Guido Calabresi³, this approach is now widely applied in legal decisions, taught in law schools, and articulated in textbooks by leading legal scholars.⁴ The emphasis of the economic approach is on evaluating laws, contracts and governance systems based on how well they promote economically efficient outcomes. We have employed this approach to inform our own analysis of the contracting problems in Colombia's natural gas markets.

In long-term commercial contracts, including ones for natural gas production and delivery, there are typically far too many contingencies to be enumerated and agreed at the time of contracting. In natural gas production and distribution, the events that can affect suppliers' production or delivery decisions include scheduled and unscheduled maintenance, well problems, natural disasters, weather events and many more. For customers, variations in demand for their

¹ Anthony Kronman, formerly dean of Yale Law School, wrote in *The Lost Lawyer* (1993, page 166) that "the intellectual movement that has had the greatest influence on American academic law in the past quarter-century" is law-and-economics.

² Coase, Ronald (1960). "The Problem of Social Cost". *The Journal of Law and Economics* **3** (1): 1–44.

³ Calabresi, Guido (1961). "Some Thoughts on Risk Distribution and the Law of Torts". *Yale Law Journal* (The Yale Law Journal Company, Inc.) **70** (4): 499.

⁴ Among these, two of the most prominent ones are those of Harvard Law professor Stephen Shavell (*Foundations of Economic Analysis of Law*. Harvard University Press, 2004) and US Circuit Judge Richard Posner (*Economic Analysis of Law* (Aspen, 7th edition, 2007).

products, from retail energy to fertilizers, affect their ability and need to take delivery of natural gas.

The efficient response to these sorts of contingencies naturally depends on the costs of the alternative solutions. The alternatives might include gas storage, reserve production capacity, or variations in the amount or timing of deliveries. To the extent that production and demand are uncertain, at least some of the contracts need to provide flexibility for the buyer or supplier to curtail deliveries, and indeed such curtailments are common. Good contracts need to ensure that the flexibility they properly provide is not abused. Contracts may often contain both explicit exceptions, so that performance is not always required, and specific damages for non-performance.

As Shavell⁵ has pointed out, damage measures have three main functions: *i*) to give incentives to performance, *ii*) to provide contracting parties with incentives to take actions relying on performance, and *iii*) to allocate risk. On these grounds, Shavell concludes that, “A full consideration of damage measures and efficient risk allocation would also take into account:

- i.* whether the risk that a party bears is detrimental or beneficial... if a party wants to breach, not because he has run into costly production difficulties, but rather than because another party has bid more for what he has made, then risk – bearing considerations would not lead to lower damages for the seller.

⁵ Shavell, Steven. “Economic Analysis of Contract Law”. NBER Working Paper 9696, May 2003.

- ii. whether a risk is monetary or nonmonetary. If, for instance, the victim's loss is nonmonetary, financial compensation in the form of damages may not constitute an optimal form of insurance.
- iii. An additional consideration is the availability of commercial insurance⁶ to the parties for the losses due to breach; if such insurance is available, then the need for damages to compensate the victim is negated, and damages have a role mainly as an incentive device.”

Shavell's analysis is a general one. For the purpose of developing natural gas contracts for Colombia, many of these considerations can be set aside.

Consider first the “risk-allocation” function of damages. This can be analyzed in two parts.

The risk of **non-monetary losses** is clearly important in situations where the main risks include damage to health or loss of life or loss of a unique and treasured artifact. These are not central issues, however, for commodity markets like natural gas in Colombia. That is why we make no comment about this in the report.

Next, consider the role of damages in allocating **financial risks**. Financial-risk sharing typically in business can involve many parties and multiple risks. The relevant parties are not just those to the standard commodity or delivery contract. For example, firms' financing decisions and managerial incentive contracts determine how risk is shared between managers, lenders and investors. The

⁶ In law and economics, insurance is a form of risk management primarily used to hedge against the risk of a contingent, uncertain loss. Insurance is defined as the equitable transfer of the risk of a loss, from one entity to another, in exchange for payment.

substantial variations in business plans, legal structure, firm size and financing arrangements among firms mean that the parties' needs for sharing financial risks can vary widely. Management of these risks is not the proper subject of standardized trading contracts, which are properly designed to emphasize the factors that are **standard** among contracting parties and so to be appropriate for firms with varying sizes, business plans, sources of financing, etc. Our conclusions about what is important and possible for Colombian gas contracts are buttressed by our review of the actual Colombian industry contracts, in which we found little evidence that financial risk sharing plays an important. We expect the reason for that is that financial risk sharing is the subject of other contracts, especially financing contracts.

Finally, consider the treatment of another of Shavell's functions of damages, to enable **actions relying on performance**. Reliance actions in this context consist mainly of investments. To enable reliance, contracts need to limit performance failures that threaten the returns on the anticipated investments. In the Colombian context, investments in gas-fired electrical generation that is only occasionally used should be backed up by gas contracts that support such investments, both for private and social reasons. Here, the question of actual damages is not a central issue, but investment planning and coordination are. (The law and economics literature, including Shavell's treatment, are relatively weak in their analyses of contracts as plans and coordinating devices – relative to their more complete development of incentive and risk-sharing themes.) In our

proposal, option contracts and conditional firm contracts help solve a planning problem.

In many commercial settings, contracts to enable major reliance investment are highly tailored – not standardized – because investments can vary enormously. Only to the extent that reliance is standard, as in the case of electrical generation described above, should one expect standard contracts to help resolve the reliance problem.

For these reasons, our proposal has focused on performance incentives is that these are relatively uniform across contracting situations. They are the proper considerations to emphasize in creating a standard contract.

Economic analysis helps us to identify the particular conditions in Colombia that might make its optimal contracts different from those in other places. The optimal contracts, and the proper interpretation of existing contracts summarized in our previous report, depend on details of the economic environment in ways that we now analyze.

We begin by discussing contract damage provisions in an idealized, competitive, highly developed natural gas market, with multiple sources of supply and demand and active spot trading. In such a setting, a buyer who has a firm supply contract can dispose of its excess supply in spot trading, so it gains little value from an ability to refuse or delay deliveries. Similarly, if the penalty for failure to deliver gas is linked to the spot price, then the supplier is led to take correct account of the damage it does to the buyer by any supply interruption. If the supplier fails to deliver gas, the buyer can replace the shortfall in the spot

market at a known cost. Damages sufficient to enable that purchase make the buyer whole. If the supplier can avoid a supply disruption at a lower cost than these damages, it has the incentive to do so. Otherwise, it finds it more profitable to breach its obligation. In summary, the supplier has proper incentives for what legal scholars call “efficient breach,” meaning that it breaches exactly when it should do so.

Besides the incentives for efficient breach, these damages give the supplier a proper incentive to invest in improved capital equipment or to do preventive maintenance, or to manage its portfolio in such a manner that its obligations can be met. The reason is that the supplier who makes the investment enjoys the full benefits that result, measured correctly by the spot price, and incurs the full costs.

In the highly developed markets of both the US and Western Europe, standard contract provisions link liquidated damages to spot prices or to a “cover” standard, as described in our earlier report about these practices.⁷ In Colombia, however, conditions are quite different. Currently, the spot market is illiquid, with few participants and little transparency. Contract prices from the Guajira field are regulated and not set by the forces of supply and demand. Buyers of Guajira gas have no good way to substitute other sources if gas supply from the Guajira field is interrupted. These features make spot prices unavailable or unreliable as a measure of damages from interrupted supply.

⁷ “History and Development of Standardized Natural Gas Contracts,” Auctionomics-FTI report, 2011. See especially the discussion of the Performance Obligation on page 13.

In less developed markets of this sort, other contract provisions must substitute for the absence of spot markets and an accurate liquidated damages provision. Several provisions can help take up the slack. When a limited spot market makes it difficult for buyers to dispose of its excess gas, take-or-pay contracts introduce needed flexibility to reduce or postpone some gas deliveries. On the flip side, supply interruptions that cannot be replaced by other sources in a spot market may be made up by additional later gas deliveries, substantially reducing damages. If buyers find delayed gas deliveries to be good substitutes for immediate deliveries, then a “make-up” or “make-good” provision can be a valuable contract term.⁸

When liquidated damages are difficult to specify, terms that improve predictability of performance are often valuable. These might include terms that limit the number of interruptions that are allowed, by the buyer, the supplier, or both. Force Majeure clauses, reducing the supplier’s obligations in certain exceptional circumstances outside its control, are typically included to reduce the bite of other limits, particularly when performance standards are otherwise high (as in “firm” contracts).

Weather events significantly affect prices and resource uses in natural gas markets. In Colombia, where El Niño years lead to high demand by gas-fired electricity generators, conditional firm contracts and option contracts provide ways to plan systematically for the necessary diversion of resources.

⁸ The storability of natural gas contributes increases the likelihood that substituting deliveries over time is viable and distinguishes gas from electricity, because electrical power is more difficult to store.

One of the most important general principles of contracting, which applies equally to Colombia gas markets, is that contracts should lead the parties to a common expectation about their rights and obligations. This is one reason that standardization is so important. Standardization of contracts reduces the cost of negotiating terms, minimizes disputes about meaning, frees the parties from the need to administer contract variations, and improves the comparison and tradability of different contracts.

One device to explore the needs of the Colombian market is to review existing contracts, as we did in our previous report.⁹ This review provides evidence, for example, of the importance of optional and condition firm contracts to deal with the needs of electricity generators.

In a market with regulated prices, however, there are important limits on what can be learned about efficient contracting from such a contract review. When prices are limited at less than market-clearing levels, bargaining between suppliers and buyers may result in contracts that appear to “favor the supplier” compared to more efficient provisions. For example, even if the provision of gas in a competitive market would make extensive use of firm supply contracts sold at a premium price, the bargain between suppliers and buyers at a lower, regulated price might lead to fewer firm and more interruptible contracts. The reason is simple: in the bargaining between buyer and supplier, when price cannot be used to transfer value, other terms get used, even if adopting those other terms leads to a loss in total value.

⁹ Report on Existing Natural Gas Contracts in Colombia, Auctionomics-FTI report, 2011.



APENDICE COMENTARIOS SOBRE FUERZA MAYOR Y CASO FORTUITO Y EVENTOS EXIMENTES.

1. PARTICULARIDADES DEL SUMINISTRO Y TRANSPORTE DEL GAS NATURAL EN COLOMBIA QUE ENMARCAN LA CONTRATACIÓN.

Como es de conocimiento, el Ministerio de Minas y Energía en el año 2010 contrató a la firma consultora Frontier Economics Ltd para que hiciera una evaluación sobre el mercado del gas natural en Colombia. La consultora presentó el estudio titulado *“Visión de largo plazo del mercado de gas natural de Colombia, Diagnostico fallas del mercado de gas natural de Colombia¹”*, en el cual se concluyó que en Colombia se un modelo regulatorio de liberalización de la competencia mayorista, caracterizado por: (i) Competencia en la producción y comercialización de gas natural; (ii) Transporte y la distribución del gas natural como sectores regulados; (iii) Libre competencia en el acceso a infraestructura, y (iv) competencia minorista limitada a grandes usuarios, por cuanto los usuarios finales se encuentran restringidos en su posibilidad de elegir el comercializador de gas natural.

