

## Chapter 460A

### Options on Three-Month SOFR Futures

#### 460A00. SCOPE OF CHAPTER

This chapter is limited in application to options on Three-Month SOFR futures (“options”). In addition to this chapter, options shall be subject to the general rules and regulations of the Exchange insofar as applicable.

Unless otherwise specified, times referenced herein shall refer to and indicate Chicago time.

#### 460A01. OPTION CHARACTERISTICS

##### 460A01.A. Contract Months and Trading Hours

Options shall be listed for expiration on such dates and shall be scheduled for trading during such hours as may be determined by the Exchange.

##### 460A01.B. Trading Unit

The trading unit shall be an option to buy in the case of the call, or to sell in the case of the put, one Three-Month SOFR futures contract (Chapter 460) (“futures” or “futures contract”).

##### 460A01.C. Minimum Fluctuations

The price of an option shall be quoted in IMM Index points corresponding to such option’s underlying futures contract (Rule 460A01.D.). Pursuant to Rules 46002.C., each 0.01 IMM Index point signifies one (1) basis point per annum of interest rate exposure in such underlying futures contract’s Trading Unit (Rule 46002.B.) and is equal to \$25 per option contract. Accordingly, for example, an option contract price of 0.35 IMM Index points represents \$875 (equal to 35 basis points x \$25 per basis point per option contract).

Minimum price fluctuations shall be as follows –

##### 1. Quarterly Standard Options (Rule 460A01.D.1.) Expiring in the Nearest March Quarterly Month

Where such options are for the next nearest monthly option expiration date, the minimum price fluctuation shall be 0.0025 IMM Index points (equal to \$6.25 per option contract).

Where such options are not for the next nearest monthly option expiration date, then:

Where any such option trades outright at a premium not greater than 0.05 IMM Index points, the minimum price fluctuation shall be 0.0025 IMM Index points (equal to \$6.25 per option contract).

Where any such option trades outright at a premium greater than 0.05 IMM Index points, the minimum price fluctuation shall be 0.005 IMM Index points (equal to \$12.50 per option contract).

##### 2. Quarterly Standard Options (Rule 460A01.D.1.) Expiring in the Second-Nearest March Quarterly Month, Serial Standard Options (Rule 460A01.D.2.), and Three-Month Mid-Curve Options (Rule 460A01.D.8.)

Where any such option trades outright at a premium not greater than 0.05 IMM Index points, the minimum price fluctuation shall be 0.0025 IMM Index points (equal to \$6.25 per option contract). Where any such option trades outright at a premium greater than 0.05 IMM Index points, the minimum price fluctuation shall be 0.005 IMM Index points (equal to \$12.50 per option contract).

##### 3. All Other Quarterly Standard Options (Rule 460A01.D.1.) and All Other Mid-Curve Options (Rules 460A01.D.3. through 460A01.D.7., 460A01.D.9., and 460A01.D.10.)

For all Quarterly Standard options other than those that expire in the nearest March Quarterly month or the second-nearest March Quarterly month, and for all Mid-Curve options other than Three-Month Mid-Curve options, the minimum price fluctuation shall be 0.005 IMM Index points (equal to \$12.50 per option contract), provided that trade may occur at a price level of 0.0025 IMM Index point (equal

to \$6.25 per option contract), whether or not such trade results in liquidation of positions for both parties to such trade.

#### 4. Option Spreads and Combinations

All option spreads and combinations shall trade in minimum price increments of 0.005 IMM Index points, subject to the following exceptions:

- (a) An option spread or combination may trade in minimum price increments of 0.0025 IMM Index points if (i) such option spread or combination comprises only Quarterly Standard Options Expiring in the Nearest March Quarterly Month (Rule 460A01.C.1.), and (ii) all option contracts that are components of such spread or combination are for the nearest monthly option expiration date.
- (b) An option spread or combination may trade in minimum price increments of 0.0025 IMM Index points if such option spread or combination (i) trades at a net premium not greater than 0.05 IMM Index points and not less than -0.05 IMM Index points and (ii) comprises only such options as are specified in Rule 460A01.C.1. and/or Rule 460A01.C.2.

