OPTIONS: WHAT ARE THEY? HOW DO THEY WORK?

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An **option** is a contract that conveys the right, but not the obligation, to buy or sell a commodity in the future. If the option holder chooses to exercise the option to buy or sell, the party who wrote (sold) the option must fulfill the price and delivery terms. Used correctly, options can be tools for managing financial risk related to gas positions.

Keep in mind that:

- Options are based on the underlying natural gas futures contract.
- Options are constantly priced and expire the business day prior to the futures expiration.

WHY OPTIONS?

Options provide a method of managing price risk and offer the ability to participate in the market without being subject to extreme price swings. Many customers view options as an insurance policy against market volatility. The graphs presented here illustrate the effects of options strategies on what you actually pay for gas.

TYPES OF OPTIONS

There are two basic types of options:

Call Option – provides the right, but not the obligation, to buy a specific quantity of natural gas for a specific contract period for a specific price on or before expiration of that contract.

Put Option – provides the right, but not the obligation, to sell a specific quantity of natural gas for a specific contract period for a specific price on or before expiration of that contract.

CALL OPTION

A customer who believes that natural gas futures will increase might buy a call option rather than just buy the contract outright. The buyer has no obligation to buy the contract—only the right to do so right up until the expiration date. Who buys a call option? A customer that is bullish on the market and wants to protect against runaway prices while still being able to participate should the market fall.

TYPES OF OPTIONS

	CALL	PUT
BUYER	The **right** (but not the obligation) to buy	The **right** (but not the obligation) to sell
SELLER	The potential obligation to sell	The potential obligation to buy

If the contract price expires higher than the call option strike-price by more than the premium cost of the option (i.e., the difference is greater than the call option premium), the natural gas position is at a lower price than market. This in effect places a ceiling on the amount that a customer will pay for that contract. If the contract price falls, the buyer lets the call option expire worthless, and only incurs the the cost (premium) of the call.

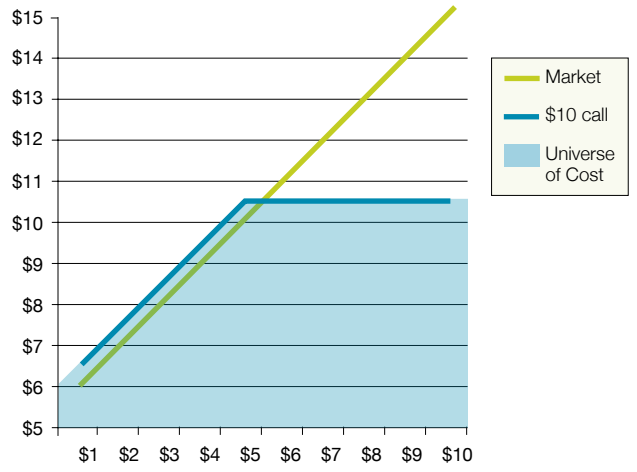
EXAMPLE: CALL OPTION

Assume the current market cost of a natural gas futures contract is $8. The customer elects to buy a call option with a strike of $10 for a cost of $0.50. The customer now has the right but not the obligation to purchase that contract at $10 plus the $0.50 option premium.

What does this mean? If that contract settles at $10 or lower, the customer simply buys a futures position at the market price at expiration plus the $0.50 option premium. If the contract settles above $10, the customer pays no more than $10 plus the $0.50 option premium.

At a $7 settlement: Customer pays $7 + $0.50 = $7.50
At an $8 settlement: Customer pays $8 + $0.50 = $8.50
At a $10 settlement: Customer pays $10 + $0.50 = $10.50
At a $15 settlement: Customer pays $10 + $0.50 = $10.50

GRAPH 1. CALL OPTION (@ $0.50 Option Premium)



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PUT OPTION

This same customer may elect to sell a put option. This gives the purchaser the right, but not the obligation, to sell the contract to the customer. If the contract expires lower than the put option strike price with a difference of more than the option premium, the purchaser of the put option may opt to sell the gas to the customer at the put option execution price.

Selling a put option effectively places a floor on the amount that a customer must pay for the contract. If the contract price closes above the put option price, the buyer of the put option lets the put contract expire worthless and the customer collects the put option premium. A put option without an offsetting call option may expose the customer to considerable upside risk.