El estudio reveló que el mercado colombiano de gas natural presenta fallas y dificultades por la competencia muy limitada en el suministro de gas al existir básicamente solo dos fuentes, por no hablar de una fuerte concentración en Ecopetrol; una red de transporte integrada por dos gasoductos; la inadecuada distribución de los riesgos en los contratos que exige una estandarización de la contratación en el suministro y transporte de gas.

Por otro lado, el estudio al que hemos venido haciendo referencia consideró que los contratos de suministro y transporte de gas que se utilizan en Colombia se caracterizan por la diversidad de causales eximentes de responsabilidad a favor de las partes fuetes de los contratos, léase el suministrador productor y los transportadores. Mediante estas causales pactadas por las partes se conviene la interrupción de los servicios de suministro y transporte estableciendo un desequilibrio contractual que riñe con la eficiencia del mercado y que en gran medida contribuye a impedir su desarrollo y madurez.

¹ <http://www.aciem.org/bancoconocimiento/D/Diagnosticofallasdelmercadodegas/futurodelgascreg1.pdf>



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

Agrega el estudio en comentario que a lo anterior hay que sumar que Colombia tiene la particularidad que los racionamientos en el suministro de gas natural pueden durar largo tiempo y no dependen de circunstancias económicas sino de administración del servicio público, el cual en nuestro país depende enteramente de la demanda de gas y de la oferta hidráulica que se presenta en determinada época del año.

Lo anterior agravado por la existencia de una competencia mínima, resultado de lo cual es que los participantes o suministradores del gas tengan poder de mercado, es decir, cuentan con la capacidad de fijar de manera unilateral las condiciones contractuales y de venta, así estos actores tienen el poder para trasladar los riesgos derivados de hechos imprevisibles e irresistibles a la parte débil del contrato a través de estipulaciones contractuales que buscan que ésta asuma los riesgos derivados de causas extrañas a su propia conducta, situación que incrementa la inseguridad jurídica y la equidad de la que deben gozar los contratos de suministro de gas.

Así las cosas, y con apoyo en las conclusiones del estudio anotadas, consideramos que es conveniente la estandarización de los contratos mediante la limitación de la autonomía de la voluntad, tanto en el suministro como en el transporte de gas natural. De esta manera, el legislador y la administración pública en ejercicio de las atribuciones legales debe delimitar el alcance de las causas extrañas o eximentes de responsabilidad, delimitando con precisión los eventos eximentes de responsabilidad e interrumpibilidad en la ejecución de los contratos, los cuales si bien se presentan regularmente en la industria del gas son extraños a la parte obligada, sean o no de común ocurrencia, o bajo lo que se ha denominado el alea normal de los contratos, pero que afectan el equilibrio y la economía del contrato. Esta labor normativa es muy importante habida cuenta que los mencionados eventos eximentes no son a priori circunstancias constitutivas de fuerza mayor o caso fortuito, mas sus efectos si son asimilables. En pocas palabras, lo que se recomienda es definir a través de las competencias legales respectivas el régimen de exclusión de responsabilidad para los contratos de suministro y transporte de gas, en aras de buscar la mayor eficiencia y madurez del mercado de gas en el país.



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

2. SISTEMAS LEGISLATIVOS Y PRÁCTICAS CONTRACTUALES QUE REGULAN LA FUERZA MAYOR O CASO FORTUITO.

Es de vital importancia resaltar que el concepto de fuerza mayor o caso fortuito no ha sido legislado en todos los sistemas jurídicos. El concepto de fuerza mayor o caso fortuito es propio de países y legislaciones del *Civil law*, tales como Francia, Bélgica, Alemania e Italia, países cuya tradición jurídica ha sido implementada en la mayoría de países de América Latina, entre ellos, Colombia.

La fuerza mayor en el sistema continental europeo se basa en las nociones de imposibilidad, irresistibilidad y ausencia de culpa del deudor como en Colombia, mientras que el *Common Law* se separa radicalmente del derecho continental europeo, por cuanto no ha desarrollado a profundidad el principio según el cual la imposibilidad de cumplir la obligación libera al deudor de responsabilidad.

En el Reino Unido existe la teoría de "*frustration of Contract*", la cual ha desarrollado en parte el principio que enseña que nadie está obligado a lo imposible, y se basa en que ante la ocurrencia de un hecho que cambia radicalmente las obligaciones originalmente adquiridas por las partes en el contrato, éstas se encuentran eximidas de cumplir las obligaciones del mismo. Como se aprecia es diferente la teoría de la fuerza mayor a la "*frustration of Contract*", pues esta última se basa en un cambio radical en las obligaciones de las partes, mientras que la primera centra su análisis en la irresistibilidad e imprevisibilidad de los hechos que impiden la ejecución de la obligación.

En el sistema jurídico norteamericano se ha desarrollado la doctrina de la "*impracticability*", doctrina que parte de las mismas premisas de la teoría de la "*frustration*", mas se ve atenuada en cuanto que exime de responsabilidad y del cumplimiento de una obligación al deudor, cuando el cumplimiento pendiente de la misma se ha vuelto extremadamente oneroso o difícil de cumplir para la parte que lo debe. Esta teoría es diametralmente diferente a la institución de la fuerza mayor o caso fortuito del derecho continental.

Precisamente por los diferentes enfoques legislativos para regular las causales eximentes de responsabilidad e que en la contratación internacional, así como a



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

nivel interno en países del *Common Law* es practica universal pactar una cláusula de fuerza mayor, concepto que las mismas partes definen contractualmente y establecen los procedimientos en los eventos en que una circunstancia de esa naturaleza se presente. Igualmente se acostumbra relacionar distintos eventos que caen bajo lo que han denominado fuerza mayor. En países que han adoptado el sistema continental europeo se advierte que la misma ley define que es fuerza mayor, y en cuanto a sus efectos sobre la distribución de los riesgos contractuales establece normas supletivas sujetas a modificación por la autonomía de la voluntad.

Entre nosotros los artículos 64 y 1604 del Código Civil definen fuerza mayor y regulan lo atinente a la distribución de los riesgos. A su turno, el Código de Comercio establece una regla imperativa en esas materias para el contrato de transporte norma que en el sistema Colombia tiene un carácter exceptivo pues no se admite pactar en contrario. A raíz de la globalización cada vez es más frecuente entre nosotros que las partes pacten una cláusula de fuerza mayor en la cual definen dicho concepto y convienen los procedimientos que deben observar en los casos en que se presente una fuerza mayor. Así mismo, es práctica común acordar listados de eventos que quedan cobijados bajo la fuerza mayor.

De otro lado, y habida consideración que existen eventos que no se ajustan enteramente a la irresistibilidad e imprevisibilidad exigidas para que pueda configurarse una fuerza mayor o caso fortuito, o por lo menos para evitar discusiones jurisprudenciales y doctrinales, así como hacer menos gravosa la carga de la prueba, es costumbre en los contratos del sector energético y en los de infraestructura pactar unos eventos eximentes o justificativos que eximen de responsabilidad al deudor.

Para evitar disquisiciones y disputas acerca de la validez o no de una estipulación contractual que defina fuerza mayor o caso fortuito en forma distinta a lo que establece el artículo 64 del Código Civil, estimamos que las partes podrían pactar una cláusula denominada eventos eximentes de responsabilidad y dentro de ella distinguir entre fuerza mayor o caso fortuito adoptando la definición legal y estableciendo otros eventos eximentes haciendo un listado de los mismos. El



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

procedimiento para el reconocimiento no de las partes de un evento eximente puede ser el mismo para uno u otro caso. Esta sugerencia permite conciliar las experiencias acumuladas por los mercados de gas natural más maduros y regulados por el *Common Law* y nuestro marco constitucional, lega y regulatorio, para solucionar las fallas que caracterizan el mercado de gas natural de Colombia.

Como corolario para efecto de la estandarización de los Contratos de gas en Colombia es recomendable reconocer las diferencias y particularidades de cada sistema, pues la simple transcripción de cláusulas de fuerza mayor que se utilizan en modelos foráneos para unos mercados diferentes al colombiano, pueden no sólo no consultar el mercado nacional sino ser contrarias a nuestra legislación.

3. FUERZA MAYOR O CASO FORTUITO Y OTROS EVENTOS EXIMENTES DE RESPONSABILIDAD.

En el derecho colombiano existen dos formas para eximirse el deudor de responsabilidad ante un eventual incumplimiento: (i) probando que el incumplimiento no se debe a una conducta negligente, descuidada o inclusive voluntariamente dañosa - noción de la culpa y/o dolo -, o (ii) probando que el incumplimiento de su obligación se ha debido a una causa extraña que escapa a su control, como son la fuerza mayor o caso fortuito y el hecho de terceros. Para efectos de este apéndice y el reporte del cual forma parte, nos interesa examinar brevemente los conceptos de fuerza mayor o caso fortuito y eventos eximentes, ambos comprendidos bajo nuestra legislación como causas extrañas eximentes de responsabilidad.

La causa extraña está compuesta por la fuerza mayor o el caso fortuito y el hecho de terceros². Se le llama causa extraña a esta forma de exoneración de responsabilidad por cuanto hay una ruptura del vínculo de causalidad existente entre el daño y la conducta del actor.

² La Corte Suprema de Justicia en diversas sentencias ha analizado la institución de la causa extraña como genero del caso fortuito y la fuerza mayor, así como el hecho de terceros. Por ejemplo, Sala de Casación Civil, Sentencia 4 de Junio 1992 M.P. Jaramillo Schloss).



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

Fuerza mayor o caso fortuito ha sido definido por el legislador en el artículo 64 del Código Civil, el cual dice: *“se llama fuerza mayor o caso fortuito el imprevisto o que no es posible resistir, como un naufragio, un terremoto, el apresamiento de enemigos, los actos de autoridad ejercidos por un funcionario público, etc”*.

Se aclara que sobre este punto no se entrará a analizar la discusión antiquísima y superflua sobre si el caso fortuito y la fuerza mayor son conceptos idénticos o si por el contrario disimiles, para nuestro entender son conceptos idénticos pues así lo establece la ley.

La jurisprudencia y doctrina nacional estiman que el caso fortuito o la fuerza mayor se presentan cuando el hecho o acontecimiento que le sobreviene al deudor es: (i) irresistible, (ii) imprevisible y (iii) extraño o ajeno a la actividad del deudor. Los anteriores elementos surgen del artículo 64 del Código Civil, tal como lo ha manifestado en diversos y reiterados fallos nuestra Honorable Corte Suprema de Justicia³.