For the avoidance of doubt, any option spread or combination that comprises one or more options specified in Rule 460A01.C.3. shall trade in minimum price increments of 0.005 IMM Index points.

For the purpose of Rule 813 for Settlement Prices, the minimum price fluctuation for all options shall be 0.0025 IMM Index point (equal to \$6.25 per option contract).

Where the price of an option is quoted in volatility terms, the minimum fluctuation shall be 0.05 percent.

#### 460A01.D. Underlying Futures Contracts

##### 1. Options in the March Quarterly Cycle (“Quarterly Standard Options”)

For options that expire in any month in the March quarterly cycle (i.e., March, June, September, and December), except for those Mid-Curve options specified in Paragraphs 3, 4, 5, 6, 7, 8, 9, or 10 of this Rule, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the month in which such options expire.

*Example:* For a given year, the underlying futures contract for an option that expires in March is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of March and ends on (and does not include) the third Wednesday of June.

##### 2. Options Not in the March Quarterly Cycle (“Serial Standard Options”)

For options that expire in any month not in the March quarterly cycle, (i.e., January, February, April, May, July, August, October, and November), excluding those Mid-Curve options specified in Paragraphs 3, 4, 5, 6, 7, 8, 9, or 10 of this Rule, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the next month in the March quarterly cycle that is nearest the expiration of such options.

*Example:* For a given year, the underlying futures contract for an option that expires in either January or February is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of March and ends on (and does not include) the third Wednesday of June.

##### 3. One-Year Mid-Curve Options

###### One-Year Mid-Curve Options in the March Quarterly Cycle (“Quarterly One-Year Mid-Curve Options”)

For One-Year Mid-Curve options that expire in any month in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 12<sup>th</sup> calendar month following the month in which such options expire.

*Example:* The underlying futures contract for the Quarterly One-Year Mid-Curve options that expire in September of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of September one (1) year hence and ends on (and does not include) the third Wednesday of December one (1) year hence.

#### One-Year Mid-Curve Options Not in the March Quarterly Cycle (“Serial One-Year Mid-Curve Options”)

For One-Year Mid-Curve Options that expire in any month other than those in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 12<sup>th</sup> calendar month following the next March quarterly month that is nearest to the expiration of such options.

*Example:* The underlying futures contract for the Serial One-Year Mid-Curve options that expire in April or May of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of June one (1) year hence and ends on (and does not include) the third Wednesday of September one (1) year hence.

#### Weekly One-Year Mid-Curve Options

For Weekly One-Year Mid-Curve Options, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 12<sup>th</sup> calendar month following the next March quarterly month that is nearest to the expiration of such options.

### **4. Two-Year Mid-Curve Options**

#### Two-Year Mid-Curve Options in the March Quarterly Cycle (“Quarterly Two-Year Mid-Curve Options”)

For Two-Year Mid-Curve options that expire in any month in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 24<sup>th</sup> calendar month following the month in which such options expire.

*Example:* The underlying futures contract for the Quarterly Two-Year Mid-Curve options that expire in September of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of September two (2) years hence and ends on (and does not include) the third Wednesday of December two (2) years hence.

#### Two-Year Mid-Curve Options Not in the March Quarterly Cycle (“Serial Two-Year Mid-Curve Options”)

For Two-Year Mid-Curve Options that expire in any month other than those in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 24<sup>th</sup> calendar month following the next March quarterly month that is nearest to the expiration of such options.

*Example:* The underlying futures contract for the Serial Two-Year Mid-Curve options that expire in April or May of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of June two (2) years hence and ends on (and does not include) the third Wednesday of September two (2) year hence.

#### Weekly Two-Year Mid-Curve Options

For Weekly Two-Year Mid-Curve Options, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 24<sup>th</sup> calendar month following the next March quarterly month that is nearest to the expiration of such options.

### **5. Three-Year Mid-Curve Options**

#### Three-Year Mid-Curve Options in the March Quarterly Cycle (“Quarterly Three-Year Mid-Curve Options”)

For Three-Year Mid-Curve options that expire in any month in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 36<sup>th</sup> calendar month following the month in which such options expire.

