# Chapter 62
# Eris SOFR Swap Futures

## 62100. SCOPE OF CHAPTER

This chapter is limited in application to trading of Eris SOFR Swap Futures ("futures" or "contract"). In addition to this chapter, futures shall be subject to the general rules and regulations of the Exchange insofar as applicable.

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

## 62101. CONTRACT SPECIFICATIONS

### 62101.A Contract Structure

$100,000 (U.S. dollar) notional principal whose value is based upon the difference between a stream of annual fixed interest payments and a stream of annual floating interest payments based on a daily compounded Secure Overnight Financing Rate (SOFR) fixing. The contract structure is subject to the following contract elections:

1. **Long Futures Position Holder:** Fixed Rate Receiver, Floating Rate Payer
2. **Short Futures Position Holder:** Fixed Rate Payer, Floating Rate Receiver
3. **Underlying Swap Tenors:** 1-Year, 2-Year, 3-Year, 4-Year, 5-Year, 7-Year, 10-Year, 12-Year, 15-Year, 20-Year, 30-Year
4. **Currency:** US Dollars
5. **Notional Amount:** $100,000
6. **Effective Dates:** Quarterly IMM Dates (3rd Wednesday of each March, June, September, December), unless such Wednesday is not a US Government Securities Business Day[1] then it shall be the next US Government Securities Business Day)
7. **Fixed Rate:** Futures contract fixed interest rate set by the Exchange at an integer multiple of 25 basis points (i.e., one quarter of one percent) per annum when such futures contract is initially listed for trading. The Exchange shall utilize the Market Agreed Coupon (MAC) standardized rate which is calculated and administered by the Exchange as noted *HERE*. Should the relevant MAC rate be recalibrated, the Exchange may amend the fixed rate according to market convention, provided that no position holder is adversely impacted by such amendment.
8. **Floating Rate:** "USD-SOFR-COMPOUND", calculated as follows:

Floating Rate = $[ \Pi i=1 \ldots d_0 \{1+(SOFR_i \times n_i)/360)\} - 1] \times (360/d) \times 100$

where:

"$d_0$", for any Accrual Period, is the number of Business Days in the relevant Accrual Period;

"*i*" is a series of whole numbers from one to d0, each representing the relevant Business Day in chronological order from, and including, the first Business Day in the relevant Accrual Period;

"*SOFR*" is the decimalized daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the New York Fed's Website;

"$SOFR_i$", for any day *"i"* in the relevant Accrual Period, is a reference rate equal to SOFR in respect of that day as published on or about 8:00 a.m., New York City time, on the Business Day immediately following that day "*i*". If, by 5:00 p.m., New York City time, on the Business Day immediately following any day "*i*", SOFR in respect of such day "*i*" has not been published, then *SOFRi* for that day "*i*" will be SOFR as published in respect

[1] **A US Government Securities Business Day is defined as follows: 2021 ISDA Interest Rate Derivatives Definitions ("2021 Definitions") "U.S. Government Securities Business Day" means any day except for a Saturday, Sunday or a day on which The Securities Industry and Financial Markets Association (or a successor) recommends that the fixed income departments of its members be closed for the entire day for the purpose of trading in U.S. government securities.**

of the first preceding Business Day for which SOFR was published on the New York Fed's Website;

"$n_i$" is the number of calendar days in the relevant Accrual Period on which the rate is $SOFR_i$;

"$d$" is the number of calendar days in the relevant Accrual Period;

9. **Floating Rate Index:** SOFR, the Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York
10. **Fixed Rate Leg Payment Frequency:** Annual
11. **Fixed Rate Day Count Convention:** Actual/360
12. **Floating Rate Leg Payment Frequency:** Annual
13. **Floating Rate Day Count Convention:** Actual/360
14. **Business Days:** US Government Securities Business Days, representing all weekdays excluding any dates identified by the Securities Industry and Financial Markets Association (SIFMA) in its U.S. Holiday Recommendations.
15. **Business Day Convention:** Modified Following, with adjustment of period end dates for Fixed Rate and Floating Rate Accrual Period Dates.
16. **Accrual Periods:** Annual periods commencing on the Effective Date, to each subsequent annual calendar date thereafter, aligned with the Cash Flow Alignment Date (CFAD) and subject to adjustment in accordance with the Modified Following Business Day Convention. The end date of an Accrual Period is the start date of the next Accrual Period.
17. **Fixed Rate & Floating Rate Payment Dates:** Two Business Days following the end date of each Accrual Period, adjusted in accordance with the Following Business day convention.
18. **Cash Flow Alignment Date ("CFAD"):** The date determined by adding the number of Underlying Swap Tenor years to the Effective Date, used for aligning all fixed and floating Accrual Period End Dates, and for determination of the Maturity Date. The Cash Flow Alignment Date may fall on any calendar day, including weekends and holidays.
19. **Maturity Date:** The date of final payment, which is two business days following the final Accrual Period end date. The Maturity Date may also be referred to as Termination Date.
20. **Last Trading Day:** Two business days immediately preceding Maturity Date.
21. **Underlying Tenor:** The duration of time in years from the Effective Date to the Cash Flow Alignment Date.
22. **Remaining Tenor:** The duration of time from today to the Cash Flow Alignment Date.