Así, en la legislación colombiana para que un hecho sea considerado como fuerza mayor o caso fortuito, este debe ser imprevisible e irresistible, y naturalmente como se desprende de esos conceptos ser ajeno o extraño al deudor. En abundante jurisprudencia de la Corte Suprema de Justicia, ha dicho:

“Dos son los elementos que han sido analizados por la Corte para que un hecho pueda ser considerado como evento de “fuerza mayor o caso fortuito –fenómenos simétricos en sus efectos-, es necesario que, de una parte, no exista manera de contemplar su ocurrencia en condiciones de normalidad, justamente porque se presenta de súbito o en forma intempestiva y, de la otra, que sea inevitable, fatal o ineludible, al punto de determinar la conducta de la persona que lo padece, quien, por tanto, queda sometido irremediabilmente a sus efectos y doblegado, por tanto, ante su fuerza arrolladora. Imprevisibilidad e irresistibilidad son, pues, los dos elementos que, in casu, permiten calificar la vis maior o casus fortuitus, ninguno de los cuales puede faltar a la hora de establecer si la situación invocada por la

³ Véanse Corte Suprema de Justicia, Sala de Casación Civil, Sentencia del 27 de Septiembre de 1945 y Sentencia del 3 de agosto de 1949, “G.J.”. t. LXVI, pág 357.



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

parte que aspira a beneficiarse de esa causal eximente de responsabilidad, inmersa en la categoría genérica de causa extraña, puede ser considerada como tal”⁴.

En cuanto a la imprevisibilidad la Corte Suprema de Justicia ha precisado que:

“si el acontecimiento es susceptible de ser humanamente previsto, por más súbito y arrollador de la voluntad que parezca, no genera el caso fortuito ni la fuerza mayor..., siendo necesario, claro está, ‘examinar cada situación de manera específica y, por contera, individual’, desde la perspectiva de los tres criterios que permiten, en concreto, establecer si el hecho es imprevisible, a saber: ‘1) El referente a su normalidad y frecuencia; 2) El atinente a la probabilidad de su realización, y 3) El concerniente a su carácter inopinado, excepcional y sorpresivo”⁵

Así, la imprevisibilidad exige que el acontecimiento que se da no sea, dentro de las condiciones normales de los aconteceres, razonablemente previsible, es decir, porque es de rara ocurrencia, porque no es suficientemente probable que ocurra, porque es súbito, repentino, que no corresponde a las previsiones normales que suceden en el curso ordinario de la vida⁶.

Así, se puede concluir sobre el elemento de la imprevisibilidad que sus características son (i) su frecuencia o normalidad, (ii) la probabilidad de su ocurrencia, y (iii) la excepcionalidad de la misma, las cuales deben examinarse para cada caso bajo el lente de la razonabilidad.

En lo atinente a la irresistibilidad la jurisprudencia reiterada de la Corte Suprema ha establecido:

“un hecho es irresistible, en el sentido estricto de no haberse podido evitar su acaecimiento ni tampoco sus consecuencias, colocando al agente –sojuzgado por el suceso así sobrevenido- en la absoluta imposibilidad de obrar del modo debido, habida cuenta que si lo que se produce es tan solo una dificultad más o menos

⁴ G. J. Tomos. LIV, página, 377, y CLVIII, página 63

⁵ Sentencia de Casación Civil del 23 de junio de 2000; exp.: 5475

⁶ Hernán Darío Velásquez Gómez, *Estudio sobre obligaciones*, Bogotá, Edit. Temis, 2010, Pág. 722.



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

acentuada para enfrentarlo, tampoco se configura el fenómeno liberatorio del que viene haciéndose mérito”⁷

(...)

“un hecho sólo puede ser calificado como irresistible, si es absolutamente imposible evitar sus consecuencias, es decir, que situada cualquier persona en las circunstancias que enfrenta el deudor, invariablemente se vería sometido a esos efectos perturbadores, pues la incidencia de estos no está determinada, propiamente, por las condiciones especiales –o personales- del individuo llamado a afrontarlos, más concretamente por la actitud que éste pueda asumir respecto de ellos, sino por la naturaleza misma del hecho, al que se le son consustanciales o inherentes unas específicas secuelas. Ello sirve de fundamento para pregonar que la imposibilidad requerida para la liberación del deudor, en casos como el que ocupa la atención de la Corte, es únicamente la absoluta, cerrándose entonces el camino a cualquier otra”.

“La imposibilidad relativa, entonces, no permite calificar un hecho de irresistible, pues las dificultades de índole personal que se ciernan sobre el deudor para atender sus compromisos contractuales, o aquellas situaciones que, pese a ser generalizadas y gravosas, no frustran –in radice- la posibilidad de cumplimiento, y que, ad cautelam, correlativamente reclaman la asunción de ciertas cargas o medidas racionales por parte del deudor, constituyen hechos por definición superables, sin que la mayor onerosidad que ellas representen, de por sí, inequívocamente tenga la entidad suficiente de tornar insuperable lo que por esencia es resistible, rectamente entendida la irresistibilidad. . Por eso, entonces, aquellos eventos cuyos resultados, por cualificados que sean, pueden ser superados con un mayor o menor esfuerzo por parte del deudor y, en general, del sujeto que los soporta, no pueden ser

⁷ Sentencia de Casación Civil de 26 de julio de 2005, Exp. No. 06569-02, reiterada en Sentencia Casación Civil de 21 de noviembre de 2005, Exp. No. 7113).



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

considerados, en forma invariable, como constitutivos de fuerza mayor o caso fortuito, en sentido estricto”⁸.

En resumen, la irresistibilidad consiste en que el hecho no pueda ser evitado o superado de manera racional por el deudor. Así, sí el hecho es superable mas con una mayor dificultad u onerosidad para el deudor, este no puede considerarse irresistible en los términos que exige el caso fortuito o fuerza mayor. A lo sumo, y dependiendo de las particularidades fácticas del caso podría darse aplicación a la teoría de la imprevisión de reunirse los demás elementos.

Por tanto, el hecho de que una obligación se vuelva más onerosa para una de las partes, no puede ser considerado como una imposibilidad absoluta de ejecución de la obligación, dejando así sin fundamento la posibilidad de que el caso fortuito o fuerza mayor sean considerados como causales eximentes de responsabilidad en tales casos.

Finalmente, la fuerza mayor o caso fortuito no debe provenir de la conducta del deudor pues la causa extraña es incompatible con la culpa del deudor cualquiera que ella sea (entiéndase grave, leve y levísima). En este sentido se ha pronunciado nuestra Corte Suprema de Justicia al decir:

“Para que exista el poder liberatorio por el caso fortuito o la fuerza mayor, se requiere la coexistencia de una condición negativa externa: la ausencia de falta de falta del deudor. En otros términos: cuando existe dolo, negligencia o imprudencia del deudor, la falta neutraliza el obstáculo y el obligado o deudor permanece responsable”⁹

Así, si el deudor en su actuar ha incurrido en culpa el hecho deja de ser imprevisible e irresistible y, en consecuencia no reuniría los elementos esenciales de la fuerza mayor o caso fortuito que exige el artículo 64 del Código Civil. En consecuencia, el deudor debe demostrar la fuerza mayor o caso fortuito que hizo

⁸ Corte Suprema de Justicia, Sala de Casación Civil, Magistrado Ponente: Carlos Ignacio Jaramillo Jaramillo, 26 de julio de 2005, exp. 6569-02, y Sentencia del 31 de mayo de 1965, G.J. CXI y CXII pág. 126

⁹ Corte Suprema de Justicia, Casación Civil del 10 de abril de 1978, G.J. LIX.
PBX (571) 743 1005, Fax Ext. 104
Calle 87 No. 10 – 93, Of. 302 Bogotá D. C.



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

imposible el cumplimiento de su obligación, probando que no hay culpa en su actuar. En otros términos, el deudor que alega la existencia de fuerza mayor o caso fortuito sólo está obligado a probar el suceso imprevisible e irresistible relevándole la ley de tal manera de la carga de probar su diligencia o cuidado.

Sin embargo, el legislador ha previsto casos específicos en los cuales el deudor que alega fuerza mayor o caso fortuito debe probar no sólo el evento imprevisible, irresistible y ajeno a su conducta sino que también debe probar que actuó diligentemente, en otros, como sucede en los contratos de transporte. En efecto, en dicho contratos la legislación colombiana exige que para que el deudor pueda exonerarse de responsabilidad, se requiere que este pruebe tanto la causa extraña como la debida prudencia y diligencia. El artículo 992 del C de Co dice:

“El transportador sólo podrá exonerarse, total o parcialmente, de su responsabilidad por la inejecución o por la ejecución defectuosa o tardía de sus obligaciones, si prueba que la causa del daño lo fue extraña o que en su caso, se debió a vicio propio o inherente de la cosa transportada, y además que adoptó todas las medidas razonables que hubiere tomado un transportador según las exigencias de la profesión para evitar el perjuicio o su agravación.

Las violaciones a los reglamentos oficiales o de la empresa, se tendrán como culpa, cuando el incumplimiento haya causado o agravado el riesgo.

Las cláusulas del contrato que impliquen la exoneración total o parcial por parte del transportador de sus obligaciones o responsabilidades, no producirán efectos”.

Como se ha dicho en reiteradas ocasiones, si existe una causa extraña habrá ausencia de culpa del deudor razón por la cual cuando la norma refiere a que el transportador “adoptó todas las medidas razonables que hubiere tomado un transportador según las exigencias de la profesión para evitar el perjuicio o su agravación”, lo único que hace la norma es volver más gravosa y pesada la carga de la prueba del transportador, por cuanto en el régimen general una vez probada la causa extraña el deudor queda relevado de probar su diligencia y cuidado. Como se observa, la citada norma no cambia en nada el alcance del concepto de fuerza mayor o caso



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

fortuito, simplemente exige una prueba adicional para exonerar al transportador de su responsabilidad.

De lo expuesto se desprende que ningún evento puede considerarse a priori como causa extraña¹⁰, ni siquiera los ejemplos que utiliza la referida norma ya que estos en pueden no llegar a ser considerados como fuerza mayor. Al respecto, para el caso de un naufragio que trae el artículo 64 como ejemplo de fuerza mayor o caso fortuito, resulta de gran ilustración el ejemplo utilizado por el doctor Javier Tamayo Jaramillo:

“si el capitán de un barco, a sabiendas de una tempestad o de un huracán, emprende una travesía marítima, y a consecuencia de las furias desatadas de la naturaleza el barco se hunde, pues ni el naufragio ni el huracán pueden ser alegados como fuerza mayor o caso fortuito, puesto que los daños son imputables a la culpa del deudor o de su dependiente, que sin tomar las medidas del caso, se arriesga a desafiar las fuerzas superiores de tales fenómenos físicos¹¹”.

En consecuencia, cada caso particular debe ser objeto de análisis por parte de un juez, o de la parte contra la que se invoca la fuerza mayor, se deben analizar todas las circunstancias fácticas del evento para determinar si este es constitutivo de fuerza mayor o caso fortuito.

La exoneración de responsabilidad del deudor por el acaecimiento de la fuerza mayor o caso fortuito es el principal efecto de esta figura jurídica, efecto que ha sido expresamente regulada en el artículo 1616, el cual en lo pertinente dice:

“la mora producida por fuerza mayor o caso fortuito, no da lugar a indemnización de perjuicios”.

Así, en caso de presentarse un hecho constitutivo de fuerza mayor o caso fortuito la obligación del deudor (i) se encuentra suspendida en el caso de los contratos de ejecución sucesiva o incluso extinta dependiendo de la clase de obligación (p.ej.

¹⁰Javier Tamayo Jaramillo, *El Contrato de Transporte*, Bogotá, Edit. Temis, 1991, Pág. 280.

