

FREQUENTLY ASKED QUESTIONS

TTF and NBP Futures-Style Margined Options

1. Which natural gas option contracts are available with Futures-Style margining?

Both TTF and NBP calendar month options are available.

2. Are these Futures-Style options physically settled?

When exercised the option transforms into a position in its underlying futures. The underlying futures are physically deliverable instruments. These are options on futures with expiry on LTD only ("European-Style expiry").

3. Do Equity-Style and Futures-Style options offset against each other?

Futures and options margins are valued through the clearing house's SPAN margin model,, therefore any offsets available to one style will also be available to the other. However, the two options will be priced differently and as such there will not be a perfect offset between the two. Offsets will however be available.

The methodologies used for each mean that in any scenario where an investor is long the futures and short the option (or vice versa), there will be collateral that will be required to be posted to maintain that position.

4. Why are we listing both Futures-Style and Equity-Style options?

To provide choice to the market.

5. Will I be exercised upon if I am "At-The-Money"?

"At-the-money" options are considered "Out-of-the-money" for exercise and assignment purposes and can only be exercised via contrary instructions. This applies to both Calls and Puts

6. What options model is used?

Black-Scholes - The basic equation for European options on physicals with no dividends (and hence with cost of carry equal to the risk-free interest rate).

7. What is the difference between Equity-Style and Futures-Style options?

Futures-style margin options behave in a manner somewhat analogous to that of a futures contract. The trade of the option itself does not result in any cash flow as the premium does not immediately move. Instead, every open position is marked to market and the resulting settlement variation (or variation margin) amounts are netted together with other such amounts in determining the net pay/collect amount. The total premium of a Futures-Style option is calculated and paid only on the day the option position is removed, whether by exercise, assignment, or expiration without exercise or assignment. When exercise or expiration of the option contract occurs, the buyer makes a premium settlement payment.

Unlike Equity-Style margin options, Futures-Style options have daily realized variation margins calculated. So, margins are paid daily according to the changing value of the option. Also, since interest rates do not factor into Futures-Style margin options, their price differs from Equity-Style margin options. This is most apparent in long-dated options where interest rates have more time to change option values.

8. So, do I pay a premium in Futures-Style options?

In Equity-Style margining, also known as "traditional" or "premium-paid-upfront" margining, the premium is paid in full at the time of the option purchase. Because the premium is immediately paid, the current market value of the option becomes a credit (if net long) or debit (if net short) to the margin requirement. The premium is calculated at the original trade price and is recognized on the day the trade clears. Thereafter, if the trade remains open, the current market value of the option is taken into account in determining the total initial margin requirement.

See further details on the different margining style under <https://www.cmegroup.com/education/articles-and-reports/a-primer-on-margining-styles-for-options.html>

9. What are the timings on the final exercise day?

The timings can be found in the table. They apply equally to Futures-Style and Equity-Style margined options.

OPTIONS EXERCISE PROCESS	
OPTION CEASES TRADING	13:00 London Time Trading terminates on the fifth calendar day immediately preceding the first calendar day of the Contract Month, unless such day is not both a NYMEX business day and a London business day, in which case trading terminates on the first preceding NYMEX business day that is a London business day. However, if that day is also the last trading day of the underlying Futures contract, trading shall terminate on the first preceding NYMEX business day that is a London business day.
AUTO-EXERCISE PRICES	Just After 13:00 London Time The Intraday 13:00 London Time market snapshot prices provided by participating brokers are received. Electronic CME orders are also observed. Those prices are used to determine settlement and the auto exercise process.
CONTRA INSTRUCTIONS	14:00 London Time Contra-instructions can be submitted to your Clearer up to 14:00
EXERCISE / ASSIGNMENT PROCESS	14:00 London Time All options are exercised/ assigned based upon the auto-exercise price and any contra-instructions received. All options that are "In-the-money" are auto-exercised (considering any contra-instructions). The official option exercise and assignment price for TTF and NBP Options will be publishes circa 13:10 London Time on the TTF & NBP CME Options landing page. The CME Positions and Expiration Report is made available. View a list of contrary instructions: https://www.cmegroup.com/clearing/contrary-option-exercise-instructions.html

[cmegroup.com](https://www.cmegroup.com)

Helping the World Advance: CME Group is comprised of four designated contract markets (DCMs), the Chicago Mercantile Exchange Inc ("CME"), the Chicago Board of Trade, Inc. ("CBOT"), the New York Mercantile Exchange, Inc. ("NYMEX"), and the Commodity Exchange, Inc. ("COMEX"). The Clearing Division of CME is a derivatives clearing organization ("DCO") for CME Group's DCMs.

Exchange traded derivatives and cleared over-the-counter ("OTC") derivatives are not suitable for all investors and involve the risk of loss. Exchange traded and OTC derivatives are leveraged instruments and because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money initially deposited. This communication does not (within the meaning of any applicable legislation) constitute a Prospectus or a public offering of securities; nor is it a recommendation to buy, sell or retain any specific investment or service.

The content in this communication has been compiled by CME Group for general purposes only and is not intended to provide, and should not be construed as, advice. Although every attempt has been made to ensure the accuracy of the information within this communication as of the date of publication, CME Group assumes no responsibility for any errors or omissions and will not update it. Additionally, all examples and information in this communication are used for explanation purposes only and should not be considered investment advice or the results of actual market experience. All matters pertaining to rules and specifications herein are made subject to and superseded by official CME, CBOT, NYMEX and COMEX rulebooks. Current rules should be consulted in all cases including matters relevant to contract specifications.

CME Group does not represent that any material or information contained in this communication is appropriate for use or permitted in any jurisdiction or country where such use or distribution would be contrary to any applicable law or regulation. In any jurisdiction where CME Group is not authorized to do business or where such distribution would be contrary to the local laws and regulations, this communication has not been reviewed or approved by any regulatory authority and access shall be at the liability of the user.

In France, each of CME, CBOT, NYMEX and COMEX have been recognized by the French Minister of Economy under Article D. 423-1 of the French Monetary and Financial Code.

In Germany, each of CME, CBOT, NYMEX and COMEX have been authorized under section 102 of the German Securities Trading Act (Wertpapierhandelsgesetz). The Commission implementing decision (EU) 2017/2320 of 13 December 2017 on the equivalence of the legal and supervisory framework of the United States of America for national securities exchanges and alternative trading systems in accordance with Directive 2014/65/EU of the European Parliament and of the Council replaced authorization under EU member state laws.

In the Netherlands, CME, CBOT, NYMEX and COMEX are dispensed from the requirement to obtain exchange recognition.

In Switzerland, CME, CBOT, NYMEX and COMEX are authorised foreign exchanges.

In the United Kingdom, CME, CBOT, NYMEX and COMEX are Recognised Overseas Investment Exchanges.

CME Group, the Globe Logo, CME, Globex, E-Mini, CME Direct, CME DataMine and Chicago Mercantile Exchange are trademarks of Chicago Mercantile Exchange Inc. CBOT and the Chicago Board of Trade are trademarks of the Board of Trade of the City of Chicago, Inc. NYMEX and ClearPort are trademarks of New York Mercantile Exchange, Inc. COMEX is a trademark of Commodity Exchange, Inc.

Copyright © 2021 CME Group Inc. All rights reserved.

Mailing Address: 20 South Wacker Drive, Chicago, Illinois 60606

PM2811/0521