*Example:* The underlying futures contract for the Quarterly Three-Year Mid-Curve options that expire in September of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of September three (3) years hence and ends on (and does not include) the third Wednesday of December three (3) years hence.

#### Three-Year Mid-Curve Options Not in the March Quarterly Cycle (“Serial Three-Year Mid-Curve Options”)

For Three-Year Mid-Curve Options that expire in any month other than those in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 36<sup>th</sup> calendar month following the next March quarterly month that is nearest to the expiration of such options.

*Example:* The underlying futures contract for the Serial Three-Year Mid-Curve options that expire in April or May of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of June three (3) years hence and ends on (and does not include) the third Wednesday of September three (3) year hence.

#### Weekly Three-Year Mid-Curve Options

For Weekly Three-Year Mid-Curve Options, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 36<sup>th</sup> calendar month following the next March quarterly month that is nearest to the expiration of such options.

### **6. Four-Year Mid-Curve Options**

#### Four-Year Mid-Curve Options in the March Quarterly Cycle (“Quarterly Four-Year Mid-Curve Options”)

For Four-Year Mid-Curve options that expire in any month in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 48<sup>th</sup> calendar month following the month in which such options expire.

*Example:* The underlying futures contract for the Quarterly Four-Year Mid-Curve options that expire in September of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of September four (4) years hence and ends on (and does not include) the third Wednesday of December four (4) years hence.

#### Four-Year Mid-Curve Options Not in the March Quarterly Cycle (“Serial Four-Year Mid-Curve Options”)

For Four-Year Mid-Curve Options that expire in any month other than those in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 48<sup>th</sup> calendar month following the next March quarterly month that is nearest to the expiration of such options.

*Example:* The underlying futures contract for the Serial Four-Year Mid-Curve options that expire in April or May of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of June four (4) years hence and ends on (and does not include) the third Wednesday of September four (4) year hence.

### **7. Five-Year Mid-Curve Options**

#### Five-Year Mid-Curve Options in the March Quarterly Cycle (“Quarterly Five-Year Mid-Curve Options”)

For Five-Year Mid-Curve options that expire in any month in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 60<sup>th</sup> calendar month following the month in which such options expire.

*Example:* The underlying futures contract for the Quarterly Five-Year Mid-Curve options that expire in September of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of September five (5) years hence and ends on (and does not include) the third Wednesday of December five (5) years hence.

#### Five-Year Mid-Curve Options Not in the March Quarterly Cycle (“Serial Five-Year Mid-Curve Options”)

For Five-Year Mid-Curve Options that expire in any month other than those in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the 60<sup>th</sup> calendar month following the next March quarterly month that is nearest to the expiration of such options.

*Example:* The underlying futures contract for the Serial Five-Year Mid-Curve options that expire in April or May of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of June five (5) years hence and ends on (and does not include) the third Wednesday of September five (5) year hence.

### **8. Three-Month Mid-Curve Options**

#### Three-Month Mid-Curve Options in the March Quarterly Cycle (“Quarterly Three-Month Mid-Curve Options”)

For Three-Month Mid-Curve options that expire in any month in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the third calendar month following the month in which such options expire.

*Example:* The underlying futures contract for the Quarterly Three-Month Mid-Curve options that expire in September of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of the following December and ends on (and does not include) the third Wednesday of the following March.

#### Three-Month Mid-Curve Options Not in the March Quarterly Cycle (“Serial Three-Month Mid-Curve Options”)

For Three-Month Mid-Curve Options that expire in any month other than those in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the third calendar month following the next March quarterly month that is nearest to the expiration of such options.

*Example:* The underlying futures contract for the Serial Three-Month Mid-Curve options that expire in April or May of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of the following September and ends on (and does not include) the third Wednesday of the following December.

### **9. Six-Month Mid-Curve Options**

#### Six-Month Mid-Curve Options in the March Quarterly Cycle (“Quarterly Six-Month Mid-Curve Options”)

For Six-Month Mid-Curve options that expire in any month in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the sixth calendar month following the month in which such options expire.

*Example:* The underlying futures contract for the Quarterly Six-Month Mid-Curve options that expire in March of a given year is the futures contract for which the contract Reference

Quarter begins on (and includes) the third Wednesday of the following September and ends on (and does not include) the third Wednesday of the following December.