¹¹Javier Tamayo Jaramillo, *Teoría General de la responsabilidad, De la responsabilidad Civil*, Tomo I, Bogotá, Edit. Temis, 1999, Pág. 297.



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

venta de cuerpo cierto), y (ii) no se le puede exigir una indemnización de perjuicios al deudor que ha sufrido el acaecimiento de la fuerza mayor o el caso fortuito.

En la legislación colombiana hay ciertos casos taxativos que no exoneran al deudor de responsabilidad ante el acontecimiento de una fuerza mayor o caso fortuito, estos eventos son: (i) cuando el deudor ha decidido asumir el caso fortuito (art. 1604 CC), (ii) cuando se encuentra constituido en mora antes del acaecimiento de la fuerza mayor o el caso fortuito, (iii) al que ha hurtado una cosa (art. 1735 CC), (iv) y cuando expresamente la ley así lo dispone¹².

Las anteriores reglas que contiene el código civil y respecto del contrato de transporte regulado por el C de Co, sobre distribución de los riesgos en los contratos tienen un carácter supletivo, es decir, que las partes pueden pactar en contrario, salvo aquellos eventos (contrato de transporte) en que la ley misma imperativamente establece limitaciones o prohibiciones. Así las cosas, en ejercicio de la autonomía de la voluntad las partes pueden contemplar o acordar causales eximentes con efectos jurídicos de fuerza mayor o caso fortuito.

En otros términos, la fuerza mayor o caso fortuito en el régimen legal colombiano puede ser asumida por el deudor, así, las partes en un contrato pueden acordar que los eventos imprevisibles e irresistibles no exoneraran de responsabilidad al deudor, lo que significa que el deudor asume todos los riesgos derivados de una fuerza mayor o caso fortuito, debiendo incluso indemnizar los perjuicios que se le causen al acreedor con la ocurrencia de un hecho imprevisible e irresistible que afecte el contrato. Adicionalmente, las partes pueden incluir, como se dijo anteriormente, otros eventos eximentes o justificativos con efectos de fuerza mayor o caso fortuito como son los denominados eventos eximentes o justificativos que comúnmente en Colombia se pactan en los contratos de suministro de gas y en ocasiones ilegalmente y contrariando las disposiciones legales en los contratos de transporte.

¹² Solo se encuentran dos casos en la legislación colombiana, a saber: (i) Transporte aéreo de pasajeros, y (ii) responsabilidad por el hurto de las cosas introducidas en el posadero.



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

La anterior forma de asumir riesgos por parte del deudor es totalmente lícita según la normatividad colombiana, pues según el artículo 1732 CC *“si el deudor se ha constituido responsable de todo caso fortuito, o de alguno en particular, se observará lo pactado”*.

De lo expuesto se constata que bajo la legislación colombiana es válido pactar una distribución de riesgo, incluido los efectos de la fuerza mayor o caso fortuito distinta a la del artículo 1604 del C.C. La misma ley honra la creatividad de las partes en ejercicio de la autonomía de la voluntad. En ejercicio de dicha autonomía no pueden las partes abusar del derecho o de sus posición contractual pues en caso de hacerlo podría la parte afectada recurrir al juez en busca de que no se aplique la cláusula o una indemnización. De allí que es muy importante distinguir una y otra institución jurídica al momento en que el Estado a través de sus distintas agencias y competencias regule los contratos para cumplir con los objetivos y fines constitucionales y legales en materia de la prestación de los servicios públicos domiciliarios

Como soporte de lo dicho, traemos a colación lo dicho por la Corte Suprema de Justicia¹³, en el sentido que corresponde al legislador y no al juez adoptar los medios necesarios que evitan la inserción de estas cláusulas en los contratos de adhesión. En el mismo sentido el tratadista Guillermo Ospina Fernández:

“Es claro que si la adhesión de una parte a la voluntad de la otra basta para formar el contrato, todas las cláusulas de este se deben tener como queridas y aceptadas por el adherente. Lo que sí se justifica – atendiendo a los peligros que ofrece la naturaleza del contrato por adhesión, tan importante y frecuente en el comercio moderno – es que la ley misma, no el juez, se preocupe por evitar la inserción de cláusulas leoninas en los reglamentos de las empresas, como lo ha hecho en materia de transportes, al exigir a los empresarios que fijen sus tarifas de acuerdo con las autoridades y al prohibirles que se exoneren de responsabilidad”¹⁴.

¹³ Corte Suprema de Justicia, Casación Civil del 15 de diciembre de 1970.

¹⁴ Guillermo Ospina Fernández, *Teoría General de los Actos o Negocios Jurídicos*, Bogotá, Edit. Temis, 1983, Pág. 70 y ss



SUÁREZ ZAPATA PARTNERS

A B O G A D O S

El reconocimiento de diferente tratamiento legal entre el abuso de la posición contractual, el abuso de la posición dominante y la validez de las cláusulas, es necesario al momento de legislar o regular las diferentes materias objeto de la contratación de suministro y transporte de gas en Colombia.

EFET

European Federation of Energy Traders

ANNEX 2A

CONFIRMATION OF INDIVIDUAL CONTRACT (FIXED PRICE)

BETWEEN:

(1) _____ ("Seller"); and

(2) _____ ("Buyer").

concluded on [/ /], [:] hours

Delivery Point :

[] INTRA SYSTEM

Relevant System :

[] INTER SYSTEM

Seller's System :

Buyer's System :

Contract Quantity : [] MWh

Time Unit :

Total Supply Period : From [] hours on [/ /]
to [] hours on [/ /]

[Planned Maintenance periods to be excluded or not?]

Contract Price :

Long Term Force Majeure Limit :
(§ 7.5)

Prevailing Meter Readings and Allocation Statements :
(§ 6.4)

Tolerance :

OTHER ARRANGEMENTS

References to time are to Central European Time or other?

Days are 0600 hours CET to 0600 hours CET or other?

Off-Spec Gas Liability Limit (as per § 8a.5 or other?)

Annex 2A- 1

This Confirmation confirms the Individual Contract entered into pursuant to the EFET General Agreement Concerning the Delivery and Acceptance of Natural Gas between the Parties (General Agreement) and supplements and forms part of that General Agreement. In case of any inconsistencies between the terms of this Confirmation and the Individual Contract, please contact us immediately.

Date : _____

Signature : _____

EFET

European Federation of Energy Traders

ANNEX 2B

CONFIRMATION OF INDIVIDUAL CONTRACT (FLOATING PRICE)

BETWEEN:

(1) _____ ("Seller"); and

(2) _____ ("Buyer").

concluded on [/ /], [:] hours

Delivery Point :

INTRA SYSTEM

Relevant System :

INTER SYSTEM

Seller's System :

Buyer's System :

Contract Quantity : [] MWh

Time Unit :

Total Supply Period : From [] hours on [/ /]
to [] hours on [/ /]

{Planned Maintenance periods to be excluded or not?}

Price Source :

Commodity Reference Price :

Alternate Commodity Reference Price :

Calculation Date :

Calculation Agent :

Calculation Method :

Long Term Force Majeure Limit :
(§ 7.5)

Annex 2B-1

Prevailing Meter Readings and Allocation Statements :
(§ 6.4)

Tolerance :

OTHER ARRANGEMENTS

References to time are to Central European Time or other?

Days are 0600 hours CET to 0600 hours CET or other?

Off-Spec Gas Liability Limit (as per § 8a.5 or other?)

This Confirmation confirms the Individual Contract entered into pursuant to the EFET General Agreement Concerning the Delivery and Acceptance of Natural Gas between the Parties (General Agreement) and supplements and forms part of that General Agreement. In case of any inconsistencies between the terms of this Confirmation and the Individual Contract, please contact us immediately.

Date : _____

Signature : _____

EFET

European Federation of Energy Traders

ANNEX 2C

CONFIRMATION OF INDIVIDUAL CONTRACT (CALL OPTION)

BETWEEN:

(1) _____ ("Writer"); and

(2) _____ ("Holder").

concluded on [/ /], [:] hours

Option Details :

- (a) Option Type : Call
- (b) Option Style: American/European
- (c) Exercise Deadline :
- (d) Exercise Period: (if American Style Option)
- (e) Premium :
- (f) Premium Payment Date :

Delivery Point :

INTRA SYSTEM

Relevant System :

INTER SYSTEM

Seller's System :

Buyer's System :

Contract Quantity : []MWh

Time Unit :

Total Supply Period : From [] hours on [/ /]
to [] hours on [/ /]

[Planned Maintenance periods to be excluded or not?]

Contract Price :

Long Term Force Majeure Limit :
(§ 7.5)

Annex 2C-1

Prevailing Meter Readings and Allocation Statements :
(§ 6.4)

Tolerance :

OTHER ARRANGEMENTS

References to time are to Central European Time or other?

Days are 0600 hours CET to 0600 hours CET or other?

Off-Spec Gas Liability Limit (as per § 8a.5 or other?)

This Confirmation confirms the Individual Contract entered into pursuant to the EFET General Agreement Concerning the Delivery and Acceptance of Natural Gas between the Parties (General Agreement) and supplements and forms part of that General Agreement. In case of any inconsistencies between the terms of this Confirmation and the Individual Contract, please contact us immediately.

Date : _____

Signature : _____

Annex 2C-2

EFET

European Federation of Energy Traders

ANNEX 2D

CONFIRMATION OF INDIVIDUAL CONTRACT (PUT OPTION)

BETWEEN:

(1) _____ ("Writer"); and

(2) _____ ("Holder").

concluded on [/ /], [:] hours

Option Details :

- (a) Option Type : Put
- (b) Option Style: American/European
- (e) Exercise Deadline :
- (f) Exercise Period: (if American Style Option)
- (e) Premium :
- (f) Premium Payment Date :

Delivery Point :

INTRA SYSTEM

Relevant System :

INTER SYSTEM

Seller's System :

Buyer's System :

Contract Quantity : []MWh

Time Unit :

Total Supply Period : From [] hours on [/ /]
to [] hours on [/ /]

[Planned Maintenance periods to be excluded or not?]

Contract Price :

Long Term Force Majeure Limit :
(§ 7.5)

Annex 2D-1

Prevailing Meter Readings and Allocation Statements :
(§ 6.4)

Tolerance :

OTHER ARRANGEMENTS

References to time are to Central European Time or other?

Days are 0600 hours CET to 0600 hours CET or other?

Off-Spec Gas Liability Limit (as per § 8a.5 or other?)

This Confirmation confirms the Individual Contract entered into pursuant to the EFET General Agreement Concerning the Delivery and Acceptance of Natural Gas between the Parties (General Agreement) and supplements and forms part of that General Agreement. In case of any inconsistencies between the terms of this Confirmation and the Individual Contract, please contact us immediately.

Date : _____

Signature : _____

Appendix “D”

Disclaimer

The attached document contains materials that were copied directly from Copyrighted materials from the European Federation of Energy Traders (EFET) and North American Energy Standards Board (NAESB) Standard Form Agreements. This document was prepared as part of the Consultancy for Standardizing Natural Gas Contracts for the Colombian Natural Gas Market, and is solely meant to be informative and to be used as an example of a Standard Contract for the Colombian Market.

