

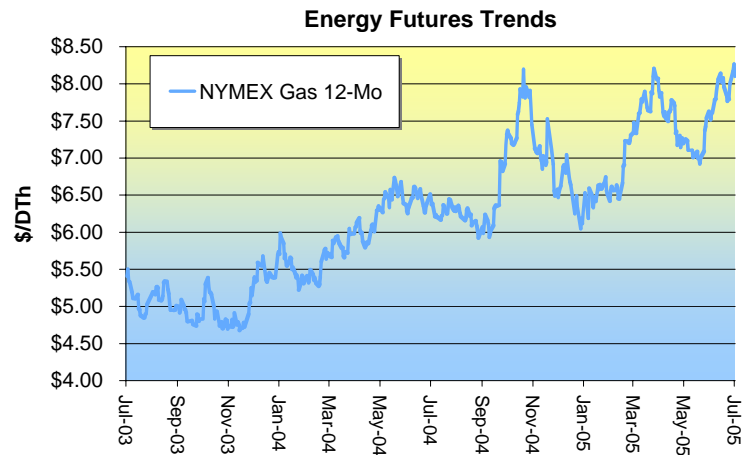


Companies with Many Smaller Facilities Can Obtain Relief from Rising Natural Gas Prices

By Dr. Jack Mason, President, EnergyWindow, Inc.

Natural Gas Prices Continue their March Upward, but Savings Opportunities Still Exist

During the last two years, natural gas prices have climbed steadily from \$3-\$4 per MMBtu to \$6-\$8 per MMBtu, and most experts agree that the upward climb is likely to continue. The Energy Information Administration (EIA) recently reported that current high natural gas inventories are expected to plunge in the upcoming autumn months. Although the number of rigs is increasing, production is expected to be flat through 2005. At the same time, demand for gas is projected to rise 4.3% above 2004 levels by the end of 2006. All these factors add up to one thing: higher natural gas prices for the foreseeable future.



So, what can businesses do to manage the rising cost of natural gas and minimize its impact on their operations? Helpful information lies in an analysis of gas pricing trends over the past 14 years. First, the overall trend shows a steady increase in prices. But there is also a notable pattern of peaks and valleys influenced by factors such as actual vs. anticipated weather patterns and actual vs. anticipated production and demand. This suggests four possible strategy elements:

- 1) Commit to longer term contracts at favorable fixed rates¹;
- 2) Look for opportunities to buy (or fix) at favorably low prices;
- 3) Be ready to act quickly when market opportunities present; and
- 4) Buy or fix prices for portions of your consumption "portfolio" at those favorable times.

Right now, several factors are coming together in a way that suggests a price drop is likely to occur sometime in the third quarter. Businesses that use natural gas ideally should set price thresholds and be in a position to act quickly if spot prices drop below them. Possible thresholds

¹ By signing fixed price contracts or signing indexed contracts and then triggering fixed prices.

might be EIA's third quarter estimate of \$6.60/ MMBtu or a 12-month Henry Hub futures strip dip to near \$7.00.

Low Consumption Per Facility Doesn't Have to Mean Missing Out on Savings

Historically, large companies with multiple large facilities have had better luck than companies with many smaller facilities in gaining the attention of natural gas suppliers and corresponding competitive pricing. Suppliers have tended to overlook businesses that have relatively low consumption per facility and thus, the market has been underserved. Yet companies with facilities of all sizes stand to gain a lot by purchasing through competitive means, and suppliers may be missing the opportunity to serve a substantial market.

In 2004, EnergyWindow® pioneered a collective purchasing model designed to help companies with smaller facilities attract the attention of suppliers. Called PowerPurchase™, the model leverages the joint buying power of many companies with multiple smaller facilities and simultaneously presents to suppliers a set of requests for quotation (RFQs) for a larger amount of natural gas supply. Unlike traditional aggregation strategies, PowerPurchase gives companies the important additional benefit of preserving all the control and flexibility of an individual, direct purchase. Each company retains the freedom to sign its own contracts with the most suitable terms and pricing.

