



# Cherry Picks

tastytrade's Quantitative Newsletter for Traders



December 31, 2017

**Options involve risk and are not suitable for all investors. Please read *Characteristics and Risks of Standardized Options* before deciding to invest.**

## Trading Natural Gas Futures

Natural Gas futures /NG has one of the smallest notional values, but one of the largest realized volatilities of all the futures.

**Ticker Symbol:** /NG

**Contract Size:** 10,000 mm. BTU's

**Contract Months:** all months

**Price Quote:** price per mm. BTU

**Tick Size:** \$0.001 (1¢) per barrel (\$10.00 per contract)

**1 /NG futures = 5,000 shares of UNG**

Natural Gas, like crude oil futures, trade from 5 PM CDT until the next day at 4 PM CST – 23 straight trading hours.

The natural gas industry considers two seasons in storage operation:

- The Withdrawal Season, from November 1 through March 31, when Natural Gas is withdrawn from storage (usually underground)
- The Injection Season, from April 1 through October 31, when Natural Gas is pumped into underground storage facilities.

While we believe there is no directional trading opportunity around seasonality in any market, the historic changes in

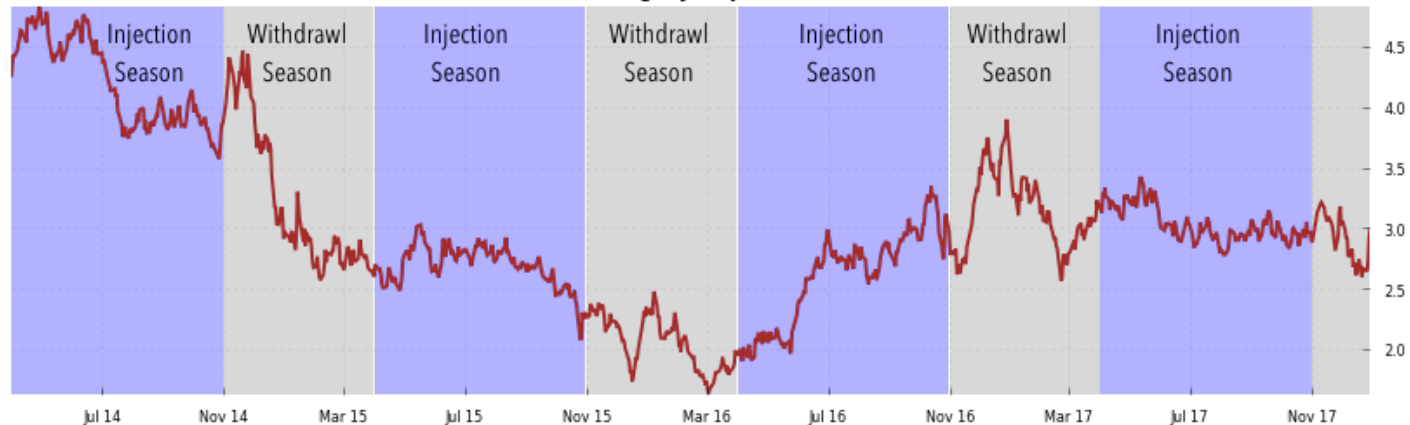
30-Day Theoretical Expected Price Move in /NG



volatility around different parts of the year can be a powerful metric for identifying trade opportunities and the determination of a scalping ranges.

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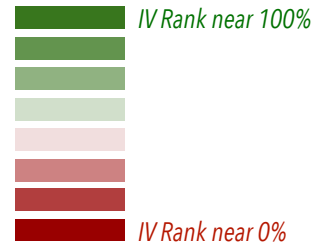
Natural Gas  
(Withdrawal Season in gray, Injection Season in blue)



# Reading this Report

**Expected Range Cone.** The colored cone represents a 30-day expected theoretical price range that is calculated from the options' implied volatilities. If the implied volatility is relatively high, then the market is expecting a larger price change in the underlying stock or ETF. From this we can derive the market's 1 standard deviation theoretical expectation of where prices might be in the future. In other words, the market is expecting, with a 68% theoretical probability, that prices will fall within the boundary of the cone at the end of 30 days.

**Cone Color.** The color of the cone is significant. The darker the color, the more "extreme" the implied volatility (IV) which is represented by implied volatility rank (IV Rank). This information can help you decide on a trading strategy.



## Glossary

**IV.** Implied Volatility is the estimated volatility of a security's price derived from its option price; the higher the IV, the more expensive the option and therefore the larger the expected price move. IV is an annualized number of volatility, e.g. a IV of 27 means the option's market is pricing in an annualized price range, either plus or minus, of 27%.

**IV Rank.** IV by itself doesn't tell us if the volatility is high or low - but IV Rank does. An IV Rank of 70 means that the IV is 70% between its low and high IV over the past year. The higher the IV Rank, the higher the security's IV is compared to its past year. We provide six levels to make evaluating easier:

- **Extremely High:** IV Rank between 90 and 100
- **High:** IV Rank between 75 and 90
- **Moderately High:** IV Rank between 50 and 75
- **Moderately Low:** IV Rank between 25 and 50
- **Low:** IV Rank between 10 and 25
- **Extremely Low:** IV Rank between 0 and 10

**Option Liquidity.** At tastytrade we have our own theoretical measure of option liquidity, Poor, Moderate, Good, or Great. It examines the options' bid/ask spread, open interest, and the number of strikes with non-zero bids.

**Correlation with S&P 500.** Correlation is a statistical measure of how strong a relationship two securities have with one another. A correlation of -1 means the stocks are perfectly negatively correlated (they move in opposite directions), while a correlation of +1 means the stocks are perfectly positively correlated (they move in the same direction). A correlation of 0 means there exist little relationship.

## Disclosures

**Options involve risk and are not suitable for all investors. Please read Characteristics and Risks of Standardized Options before deciding to invest in options: <https://www.theocc.com/components/docs/riskstoc.pdf>**

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