Modifications have been made to reflect the Colombian natural Gas Market. The form of Agreement should only be used after gaining permission and license from the two entities named above.

Additionally, this form should be subject to review by legal counsel in Colombian in order to strictly conform to Colombian Laws and Regulations.

Base Contract for Sale and Purchase of Natural Gas

This Base Contract is entered into as of the following date:

The parties to this Base Contract are the following:

PARTY A 	PARTY NAME	PARTY B
	ADDRESS	
WWW: _____	BUSINESS WEBSITE	WWW: _____
	CONTRACT NUMBER	
<input type="checkbox"/> _____: <input type="checkbox"/> OTHER:	TAX ID NUMBERS	<input type="checkbox"/> _____: <input type="checkbox"/> OTHER:
	JURISDICTION OF ORGANIZATION	
<input type="checkbox"/> Corporation <input type="checkbox"/> LLC <input type="checkbox"/> Limited Partnership <input type="checkbox"/> Partnership <input type="checkbox"/> LLP <input type="checkbox"/> Other: _____	COMPANY TYPE	<input type="checkbox"/> Corporation <input type="checkbox"/> LLC <input type="checkbox"/> Limited Partnership <input type="checkbox"/> Partnership <input type="checkbox"/> LLP <input type="checkbox"/> Other: _____
	GUARANTOR (IF APPLICABLE)	
CONTACT INFORMATION		
ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____	▪ COMMERCIAL	ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____
ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____	▪ SCHEDULING	ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____
ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____	▪ CONTRACT AND LEGAL NOTICES	ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____
ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____	▪ CREDIT	ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____
ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____	▪ TRANSACTION CONFIRMATIONS	ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____
ACCOUNTING INFORMATION		
ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____	▪ INVOICES ▪ PAYMENTS ▪ SETTLEMENTS	ATTN: _____ TEL#: _____ FAX#: _____ EMAIL: _____
BANK: _____ ABA: _____ ACCT: _____ OTHER DETAILS: _____	WIRE TRANSFER NUMBERS (IF APPLICABLE)	BANK: _____ ABA: _____ ACCT: _____ OTHER DETAILS: _____
BANK: _____ ABA: _____ ACCT: _____ OTHER DETAILS: _____	ACH NUMBERS (IF APPLICABLE)	BANK: _____ ABA: _____ ACCT: _____ OTHER DETAILS: _____
ATTN: _____ ADDRESS: _____	CHECKS (IF APPLICABLE)	ATTN: _____ ADDRESS: _____

Proposed for the Colombian Natural Gas Market

General Terms and Conditions Base Contract for Sale and Purchase of Natural Gas

SECTION 1. PURPOSE AND PROCEDURES

These General Terms and Conditions are intended to facilitate purchase and sale transactions of Gas on a Firm or Interruptible basis. "Buyer" refers to the party receiving Gas and "Seller" refers to the party delivering Gas. The entire agreement between the parties shall be the Contract as defined in Section 2.9.

1.1. The parties will use the following Transaction Confirmation procedure. Should the parties come to an agreement regarding a Gas purchase and sale transaction for a particular Delivery Period, the Confirming Party shall, and the other party may, record that agreement on a Transaction Confirmation and communicate such Transaction Confirmation by facsimile, EDI or mutually agreeable electronic means, to the other party by the close of the Business Day following the date of agreement. The parties acknowledge that their agreement will not be binding until the exchange of non-conflicting Transaction Confirmations or the passage of the Confirm Deadline without objection from the receiving party, as provided in Section 1.3.

1.2. If a sending party's Transaction Confirmation is materially different from the receiving party's understanding of the agreement referred to in Section 1.2, such receiving party shall notify the sending party via facsimile, EDI or mutually agreeable electronic means by the Confirm Deadline, unless such receiving party has previously sent a Transaction Confirmation to the sending party. The failure of the receiving party to so notify the sending party in writing by the Confirm Deadline constitutes the receiving party's agreement to the terms of the transaction described in the sending party's Transaction Confirmation. If there are any material differences between timely sent Transaction Confirmations governing the same transaction, then neither Transaction Confirmation shall be binding until or unless such differences are resolved including the use of any evidence that clearly resolves the differences in the Transaction Confirmations. In the event of a conflict among the terms of (i) a binding Transaction Confirmation pursuant to Section 1.2, (ii) the oral agreement of the parties which may be evidenced by a recorded conversation, where the parties have selected the Oral Transaction Procedure of the Base Contract, (iii) the Base Contract, and (iv) these General Terms and Conditions, the terms of the documents shall govern in the priority listed in this sentence.

1.3. The parties agree that each party may electronically record all telephone conversations with respect to this Contract between their respective employees, without any special or further notice to the other party. Each party shall obtain any necessary consent of its agents and employees to such recording. Where the parties have selected the Oral Transaction Procedure in Section 1.2 of the Base Contract, the parties agree not to contest the validity or enforceability of telephonic recordings entered into in accordance with the requirements of this Base Contract.

SECTION 2. DEFINITIONS

The terms set forth below shall have the meaning ascribed to them below. Other terms are also defined elsewhere in the Contract and shall have the meanings ascribed to them herein.

2.1. "Additional Event of Default" shall mean Transactional Cross Default or Indebtedness Cross Default, each as and if selected by the parties pursuant to the Base Contract.

2.2. "Affiliate" shall mean, in relation to any person, any entity controlled, directly or indirectly, by the person, any entity that controls, directly or indirectly, the person or any entity directly or indirectly under common control with the person. For this purpose, "control" of any entity or person means ownership of at least 50 percent of the voting power of the entity or person.

2.3. "Alternative Damages" shall mean such damages, expressed in dollars or dollars per MMBtu, as the parties shall agree upon in the Transaction Confirmation, in the event either Seller or Buyer fails to perform a Firm obligation to deliver Gas in the case of Seller or to receive Gas in the case of Buyer.

2.4. "Base Contract" shall mean a contract executed by the parties that incorporates these General Terms and Conditions by reference; that specifies the agreed selections of provisions contained herein; and that sets forth other information required herein and any Special Provisions and addendum(s) as identified on page one.

2.5. "British thermal unit" or "Btu" shall mean the International BTU, which is also called the Btu (IT).

2.6. "Business Day(s)" shall mean Monday through Friday, excluding Federal Banking Holidays for transactions in the U.S.

2.7. "Confirm Deadline" shall mean 5:00 p.m. in the receiving party's time zone on the second Business Day following the Day a Transaction Confirmation is received or, if applicable, on the Business Day agreed to by the parties in the Base Contract; provided, if the Transaction Confirmation is time stamped after 5:00 p.m. in the receiving party's time zone, it shall be deemed received at the opening of the next Business Day.

2.8. "Confirming Party" shall mean the party designated in the Base Contract to prepare and forward Transaction Confirmations to the other party.

2.9. "Contract" shall mean the legally-binding relationship established by (i) the Base Contract, (ii) any and all binding Transaction Confirmations and (iii) where the parties have selected the Oral Transaction Procedure in Section 1.2 of the Base Contract,

any and all transactions that the parties have entered into through an EDI transmission or by telephone, but that have not been confirmed in a binding Transaction Confirmation, all of which shall form a single integrated agreement between the parties.

2.10. "Contract Price" shall mean the amount expressed in U.S. Dollars per MMBtu to be paid by Buyer to Seller for the purchase of Gas as agreed to by the parties in a transaction.

2.11. "Contract Quantity" shall mean the quantity of Gas to be delivered and taken as agreed to by the parties in a transaction.

2.12. "Cover Standard", as referred to in Section 3.2, shall mean that if there is an unexcused failure to take or deliver any quantity of Gas pursuant to this Contract, then the performing party shall use commercially reasonable efforts to (i) if Buyer is the performing party, obtain Gas, (or an alternate fuel if elected by Buyer and replacement Gas is not available), or (ii) if Seller is the performing party, sell Gas, in either case, at a price reasonable for the delivery or production area, as applicable, consistent with: the amount of notice provided by the nonperforming party; the immediacy of the Buyer's Gas consumption needs or Seller's Gas sales requirements, as applicable; the quantities involved; and the anticipated length of failure by the nonperforming party.

2.13. "Credit Support Obligation(s)" shall mean any obligation(s) to provide or establish credit support for, or on behalf of, a party to this Contract such as cash, an irrevocable standby letter of credit, a margin agreement, a prepayment, a security interest in an asset, guaranty, or other good and sufficient security of a continuing nature.

2.14. "Day" shall mean a period of 24 consecutive hours, coextensive with a "day" as defined by the Receiving Transporter in a particular transaction.

2.15. "Delivery Period" shall be the period during which deliveries are to be made as agreed to by the parties in a transaction.

2.16. "Delivery Point(s)" shall mean such point(s) as are agreed to by the parties in a transaction.

2.17. "EDI" shall mean an electronic data interchange pursuant to an agreement entered into by the parties, specifically relating to the communication of Transaction Confirmations under this Contract.

2.18. "EFP" shall mean the purchase, sale or exchange of natural Gas as the "physical" side of an exchange for physical transaction involving gas futures contracts. EFP shall incorporate the meaning and remedies of "Firm", provided that a party's excuse for nonperformance of its obligations to deliver or receive Gas will be governed by the rules of the relevant futures exchange regulated under the Commodity Exchange Act.

2.19. "Firm" shall mean that either party may interrupt its performance without liability only to the extent that such performance is prevented for reasons of Force Majeure; provided, however, that during Force Majeure interruptions, the party invoking Force Majeure may be responsible for any Imbalance Charges as set forth in Section 4.3 related to its interruption after the nomination is made to the Transporter and until the change in deliveries and/or receipts is confirmed by the Transporter.

2.20. "Gas" shall mean any mixture of hydrocarbons and noncombustible gases in a gaseous state consisting primarily of methane.

2.21. "Guarantor" shall mean any entity that has provided a guaranty of the obligations of a party hereunder.

2.22. "Imbalance Charges" shall mean any fees, penalties, costs or charges (in cash or in kind) assessed by a Transporter for failure to satisfy the Transporter's balance and/or nomination requirements.

2.23. "Indebtedness Cross Default" shall mean if selected on the Base Contract by the parties with respect to a party, that it or its Guarantor, if any, experiences a default, or similar condition or event however therein defined, under one or more agreements or instruments, individually or collectively, relating to indebtedness (such indebtedness to include any obligation whether present or future, contingent or otherwise, as principal or surety or otherwise) for the payment or repayment of borrowed money in an aggregate amount greater than the threshold specified in the Base Contract with respect to such party or its Guarantor, if any, which results in such indebtedness becoming immediately due and payable.

2.24. "Interruptible" shall mean that either party may interrupt its performance at any time for any reason, whether or not caused by an event of Force Majeure, with no liability, except such interrupting party may be responsible for any Imbalance Charges as set forth in Section 4.3 related to its interruption after the nomination is made to the Transporter and until the change in deliveries and/or receipts is confirmed by Transporter.

2.25. "MMBtu" shall mean one million British thermal units, which is equivalent to one dekatherm.

2.26. "Month" shall mean the period beginning on the first Day of the calendar month and ending immediately prior to the commencement of the first Day of the next calendar month.