The inaugural PowerPurchase event staged in September 2004 was very successful. More than 15 national chains participated, and nearly 3,000 RFQs were presented to 47 energy suppliers in 35 utility territories in 7 states. Suppliers responded with opportunities to save in excess of \$2 million on natural gas supply of more than 1.5 billion cubic feet (bcf), valued at more than \$10 million.

Technology is the Key to PowerPurchase Success

The PowerPurchase model is a sound one, but what really makes it possible is the integration of Web-based procurement technology. Online energy sourcing, or e-procurement, dramatically reduces the time required to build and respond to large numbers of RFQs. This is significant, considering that a single RFQ can involve obtaining more than 50 data elements for each facility. E-procurement involves, in many cases, obtaining data via electronic means, which is much faster and more accurate than manual data entry.

PowerPurchase's Web-based approach accelerates the entire auction process and provides buyers and suppliers with an easy way to organize and share information rapidly. Suppliers can utilize proxy bidding (automatic bidding) to streamline the submission and management of bids. Buyers can reduce the time they spend managing bidding by identifying reserve and maximum prices. This way, suppliers have an approximate idea of buyers' price expectations and can participate accordingly. Buyers are not required to negotiate with the winning supplier unless the bid submitted is lower than the reserve price set by the buyer. E-mail notices of bidding activity further reduce the time suppliers and buyers spend on submitting bids and observing the proceedings.

Lessons Learned and Enhancements for PowerPurchase 2005

If there is one thing that could have made the inaugural PowerPurchase event an even greater success, it is shorter contract review and closure cycle time. Many of the 2004 participants had limited experience with gas contracts and/or no in-house gas contracts. As a result, the review process for many was lengthy, and three factors cost some buyers real savings and resulted in missed revenue for suppliers: 1) the value lost during the extended period of negotiation; 2) the unrealized value resulting from deals that never closed; and 3) the opportunity to trigger fixed lower prices at the optimum time – last year, in early September, when prices were at their lowest.

Looking forward, it is apparent that all parties can benefit from the adoption of a standardized contract. The North American Energy Standards Board (NAESB) standard contract provides an instrument that most suppliers find acceptable for retail transactions. Natural gas buyers can obtain a copy of the contract and submit it for legal review in advance of procurement events. Legal departments have the flexibility to mark up or make addendums, if necessary, to the standard contract. This early review process and adoption of standard base language can further reduce buyers' and suppliers' effort applied and cost of participation in future PowerPurchase events. At the same time, it should result in greater captured savings for buyers and more revenue for suppliers.

Making the Most of Collective Procurement

If you decide you decide to participate in a collective procurement event like PowerPurchase, it is important to know what factors will drive your decision to accept a winning bid. Indexed pricing presents a way to ensure with a reasonable degree of confidence that acceptance is justified and will yield savings versus the cost of default service from the local distribution company (LDC).

The LDC default price is set monthly or quarterly in most states. Indexed pricing parallels the default. You can use historical monthly default gas prices and the appropriate index (usually, the NYMEX Henry Hub settle price) to calculate the threshold at which you would accept a competitive bid:

1. Tabulate monthly default gas supplier prices from the LDC or PUC Web site and appropriate wholesale price indexes
2. Calculate the monthly differences between default prices and the index prices
3. Calculate the expected value (mean) and standard deviation for those differences over a period of one or two years (exact multiples of 12 months, to account for cyclical effects)
4. Apply an appropriate statistical distribution to determine the implied basis value (in this case, an all-inclusive adder) at which an indexed price is likely to produce savings versus the default price

You can then set a maximum or starting price at the level at which expected savings begin to accrue. A reserve price can be set at a level that will yield sufficient expected savings at a reasonable level of confidence to produce savings. Knowing what your threshold for savings is, you can now easily determine whether a competitive bid makes sense or whether it would be more advantageous to remain on default service for the time being.