#### Six-Month Mid-Curve Options Not in the March Quarterly Cycle (“Serial Six-Month Mid-Curve Options”)

For Six-Month Mid-Curve Options that expire in any month other than those in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the sixth calendar month following the next March quarterly month that is nearest to the expiration of such options.

*Example:* The underlying futures contract for the Serial Six-Month Mid-Curve options that expire in January or February of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of the following September and ends on (and does not include) the third Wednesday of the following December.

### **10. Nine-Month Mid-Curve Options**

#### Nine-Month Mid-Curve Options in the March Quarterly Cycle (“Quarterly Nine-Month Mid-Curve Options”)

For Nine-Month Mid-Curve options that expire in any month in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the ninth calendar month following the month in which such options expire.

*Example:* The underlying futures contract for the Quarterly Nine-Month Mid-Curve options that expire in December of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of the following September and ends on (and does not include) the third Wednesday of the following December.

#### Nine-Month Mid-Curve Options Not in the March Quarterly Cycle (“Serial Nine-Month Mid-Curve Options”)

For Nine-Month Mid-Curve Options that expire in any month other than those in the March quarterly cycle, the underlying futures contract is the futures contract for which the contract Reference Quarter (Rule 46003.A.1.) begins on the third Wednesday of the ninth calendar month following the next March quarterly month that is nearest to the expiration of such options.

*Example:* The underlying futures contract for the Serial Nine-Month Mid-Curve options that expire in October or November of a given year is the futures contract for which the contract Reference Quarter begins on (and includes) the third Wednesday of the following September and ends on (and does not include) the third Wednesday of the following December.

### **460A01.E. Exercise Prices**

#### **1. Twenty-Five Point Exercise Prices**

For options for a given expiration date that are exercisable into a given underlying futures contract, exercise prices shall be stated in terms of the IMM Index for such underlying futures contract and shall be stated in intervals whose last two digits are 00, 25, 50, or 75 (“twenty-five point exercise prices”) for all IMM Index levels, e.g., 88.00, 88.25, 88.50, 88.75.

The Exchange shall list put and call options for trading at the exercise price that is nearest the previous day’s settlement price of such underlying futures contract (“at-the-money exercise price”) and at all eligible exercise prices in a range from 5.50 IMM Index points above to 5.50 IMM Index points below such at-the-money exercise price. Thereafter until termination of trading in such options, the Exchange shall ensure that put and call options are listed for trading on each day at all eligible exercise prices in a range from 5.50 IMM Index points above to 5.50 IMM Index points below

the at-the-money exercise price for such underlying futures contract. New options may be listed for trading up to and including the termination of trading.

## **2. Special Listings of 12.5 Point Exercise Prices**

For options for a given expiration date that are exercisable into a given underlying futures contract, with the exception of certain option expiries with 6.25 Point Exercise Prices (Rule 460A01.E.3.), additional exercise prices shall be stated in intervals whose last three digits are 12.5, 37.5, 62.5, or 87.5 ("12.5 point exercise prices") for all IMM Index levels, e.g., 93.125, 93.375, 93.625, 93.875.

The Exchange shall ensure that put and call options are listed for trading on each day at all such 12.5 point exercise prices in a range from 1.50 IMM Index points above to 1.50 IMM Index points below the at-the-money exercise price for such underlying futures contract.

## **3. Special Listings of 6.25 Point Exercise Prices**

From time to time as determined by the Exchange, additional exercise prices for selected expiries will be made available in intervals whose last four digits are 06.25, 12.50, 18.75, 31.25, 37.50, 43.75, 56.25, 62.50, 68.75, 81.25, 87.50, or 93.75 ("6.25 point exercise prices") for all IMM Index levels, e.g., 93.0625, 93.1250, 93.1875, 93.3125, 93.3750, 93.4375, 93.5625, 93.6250, 93.6875, 93.8125, 93.8750, 93.9375.

