National Stock Exchange of India Limited

Circular

Department: COMMODITY DERIVATIVES	
Download Ref No: NSE/COM/60131	Date: January 06, 2024
Circular Ref. No: 02/2024	

All Members,

Base price for options contracts

This is in partial modification to item no. 1.5 - Close Price, Base Price and Operating ranges applicable to the contracts of Commodity consolidated circular NSE/COM/57265 dated June 26, 2023, the below changes related Base price are applicable to the options contracts.

A) Options Contracts:
   a. Commodity option on goods contracts on the first day shall be the theoretical options price as per the Black and Scholes model (Bachelier model shall be used for negative strikes and when the underlying is negative)
   b. Commodity option on futures (other than GOLDM) contracts on the first day shall be the theoretical options price as per the Black 76 model (Bachelier model shall be used for negative strikes and when the underlying is negative).
   c. In case the close price of the option contract (other than GOLDM) is computed as per point 2.a or 2.b of Chapter 1.5 of the aforesaid circular, then such close price shall be set as the base price.
   d. In case the close price of the option contract (other than GOLDM) is computed as per point 2.c of Chapter 1.5 of the aforesaid circular, then daily settlement price of the contract shall be set as the base price.

B) GOLDM Options on futures:
   a. GOLDM option on futures contracts on the first day shall be the theoretical options price as per the Black 76 model (Bachelier model shall be used for negative strikes and when the underlying is negative). The inputs used for computation shall be as follows:
      1. Underlying futures price:
         • Volume Weighted Average Price (VWAP) of all trades done during last half an hour of the trading day, subject to minimum of ten trades.
         • If the number of trades during last half an hour is less than ten, then close price shall be based on the VWAP of the last ten trades executed during the day.
         • Theoretical price computed using polled price adjusted for movement in XAUGOLD price OR underlying price derived from near month future contract price OR latest available polled price.

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2. Volatility: Annualized underlying volatility as published by NCL (in case of Bachelier model, this shall be computed considering change in underlying in absolute terms)

3. Interest Rate: Applicable MIBOR Rate

b. The base price of the GOLDM option on futures contracts on subsequent days shall be computed theoretically for all the option contracts at the EOD, as per the Black and Scholes model (Bachelier model shall be used for negative strikes and when the underlying is negative). The inputs used for computation shall be as follows:

- Underlying price: Polled price adjusted for movement in XAUGOLD price OR underlying price derived from near month future contract price OR latest available polled price.
- Volatility: Annualized underlying volatility as published by NCL (in case of Bachelier model, this shall be computed considering change in underlying in absolute terms)
- Interest Rate: Applicable MIBOR Rate

The circular shall be made effective from January 09,2024. Members are advised to take the updated contract.gz file available on the NSE extranet (path: /comtftp/comtcommon) before trading.

For and on behalf of
National Stock Exchange of India Limited

Khushal Shah
Associate Vice President

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