Because basis values are generally not directly proportional to underlying gas prices (and in some case are inversely proportional), you can obtain favorable basis bids even when gas prices are high. Then, with an indexed contract in place, you are in a position to “trigger” very quickly (one contract option is verbal confirmation) a fixed price for some appropriate period of the contract if a price dip appears.

Gas PowerPurchase 2004 Results

We can provide two examples of actual results from the gas PowerPurchase event in 2004. They offer some useful lessons learned and illustrate the range of resulting outcomes.

In the first case, for Columbia Gas of Ohio (CGOH) accounts, basis bids on the order of \$1.15 per MMBtu were obtained for most accounts in early September 2004. The calculated mean and standard deviation of the basis implied by monthly differences between CGOH default (gas cost recovery) rates and the NYMEX Henry Hub monthly settle prices were \$1.93 and \$0.67, respectively. Thus, the expected value of savings at the actual bid of \$1.15 was \$0.78 per MMBtu with a confidence of 87% that savings would be realized. Based on actual gas prices (NYMEX and CGOH monthly default prices) in the 9 months since September shows that actual results were, a) average monthly savings of \$1.40 per MMBtu (approximately 15%) for those companies that executed contracts and remained on index; and b) average monthly savings of \$2.20 per MMBtu (approximately 24%) for those companies that executed a contract and quickly “triggered” a fixed price in early September, when the NYMEX Henry Hub 12-month future strip was \$5.95 per MMBtu. They have been paying $1.15 + 5.95 = \$7.10$ since. Savings would likely be substantially higher for longer term contracts; but only another year will tell us whether future prices will ever even get close to early September 2004 lows.

A second example is for Pacific Gas & Electric accounts in California. Basis bids received were on the order of \$0.45 per MMBtu. In this case the NGI PG&E Citygate index was used. Mean and standard deviation values for the monthly differences between PG&E default (procurement charge) rates were such that the calculated expected value of savings was \$0.15 with a confidence level of 70% for savings. Based on actual index and PG&E procurement charge rates since September actual savings since then have been \$.10-.70 per MMBtu for those customers that signed contracts and fixed prices in early September (depending on the exact date). In one case, a customer locked in a winter strip (November-March) at \$5.95 (total cost, including the basis). The result was average savings of \$0.98 per MMBTU for those months. However, in this case, those customers that signed contracts and remained on month-to-month indexed rates have, so far, actually paid an average of \$0.15 per MMBtu more than the PG&E procurement charge.

PowerPurchase 2005

Natural gas market conditions are likely to create challenges for businesses’ bottom line for some time to come. Strategies such as those outlined above, along with innovative procurement models like EnergyWindow PowerPurchase, can offer some relief from escalating costs. These procurement methods also can lower procurement transactions costs to the extent that companies with many smaller facilities can economically pursue competitive pricing.

As the third quarter progresses, you can anticipate a price dip, but should expect that if it does occur, it will be brief. Businesses can prepare themselves in three ways to seize opportunities as they emerge: 1) review and adopt the NAESB contract in advance of any RFQ activity; 2)

determine the threshold at which you will accept a competitive bid versus default service; and 3) participate in an upcoming PowerPurchase event, wherein you can accept an indexed contract and be poised to trigger a fixed price at the right moment, when spot prices drop.

EnergyWindow is a Boulder, Colorado-based company that offers a comprehensive suite of information technology-based tools and extensive energy industry expertise to help businesses manage every element of their energy supply cycle. Specifically, EnergyWindow offers: an online request/bid system for energy procurement; a real-time, online energy market database that tracks the best opportunities for energy procurement; an energy management information system that allows energy managers to track and analyze their company's energy usage; and energy supply strategy and management consulting. The company can be reached by visiting www.energywindow.com.

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