Until termination of trading in such options, the Exchange shall ensure that put and call options are listed for trading on each day at all such 6.25 point exercise prices in a range from 1.50 IMM Index points above to 1.50 IMM Index points below the at-the-money exercise price for such underlying futures contract.

## **4. Dynamically-Listed Exercise Prices**

Upon demand and at the discretion of the Exchange, a new option contract with an out-of-current-range exercise price may be added, on an as-soon-as-possible basis, provided that the last two digits of the exercise price of such newly added option contract must be 00, 25, 50, or 75 (e.g., 88.00, 88.25, 88.50, 88.75).

The Exchange may modify the provisions governing the establishment of exercise prices as it deems appropriate.

### **460A01.F. Position Limits, Exemptions, Position Accountability and Reportable Levels**

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion. Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

### **460A01.G. Special Price Fluctuation Limits**

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits Table in the Interpretations & Special Notices Section of Chapter 5.

### **460A01.H.-I. [Reserved]**

### **460A01.J. Termination of Trading**

#### **1. All Options Excluding Weekly Mid-Curve Options**

Trading in any Quarterly Standard Option, Serial Standard Option, Quarterly Mid-Curve Option, or Serial Mid-Curve Option shall terminate at the close of trading on the Friday preceding the third Wednesday of the month in which such option expires. If such Friday is a scheduled Exchange holiday, then trading shall terminate on the immediately preceding Business Day. In the event that the underlying futures market for such option does not open on the day scheduled for termination of trading in such option, then trading in such option shall be extended to the next day on which the underlying futures market is open for trading.

## 2. Weekly Mid-Curve Options

Trading in Weekly Mid-Curve options shall terminate at the close of trading on any Friday that is not also scheduled for termination of trading in Quarterly Mid-Curve Options or Serial Mid-Curve Options. If such Friday is a scheduled Exchange holiday, then trading shall terminate on the immediately preceding Business Day. In the event that the underlying futures market for such option does not open on the day scheduled for termination of trading in such option, then trading in such option shall be extended to the next day on which the underlying futures market is open for trading.

### 460A01.K. [Reserved]

## 460A02. EXERCISE AND ASSIGNMENT

In addition to the applicable procedures and requirements of Chapter 7, the following shall apply to the exercise of SOFR options.

### 460A02.A. Exercise of Option by Buyer

An option may be exercised by the buyer on any Business Day that the option is traded. To exercise an option, the clearing member representing the buyer shall present an exercise notice to the Clearing House by 5:30 p.m. on the day of exercise.

An option that is in the money and has not been liquidated or exercised prior to the termination of trading in such option shall be exercised automatically, in the absence of contrary instructions delivered to the Clearing House no later than 5:30 p.m. on the last day of trading by the clearing member representing the option buyer. An option is in the money if the settlement price of the underlying futures contract at the termination of trading lies strictly above the exercise price in the case of a call, or lies strictly below the exercise price in the case of a put.

Corrections to option exercises may be accepted by the Clearing House after the 5:30 p.m. deadline and up to the beginning of final option expiration processing, provided that such corrections are necessary due to: (1) a bona fide clerical error, (2) unreconciled Exchange option transactions, or (3) an extraordinary circumstance in which the clearing firm and customer are unable to communicate final option exercise instructions prior to the deadline. The decision whether a correction is acceptable will be made by the President of the Clearing House, or the President's designee, and such decision will be final.

### 460A02.B. Assignment

Exercise notices accepted by the Clearing House shall be assigned through a process of random selection to clearing members with open short positions in the same series. A clearing member to which an exercise notice is assigned shall be notified thereof as soon as practicable after such notice is assigned by the Clearing House, but not later than 45 minutes before the opening of Regular Trading Hours in the underlying futures contract on the following Business Day.

The clearing member assigned an exercise notice shall be assigned a short position in the underlying futures contract if a call is exercised or a long position if a put is exercised. The clearing member representing the option buyer shall be assigned a long position in the underlying futures contract if a call is exercised and a short position if a put is exercised. All such futures positions shall be assigned at a price equal to the exercise price of the option and shall be marked to market in accordance with Rule 814 on the Trading Day of acceptance by the Clearing House of the exercise notice.

## 460A03. [RESERVED]

(End Chapter 460A)