2.27. "Payment Date" shall mean a date, as indicated on the Base Contract, on or before which payment is due Seller for Gas received by Buyer in the previous Month.

2.28. "Receiving Transporter" shall mean the Transporter receiving Gas at a Delivery Point, or absent such receiving Transporter, the Transporter delivering Gas at a Delivery Point.

2.29. "Scheduled Gas" shall mean the quantity of Gas confirmed by Transporter(s) for movement, transportation or management.

2.30. "Specified Transaction(s)" shall mean any other transaction or agreement between the parties for the purchase, sale or exchange of physical Gas, and any other transaction or agreement identified as a Specified Transaction under the Base Contract.

2.31. "Spot Price" as referred to in Section 3.2 shall mean the price listed in the publication indicated on the Base Contract, under the listing applicable to the geographic location closest in proximity to the Delivery Point(s) for the relevant Day; provided, if there is no single price published for such location for such Day, but there is published a range of prices, then the Spot Price shall be the average

of such high and low prices. If no price or range of prices is published for such Day, then the Spot Price shall be the average of the following: (i) the price (determined as stated above) for the first Day for which a price or range of prices is published that next precedes the relevant Day; and (ii) the price (determined as stated above) for the first Day for which a price or range of prices is published that next follows the relevant Day.

2.32. "Transaction Confirmation" shall mean a document, similar to the form of Exhibit A, setting forth the terms of a transaction formed pursuant to Section 1 for a particular Delivery Period.

2.33. "Transactional Cross Default" shall mean if selected on the Base Contract by the parties with respect to a party, that it shall be in default, however therein defined, under any Specified Transaction.

2.34. "Termination Option" shall mean the option of either party to terminate a transaction in the event that the other party fails to perform a Firm obligation to deliver Gas in the case of Seller or to receive Gas in the case of Buyer for a designated number of days during a period as specified on the applicable Transaction Confirmation.

2.35. "Transporter(s)" shall mean all Gas gathering or pipeline companies, or local distribution companies, acting in the capacity of a transporter, transporting Gas for Seller or Buyer upstream or downstream, respectively, of the Delivery Point pursuant to a particular transaction.

SECTION 3. PERFORMANCE OBLIGATION

3.1. Seller agrees to sell and deliver, and Buyer agrees to receive and purchase, the Contract Quantity for a particular transaction in accordance with the terms of the Contract. Sales and purchases will be on a Firm or Interruptible basis, as agreed to by the parties in a transaction.

The parties have selected either the "Cover Standard" or the "Spot Price Standard" as indicated on the Base Contract.

Cover Standard:

3.2. The sole and exclusive remedy of the parties in the event of a breach of a Firm obligation to deliver or receive Gas shall be recovery of the following: (i) in the event of a breach by Seller on any Day(s), payment by Seller to Buyer in an amount equal to the positive difference, if any, between the purchase price paid by Buyer utilizing the Cover Standard and the Contract Price, adjusted for commercially reasonable differences in transportation costs to or from the Delivery Point(s), multiplied by the difference between the Contract Quantity and the quantity actually delivered by Seller for such Day(s) excluding any quantity for which no replacement is available; or (ii) in the event of a breach by Buyer on any Day(s), payment by Buyer to Seller in the amount equal to the positive difference, if any, between the Contract Price and the price received by Seller utilizing the Cover Standard for the resale of such Gas, adjusted for commercially reasonable differences in transportation costs to or from the Delivery Point(s), multiplied by the difference between the Contract Quantity and the quantity actually taken by Buyer for such Day(s) excluding any quantity for which no sale is available; and (iii) in the event that Buyer has used commercially reasonable efforts to replace the Gas or Seller has used commercially reasonable efforts to sell the Gas to a third party, and no such replacement or sale is available for all or any portion of the Contract Quantity of Gas, then in addition to (i) or (ii) above, as applicable, the sole and exclusive remedy of the performing party with respect to the Gas not replaced or sold shall be an amount equal to any unfavorable difference between the Contract Price and the Spot Price, adjusted for such transportation to the applicable Delivery Point, multiplied by the quantity of such Gas not replaced or sold. Imbalance Charges shall not be recovered under this Section 3.2, but Seller and/or Buyer shall be responsible for Imbalance Charges, if any, as provided in Section 4.3. The amount of such unfavorable difference shall be payable five Business Days after presentation of the performing party's invoice, which shall set forth the basis upon which such amount was calculated.

Spot Price Standard:

3.2. The sole and exclusive remedy of the parties in the event of a breach of a Firm obligation to deliver or receive Gas shall be recovery of the following: (i) in the event of a breach by Seller on any Day(s), payment by Seller to Buyer in an amount equal to the difference between the Contract Quantity and the actual quantity delivered by Seller and received by Buyer for such Day(s), multiplied by the positive difference, if any, obtained by subtracting the Contract Price from the Spot Price; or (ii) in the event of a breach by Buyer on any Day(s), payment by Buyer to Seller in an amount equal to the difference between the Contract Quantity and the actual quantity delivered by Seller and received by Buyer for such Day(s), multiplied by the positive difference, if any, obtained by subtracting the applicable Spot Price from the Contract Price. Imbalance Charges shall not be recovered under this Section 3.2, but Seller and/or Buyer shall be responsible for Imbalance Charges, if any, as provided in Section 4.3. The amount of such unfavorable difference shall be payable five Business Days after presentation of the performing party's invoice, which shall set forth the basis upon which such amount was calculated.

3.3. Notwithstanding Section 3.2, the parties may agree to Alternative Damages in a Transaction Confirmation executed in writing by both parties.

3.4. In addition to Sections 3.2 and 3.3, the parties may provide for a Termination Option in a Transaction Confirmation executed in writing by both parties. The Transaction Confirmation containing the Termination Option will designate the length of nonperformance triggering the Termination Option and the procedures for exercise thereof, how damages for nonperformance will be compensated, and how liquidation costs will be calculated.

SECTION 4. TRANSPORTATION, NOMINATIONS, AND IMBALANCES

4.1. Seller shall have the sole responsibility for transporting the Gas to the Delivery Point(s). Buyer shall have the sole responsibility for transporting the Gas from the Delivery Point(s).

4.2. The parties shall coordinate their nomination activities, giving sufficient time to meet the deadlines of the affected Transporter(s). Each party shall give the other party timely prior Notice, sufficient to meet the requirements of all Transporter(s) involved in the transaction, of the

quantities of Gas to be delivered and purchased each Day. Should either party become aware that actual deliveries at the Delivery Point(s) are greater or lesser than the Scheduled Gas, such party shall promptly notify the other party.

4.3. The parties shall use commercially reasonable efforts to avoid imposition of any Imbalance Charges. If Buyer or Seller receives an invoice from a Transporter that includes Imbalance Charges, the parties shall determine the validity as well as the cause of such Imbalance Charges. If the Imbalance Charges were incurred as a result of Buyer's receipt of quantities of Gas greater than or less than the Scheduled Gas, then Buyer shall pay for such Imbalance Charges or reimburse Seller for such Imbalance Charges paid by Seller. If the Imbalance Charges were incurred as a result of Seller's delivery of quantities of Gas greater than or less than the Scheduled Gas, then Seller shall pay for such Imbalance Charges or reimburse Buyer for such Imbalance Charges paid by Buyer.

SECTION 5. QUALITY AND MEASUREMENT

All Gas delivered by Seller shall meet the pressure, quality and heat content requirements of the Receiving Transporter. The unit of quantity measurement for purposes of this Contract shall be one MMBtu dry. Measurement of Gas quantities hereunder shall be in accordance with the established procedures of the Receiving Transporter.

SECTION 6. TAXES (THIS LANGUAGE SHOULD BE ADAPTED TO REFLECT COLOMBIAN LAW)

The parties have selected either "Buyer Pays At and After Delivery Point" or "Seller Pays Before and At Delivery Point" as indicated on the Base Contract.

Buyer Pays At and After Delivery Point:

Seller shall pay or cause to be paid all taxes, fees, levies, penalties, licenses or charges imposed by any government authority ("Taxes") on or with respect to the Gas prior to the Delivery Point(s). Buyer shall pay or cause to be paid all Taxes on or with respect to the Gas at the Delivery Point(s) and all Taxes after the Delivery Point(s). If a party is required to remit or pay Taxes that are the other party's responsibility hereunder, the party responsible for such Taxes shall promptly reimburse the other party for such Taxes. Any party entitled to an exemption from any such Taxes or charges shall furnish the other party any necessary documentation thereof.

Seller Pays Before and At Delivery Point:

Seller shall pay or cause to be paid all taxes, fees, levies, penalties, licenses or charges imposed by any government authority ("Taxes") on or with respect to the Gas prior to the Delivery Point(s) and all Taxes at the Delivery Point(s). Buyer shall pay or cause to be paid all Taxes on or with respect to the Gas after the Delivery Point(s). If a party is required to remit or pay Taxes that are the other party's responsibility hereunder, the party responsible for such Taxes shall promptly reimburse the other party for such Taxes. Any party entitled to an exemption from any such Taxes or charges shall furnish the other party any necessary documentation thereof.

SECTION 7. BILLING, PAYMENT, AND AUDIT

7.1. Seller shall invoice Buyer for Gas delivered and received in the preceding Month and for any other applicable charges, providing supporting documentation acceptable in industry practice to support the amount charged. If the actual quantity delivered is not known by the billing date, billing will be prepared based on the quantity of Scheduled Gas. The invoiced quantity will then be adjusted to the actual quantity on the following Month's billing or as soon thereafter as actual delivery information is available.

7.2. Buyer shall remit the amount due under Section 7.1 in the manner specified in the Base Contract, in immediately available funds, on or before the later of the Payment Date or 10 Days after receipt of the invoice by Buyer; provided that if the Payment Date is not a Business Day, payment is due on the next Business Day following that date. In the event any payments are due Buyer hereunder, payment to Buyer shall be made in accordance with this Section 7.2.

7.3. In the event payments become due pursuant to Sections 3.2 or 3.3, the performing party may submit an invoice to the nonperforming party for an accelerated payment setting forth the basis upon which the invoiced amount was calculated. Payment from the nonperforming party will be due five Business Days after receipt of invoice.

7.4. If the invoiced party, in good faith, disputes the amount of any such invoice or any part thereof, such invoiced party will pay such amount as it concedes to be correct; provided, however, if the invoiced party disputes the amount due, it must provide supporting documentation acceptable in industry practice to support the amount paid or disputed without undue delay. In the event the parties are unable to resolve such dispute, either party may pursue any remedy available at law or in equity to enforce its rights pursuant to this Section.

7.5. If the invoiced party fails to remit the full amount payable when due, interest on the unpaid portion shall accrue from the date due until the date of payment at a rate equal to the lower of (i) the then-effective prime rate of interest published under "Money Rates" by The Wall Street Journal, plus two percent per annum; or (ii) the maximum applicable lawful interest rate.