EXAMPLE: PUT OPTION

Again, assume the same current market cost of some natural gas futures contract is $8. They customer sells a put option at $7 with the proceeds of $0.50. The customer now has the right but not the obligation to sell that contract at $7 minus the $0.50 option proceeds.

What does this mean? If that contract settles at $7 or lower, the customer simply pays $7 less the $0.50 option proceeds. If the contract settles above $7, the customer pays the market settle price minus the $0.50.

At a $6 settlement: Customer pays $7 - $0.50 = $6.50
At a $7 settlement: Customer pays $7 - $0.50 = $6.50
At a $10 settlement: Customer pays $10 - $0.50 = $9.50
At a $15 settlement: Customer pays $15 - $0.50 = $14.50

COSTLESS COLLAR

This is a hybrid option transaction that couples purchase of a call option with the sale of a put option. Effectively, this transaction sets both ceiling and floor purchase levels. Generally, a call option must be roughly twice as distant from the current market price as the put option in order for the put option proceeds to offset the call option premium.

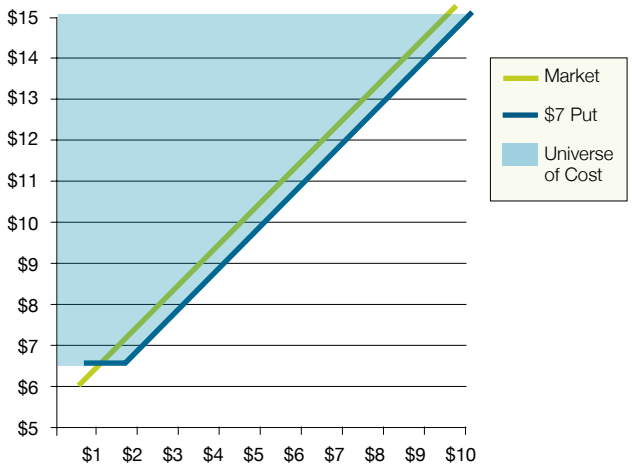
EXAMPLE: COSTLESS COLLAR

Using the previous examples and assuming the current market price of a natural gas futures contract is $8, a costless collar would look like this: The customer buys a call option with a strike price of $10 at a $0.50 premium. The customer also sells a put option with a strike price of $7 for a $0.50 credit. The cost of the call purchase and the proceeds from the sale of the put offset and the customer now has a costless collar with a $7 floor and a $10 ceiling. This strategy limits upside risk at the expense of also limiting downside potential. A customer may not be able to fully participate in a market rout, but will be protected in a market panic.

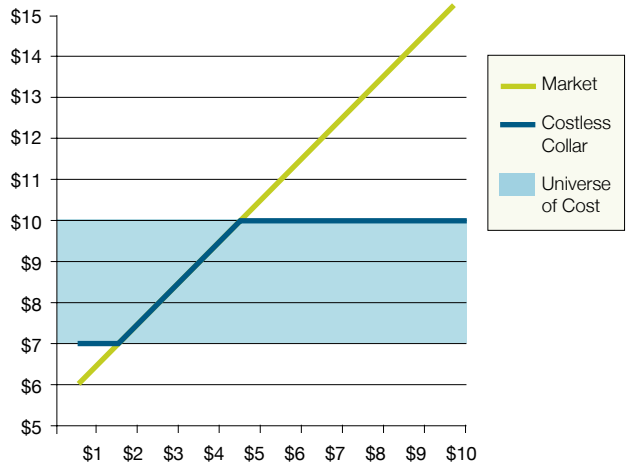
What does that mean? If the market closes below $7, the customer will never pay less than $7. If the market closes between $7 and $10, the customer pays the market price at close. If the market closes above $10, the customer will never pay more than $10 for that contract. Premium and credit offset each other.

At a $6 settlement: Customer pays $7
At a $7 settlement: Customer pays $7
At an $8 settlement: Customer pays $8
At a $10 settlement: Customer pays $10
At a $15 settlement: Customer pays $10

GRAPH 2. PUT OPTION (@ $0.50 Option Premium)



GRAPH 3. COSTLESS COLLAR



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Please note: Contract, market, and options prices presented here are examples only and reflect snapshots in time. For current pricing information and assistance in managing risk related to your energy costs, please contact your EnergyUSA representative.