7.6. A party shall have the right, at its own expense, upon reasonable Notice and at reasonable times, to examine and audit and to obtain copies of the relevant portion of the books, records, and telephone recordings of the other party only to the extent reasonably necessary to verify the accuracy of any statement, charge, payment, or computation made under the Contract. This right to examine, audit, and to obtain copies shall not be available with respect to proprietary information not directly relevant to transactions under this Contract. All invoices and billings shall be conclusively presumed final and accurate and all associated claims for under- or overpayments shall be deemed waived unless such invoices or billings are objected to in writing, with adequate explanation and/or documentation, within two years after the Month of Gas delivery. All retroactive adjustments under Section 7 shall be paid in full by the party owing payment within 30 Days of Notice and substantiation of such inaccuracy.

7.7. Unless the parties have elected on the Base Contract not to make this Section 7.7 applicable to this Contract, the parties shall net all undisputed amounts due and owing, and/or past due, arising under the Contract such that the party owing the greater amount shall make a single payment of the net amount to the other party in accordance with Section 7; provided that no payment required to be made pursuant to the terms of any Credit Support Obligation or pursuant to Section 7.3 shall be subject to netting under this Section. If

the parties have executed a separate netting agreement, the terms and conditions therein shall prevail to the extent inconsistent herewith.

SECTION 8. TITLE, WARRANTY, AND INDEMNITY

8.1. Unless otherwise specifically agreed, title to the Gas shall pass from Seller to Buyer at the Delivery Point(s). Seller shall have responsibility for and assume any liability with respect to the Gas prior to its delivery to Buyer at the specified Delivery Point(s). Buyer shall have responsibility for and assume any liability with respect to said Gas after its delivery to Buyer at the Delivery Point(s).

8.2. Seller warrants that it will have the right to convey and will transfer good and merchantable title to all Gas sold hereunder and delivered by it to Buyer, free and clear of all liens, encumbrances, and claims. EXCEPT AS PROVIDED IN THIS SECTION 8.2 AND IN SECTION 15.8, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE, ARE DISCLAIMED.

8.3. Seller agrees to indemnify Buyer and save it harmless from all losses, liabilities or claims including reasonable attorneys' fees and costs of court ("Claims"), from any and all persons, arising from or out of claims of title, personal injury (including death) or property damage from said Gas or other charges thereon which attach before title passes to Buyer. Buyer agrees to indemnify Seller and save it harmless from all Claims, from any and all persons, arising from or out of claims regarding payment, personal injury (including death) or property damage from said Gas or other charges thereon which attach after title passes to Buyer.

8.4. The parties agree that the delivery of and the transfer of title to all Gas under this Contract shall take place within the Customs Territory of the United States (as defined in general note 2 of the Harmonized Tariff Schedule of the United States 19 U.S.C. §1202, General Notes, page 3); provided, however, that in the event Seller took title to the Gas outside the Customs Territory of the United States, Seller represents and warrants that it is the importer of record for all Gas entered and delivered into the United States, and shall be responsible for entry and entry summary filings as well as the payment of duties, taxes and fees, if any, and all applicable record keeping requirements.

8.5. Notwithstanding the other provisions of this Section 8, as between Seller and Buyer, Seller will be liable for all Claims to the extent that such arise from the failure of Gas delivered by Seller to meet the quality requirements of Section 5.

SECTION 9. NOTICES

9.1. All Transaction Confirmations, invoices, payment instructions, and other communications made pursuant to the Base Contract ("Notices") shall be made to the addresses specified in writing by the respective parties from time to time.

9.2. All Notices required hereunder shall be in writing and may be sent by facsimile or mutually acceptable electronic means, a nationally recognized overnight courier service, first class mail or hand delivered.

9.3. Notice shall be given when received on a Business Day by the addressee. In the absence of proof of the actual receipt date, the following presumptions will apply. Notices sent by facsimile shall be deemed to have been received upon the sending party's receipt of its facsimile machine's confirmation of successful transmission. If the day on which such facsimile is received is not a Business Day or is after five p.m. on a Business Day, then such facsimile shall be deemed to have been received on the next following Business Day. Notice by overnight mail or courier shall be deemed to have been received on the next Business Day after it was sent or such earlier time as is confirmed by the receiving party. Notice via first class mail shall be considered delivered five Business Days after mailing.

9.4. The party receiving a commercially acceptable Notice of change in payment instructions or other payment information shall not be obligated to implement such change until ten Business Days after receipt of such Notice.

SECTION 10. FINANCIAL RESPONSIBILITY (THIS LANGUAGE SHOULD BE ADAPTED TO REFLECT COLOMBIAN LAW AND SHOULD REFLECT THE LAWS RELATED TO DEFAULT IN THE COLOMBIAN LAWS AND REGULATIONS)

10.1. If either party ("X") has reasonable grounds for insecurity regarding the performance of any obligation under this Contract (whether or not then due) by the other party ("Y") (including, without limitation, the occurrence of a material change in the creditworthiness of Y or its Guarantor, if applicable), X may demand Adequate Assurance of Performance. "Adequate Assurance of Performance" shall mean sufficient security in the form, amount, for a term, and from an issuer, all as reasonably acceptable to X, including, but not limited to cash, a standby irrevocable letter of credit, a prepayment, a security interest in an asset or guaranty. Y hereby grants to X a continuing first priority security interest in, lien on, and right of setoff against all Adequate Assurance of Performance in the form of cash transferred by Y to X pursuant to this Section 10.1. Upon the return by X to Y of such Adequate Assurance of Performance, the security interest and lien granted hereunder on that Adequate Assurance of Performance shall be released automatically and, to the extent possible, without any further action by either party.

10.2. In the event (each an "Event of Default") either party (the "Defaulting Party") or its Guarantor shall: (i) make an assignment or any general arrangement for the benefit of creditors; (ii) file a petition or otherwise commence, authorize, or acquiesce in the commencement of a proceeding or case under any bankruptcy or similar law for the protection of creditors or have such petition filed or proceeding commenced against it; (iii) otherwise become bankrupt or insolvent (however evidenced); (iv) be unable to pay its debts as they fall due; (v) have a receiver, provisional liquidator, conservator, custodian, trustee or other similar official appointed with respect to it or substantially all of its assets; (vi) fail to perform any obligation to the other party with respect to any Credit Support Obligations relating to the Contract; (vii) fail to give Adequate Assurance of Performance under Section 10.1 within 48 hours but at least one Business Day of a written request by the other party; (viii) not have paid any amount due the other party hereunder on or before the second Business Day following written Notice that such payment is due; or (ix) be the affected party with respect to any Additional Event

of Default; then the other party (the "Non-Defaulting Party") shall have the right, at its sole election, to immediately withhold and/or suspend deliveries or payments upon Notice and/or to terminate and liquidate the transactions under the Contract, in the manner provided in Section 10.3, in addition to any and all other remedies available hereunder.

10.3. If an Event of Default has occurred and is continuing, the Non-Defaulting Party shall have the right, by Notice to the Defaulting Party, to designate a Day, no earlier than the Day such Notice is given and no later than 20 Days after such Notice is given, as an early termination date (the "Early Termination Date") for the liquidation and termination pursuant to Section 10.3.1 of all transactions under the Contract, each a "Terminated Transaction". On the Early Termination Date, all transactions will terminate, other than those transactions, if any, that may not be liquidated and terminated under applicable law ("Excluded Transactions"), which Excluded Transactions must be liquidated and terminated as soon thereafter as is legally permissible, and upon termination shall be a Terminated Transaction and be valued consistent with Section 10.3.1 below. With respect to each Excluded Transaction, its actual termination date shall be the Early Termination Date for purposes of Section 10.3.1.

10.3.1 The Non-Defaulting Party shall net or aggregate, as appropriate, any and all amounts owing between the parties under Section 10.3.1, so that all such amounts are netted or aggregated to a single liquidated amount payable by one party to the other (the "Net Settlement Amount"). At its sole option and without prior Notice to the Defaulting Party, the Non-Defaulting Party is hereby authorized to setoff any Net Settlement Amount against (i) any margin or other collateral held by a party in connection with any Credit Support Obligation relating to the Contract; and (ii) any amount(s) (including any excess cash margin or excess cash collateral) owed or held by the party that is entitled to the Net Settlement Amount under any other agreement or arrangement between the parties.

10.3.2 As of the Early Termination Date, the Non-Defaulting Party shall determine, in good faith and in a commercially reasonable manner, (i) the amount owed (whether or not then due) by each party with respect to all Gas delivered and received between the parties under Terminated Transactions and Excluded Transactions on and before the Early Termination Date and all other applicable charges relating to such deliveries and receipts (including without limitation any amounts owed under Section 3.2), for which payment has not yet been made by the party that owes such payment under this Contract and (ii) the Market Value, as defined below, of each Terminated Transaction. The Non-Defaulting Party shall (x) liquidate and accelerate each Terminated Transaction at its Market Value, so that each amount equal to the difference between such Market Value and the Contract Value, as defined below, of such Terminated Transaction(s) shall be due to the Buyer under the Terminated Transaction(s) if such Market Value exceeds the Contract Value and to the Seller if the opposite is the case; and (y) where appropriate, discount each amount then due under clause (x) above to present value in a commercially reasonable manner as of the Early Termination Date (to take account of the period between the date of liquidation and the date on which such amount would have otherwise been due pursuant to the relevant Terminated Transactions).

10.4. As soon as practicable after a liquidation, Notice shall be given by the Non-Defaulting Party to the Defaulting Party of the Net Settlement Amount, and whether the Net Settlement Amount is due to or due from the Non-Defaulting Party. The Notice shall include a written statement explaining in reasonable detail the calculation of the Net Settlement Amount, provided that failure to give such Notice shall not affect the validity or enforceability of the liquidation or give rise to any claim by the Defaulting Party against the Non-Defaulting Party. The Net Settlement Amount as well as any setoffs applied against such amount pursuant to Section 10.3.2, shall be paid by the close of business on the second Business Day following such Notice, which date shall not be earlier than the Early Termination Date. Interest on any unpaid portion of the Net Settlement Amount as adjusted by setoffs, shall accrue from the date due until the date of payment at a rate equal to the lower of (i) the then-effective prime rate of interest published under "Money Rates" by The Wall Street Journal, plus two percent per annum; or (ii) the maximum applicable lawful interest rate..

10.5. The Non-Defaulting Party's remedies under this Section 10 are the sole and exclusive remedies of the Non-Defaulting Party with respect to the occurrence of any Early Termination Date. Each party reserves to itself all other rights, setoffs, counterclaims and other defenses that it is or may be entitled to arising from the Contract.

10.6. With respect to this Section 10, if the parties have executed a separate netting agreement with close-out netting provisions, the terms and conditions therein shall prevail to the extent inconsistent herewith.

SECTION 11. FORCE MAJEURE AND UNFORESEEABLE CIRCUMSTANCES

11.1. Except with regard to a party's obligation to make payment(s) due under Section 7, Section 10.4, and Imbalance Charges under Section 4, neither party shall be liable to the other for failure to perform a Firm obligation, to the extent such failure was caused by Force Majeure. The term "Force Majeure" as employed herein means any cause not reasonably within the control of the party claiming suspension, as further defined in Section 11.2. Unforeseeable Circumstances shall be those circumstances not covered by Force Majeure that render either party unable, in whole or in part, to exercise their obligations under this Contract. Unforeseeable Circumstances is more fully defined in Section 11.3, below.

11.2. For the effects of this Contract, it is understood that a Force Majeure is any event that can qualify as such in accordance with Colombian law as an unpredictable or unavoidable, verified accordingly, being out of the control of the Parties and occurring without any fault or negligence of either party.

11.3. Unforeseeable Circumstances shall include, but not be limited to, the following: (i) physical events such as acts of God, landslides, lightning, earthquakes, fires, storms or storm warnings, such as hurricanes, which result in evacuation of the affected area, floods, washouts, explosions, breakage or accident or necessity of repairs to machinery or equipment or lines of pipe; (iv) acts of others such as strikes, lockouts or other industrial disturbances, riots, sabotage, insurrections or wars, or acts of terror; (v) governmental

actions such as necessity for compliance with any court order, law, statute, ordinance, regulation, or policy having the effect of law promulgated by a governmental authority having jurisdiction and (vi) interruption related to the failure of production facilities such as wells, processing and treating facilities.

11.4. Seller and Buyer shall make reasonable efforts to avoid the adverse impacts of a Force Majeure and to resolve the event or occurrence once it has occurred in order to resume performance.

11.5. Neither party shall be entitled to the benefit of the provisions of Force Majeure or Unforeseeable Circumstances to the extent performance is affected by any or all of the following circumstances: (i) the curtailment of interruptible or secondary Firm transportation unless primary, in-path, Firm transportation is also curtailed; (ii) the party claiming excuse failed to remedy the condition and to resume the performance of such covenants or obligations with reasonable dispatch; or (iii) economic hardship, to include, without limitation, Seller's ability to sell Gas at a higher or more advantageous price than the Contract Price, Buyer's ability to purchase Gas at a lower or more advantageous price than the Contract Price, or a regulatory agency disallowing, in whole or in part, the pass through of costs resulting from this Contract; (iv) the loss of Buyer's market(s) or Buyer's inability to use or resell Gas purchased hereunder, except, in either case, as provided in Section 11.2; or (v) the loss or failure of Seller's gas supply or depletion of reserves, except, in either case, as provided in Section 11.2. The party claiming Force Majeure or Unforeseeable Circumstances shall not be excused from its responsibility for Imbalance Charges.

11.6. Notwithstanding anything to the contrary herein, the parties agree that the settlement of strikes, lockouts or other industrial disturbances shall be within the sole discretion of the party experiencing such disturbance.

11.7. The party whose performance is prevented by Force Majeure or Unforeseeable Circumstances must provide Notice to the other party. Initial Notice may be given orally; however, written Notice with reasonably full particulars of the event or occurrence is required as soon as reasonably possible. Upon providing written Notice of Force Majeure to the other party, the affected party will be relieved of its obligation, from the onset of the Force Majeure event, to make or accept delivery of Gas, as applicable, to the extent and for the duration of Force Majeure, and neither party shall be deemed to have failed in such obligations to the other during such occurrence or event.

11.8. Interruptions that occur as a result of Unforeseeable Circumstances shall be limited to ___ days per Contract Year.

SECTION 12. TERM

This Contract may be terminated on 30 Day's written Notice, but shall remain in effect until the expiration of the latest Delivery Period of any transaction(s). The rights of either party pursuant to Section 7.6, Section 10, Section 13, the obligations to make payment hereunder, and the obligation of either party to indemnify the other, pursuant hereto shall survive the termination of the Base Contract or any transaction.

SECTION 13. LIMITATIONS (THIS SECTION SHOULD REFLECT THE LAWS AND REGULATIONS IN COLOMBIA)

FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY. A PARTY'S LIABILITY HEREUNDER SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION, AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN OR IN A TRANSACTION, A PARTY'S LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY. SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. UNLESS EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

SECTION 14. MARKET DISRUPTION

If a Market Disruption Event has occurred then the parties shall negotiate in good faith to agree on a replacement price for the Floating Price (or on a method for determining a replacement price for the Floating Price) for the affected Day, and if the parties have not so agreed on or before the second Business Day following the affected Day then the replacement price for the Floating Price shall be determined within the next two following Business Days with each party obtaining, in good faith and from non-affiliated market participants in the relevant market, two quotes for prices of Gas for the affected Day of a similar quality and quantity in the geographical location closest in proximity to the Delivery Point and averaging the four quotes. If either party fails to provide two quotes then the average of the other party's two quotes shall determine the replacement price for the Floating Price. "Floating Price" means the price or a factor of the price agreed to in the transaction as being based upon a specified index. "Market Disruption Event" means, with respect to an index specified for a transaction, any of the following events: (a) the failure of the index to announce or publish information necessary for determining the Floating Price; (b) the failure of trading to commence or the permanent discontinuance or material suspension of trading on the exchange or market acting as the index; (c) the temporary or permanent discontinuance or unavailability of the index; (d) the temporary or permanent closing of any exchange acting as the index; or (e) both parties agree that a material change in the formula for or the method of determining the Floating Price has occurred. For the purposes of the calculation of a replacement price for the Floating Price, all numbers shall be rounded to three decimal places. If the fourth decimal number is five or greater, then the third decimal number shall be increased by one and if the fourth decimal number is less than five, then the third decimal number shall remain unchanged.

SECTION 15. MISCELLANEOUS

15.1. This Contract shall be binding upon and inure to the benefit of the successors, assigns, personal representatives, and heirs of the respective parties hereto, and the covenants, conditions, rights and obligations of this Contract shall run for the full term of this Contract. No assignment of this Contract, in whole or in part, will be made without the prior written consent of the non-assigning party (and shall not relieve the assigning party from liability hereunder), which consent will not be unreasonably withheld or delayed; provided, either party may (i) transfer, sell, pledge, encumber, or assign this Contract or the accounts, revenues, or proceeds hereof in connection with any financing or other financial arrangements, or (ii) transfer its interest to any parent or Affiliate by assignment, merger or otherwise without the prior approval of the other party. Upon any such assignment, transfer and assumption, the transferor shall remain principally liable for and shall not be relieved of or discharged from any obligations hereunder.

15.2. If any provision in this Contract is determined to be invalid, void or unenforceable by any court having jurisdiction, such determination shall not invalidate, void, or make unenforceable any other provision, agreement or covenant of this Contract.

15.3. No waiver of any breach of this Contract shall be held to be a waiver of any other or subsequent breach.

15.4. This Contract sets forth all understandings between the parties respecting each transaction subject hereto, and any prior contracts, understandings and representations, whether oral or written, relating to such transactions are merged into and superseded by this Contract and any effective transaction(s). This Contract may be amended only by a writing executed by both parties.

15.5. The interpretation and performance of this Contract shall be governed by the laws of the jurisdiction as indicated on the Base Contract, excluding, however, any conflict of laws rule which would apply the law of another jurisdiction.

15.6. This Contract and all provisions herein will be subject to all applicable and valid statutes, rules, orders and regulations of any governmental authority having jurisdiction over the parties, their facilities, or Gas supply, this Contract or transaction or any provisions thereof.

15.7. There is no third party beneficiary to this Contract.

15.8. Each party to this Contract represents and warrants that it has full and complete authority to enter into and perform this Contract. Each person who executes this Contract on behalf of either party represents and warrants that it has full and complete authority to do so and that such party will be bound thereby.

15.9. The headings and subheadings contained in this Contract are used solely for convenience and do not constitute a part of this Contract between the parties and shall not be used to construe or interpret the provisions of this Contract.

15.10. Unless the parties have elected on the Base Contract not to make this Section 15.10 applicable to this Contract, neither party shall disclose directly or indirectly without the prior written consent of the other party the terms of any transaction to a third party (other than the employees, lenders, royalty owners, counsel, accountants and other agents of the party, or prospective purchasers of all or substantially all of a party's assets or of any rights under this Contract, provided such persons shall have agreed to keep such terms confidential) except (i) in order to comply with any applicable law, order, regulation, or exchange rule, (ii) to the extent necessary for the enforcement of this Contract, (iii) to the extent necessary to implement any transaction, (iv) to the extent necessary to comply with a regulatory agency's reporting requirements including but not limited to gas cost recovery proceedings; or (v) to the extent such information is delivered to such third party for the sole purpose of calculating a published index. Each party shall notify the other party of any proceeding of which it is aware which may result in disclosure of the terms of any transaction (other than as permitted hereunder) and use reasonable efforts to prevent or limit the disclosure. The existence of this Contract is not subject to this confidentiality obligation. Subject to Section 13, the parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with this confidentiality obligation. The terms of any transaction hereunder shall be kept confidential by the parties hereto for one year from the expiration of the transaction.

In the event that disclosure is required by a governmental body or applicable law, the party subject to such requirement may disclose the material terms of this Contract to the extent so required, but shall promptly notify the other party, prior to disclosure, and shall cooperate (consistent with the disclosing party's legal obligations) with the other party's efforts to obtain protective orders or similar restraints with respect to such disclosure at the expense of the other party.

15.11. The parties may agree to dispute resolution procedures in Special Provisions attached to the Base Contract or in a Transaction Confirmation executed in writing by both parties

15.12. Any original executed Base Contract, Transaction Confirmation or other related document may be digitally copied, photocopied, or stored on computer tapes and disks (the "Imaged Agreement"). The Imaged Agreement, if introduced as evidence on paper, the Transaction Confirmation, if introduced as evidence in automated facsimile form, the recording, if introduced as evidence in its original form, and all computer records of the foregoing, if introduced as evidence in printed format, in any judicial, arbitration, mediation or administrative proceedings will be admissible as between the parties to the same extent and under the same conditions as other business records originated and maintained in documentary form. Neither Party shall object to the admissibility of the recording, the Transaction Confirmation, or the Imaged Agreement on the basis that such were not originated or maintained in documentary form. However, nothing herein shall be construed as a waiver of any other objection to the admissibility of such evidence.

**TRANSACTION CONFIRMATION
FOR IMMEDIATE DELIVERY**

Letterhead/Logo	Date: _____, ____ Transaction Confirmation #: _____
-----------------	--

This Transaction Confirmation is subject to the Base Contract between Seller and Buyer dated _____. The terms of this Transaction Confirmation are binding unless disputed in writing within 2 Business Days of receipt unless otherwise specified in the Base Contract.

SELLER:

 Attn: _____
 Phone: _____
 Fax: _____
 Base Contract No. _____
 Transporter: _____
 Transporter Contract Number: _____

BUYER:

 Attn: _____
 Phone: _____
 Fax: _____
 Base Contract No. _____
 Transporter: _____
 Transporter Contract Number: _____

Contract Price: \$ ____/MMBtu or _____

Delivery Period: Begin: _____, ____ End: _____, ____

Performance Obligation and Contract Quantity: (Select One)

Firm (Fixed Quantity):

_____ MMBtus/day
 EFP

Conditional Firm:

_____ MMBtus/day aximum
 subject to CREG Res. 71

Option:

Up to _____ MMBtus/day
 Per terms specified in _____

Delivery Point(s): _____

(If a pooling point is used, list a specific geographic and pipeline location):

Special Conditions:

Seller: _____
 By: _____
 Title: _____
 Date: _____

Buyer: _____
 By: _____
 Title: _____
 Date: _____