## 62102. TRADING SPECIFICATIONS

### 62102.A. Trading Schedule

Contracts shall be scheduled for trading during such hours and for delivery in such months as may be determined by the Exchange.

### 62102.B. Trading Unit

The unit of trading shall be contracts that meet Contract Structure (CBOT Rule 62101.A.) having notional amount of one hundred thousand US dollars ($100,000) or multiples thereof.

### 62102.C. Price Increments

Par shall be on the basis of 100 points, with each point equal to $1,000 per contract.
The minimum price fluctuations for each available tenor shall be:

1. 1-Year Eris SOFR Swap Futures
    a. 0.0025 of one point, equal to $2.50 per contract
2. 2-Year Eris SOFR Swap Futures
    a. 0.0025 of one point, equal to $2.50 per contract
3. 3-Year Eris SOFR Swap Futures
    a. 0.005 of one point, equal to $5 per contract
4. 4-Year Eris SOFR Swap Futures
    a. 0.010 of one point, equal to $10 per contract
5. 5-Year Eris SOFR Swap Futures
    a. 0.010 of one point, equal to $10 per contract
6. 7-Year Eris SOFR Swap Futures
    a. 0.010 of one point, equal to $10 per contract
7. 10-Year Eris SOFR Swap Futures
    a. 0.020 of one point, equal to $20 per contract

8. 12-Year Eris SOFR Swap Futures
    a. 0.020 of one point, equal to $20 per contract
9. 15-Year Eris SOFR Swap Futures
    a. 0.020 of one point, equal to $20 per contract
10. 20-Year Eris SOFR Swap Futures
    a. 0.040 of one point, equal to $40 per contract
11. 30-Year Eris SOFR Swap Futures
    a. 0.040 of one point, equal to $40 per contract

Contracts shall not be made on any other price basis.

**62102.D. 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.

**62102.E. 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.

**62102.F. Termination of Trading**

Trading in an expiring contract shall terminate at the close of trading on the second Business Day immediately preceding the Contract Maturity Date.

## 62103. SETTLEMENT PROCEDURES

Delivery shall be by cash settlement.

**62103.A. Maturity Date Final Settlement Price**

The Final Settlement Price on the Maturity Date of each contract shall be as follows:

$S_{final} = 100 + B_{final} - C_{final}$

$S_{final}$ = Settlement price at Maturity Date

$B_{final}$ = Historical Fixed and Floating Rate amounts since contract inception through maturity (Calculated in accordance with the Day Count Convention)

$C_{final}$ = Eris Price Alignment Amount (or Eris PAA), at Maturity Date

Eris PAA is the cumulative value calculated daily by applying the secured overnight financing rate (SOFR) dated for the previous settlement date to the contract's NPV of the previous settlement date less the net Fixed and Floating Rate cash flows on the current settlement date, using an Actual/360 day-count convention.

The Exchange and CME Clearing calculate Final Settlement Price to 4 decimals of precision (e.g., 100.1234).

**62103.B. Final Settlement**

Clearing members holding open positions in a contract at the time of termination of trading in such contract shall make payment to or receive payment from the Clearing House in accordance with normal variation performance bond procedures based on a settlement price equal to the final settlement price.

**62103.C. Daily Settlement Price**

The Daily Settlement Price shall be as follows:

$S_t = 100 + A_t + B_t - C_t$

$S_t$ = Settlement Price on settlement date t

$A_t$ = Net Present Value (NPV) of the future Fixed and Floating Rate cash flows on date t, discounted on a SOFR curve

$B_t$ = Value of the past historical Fixed and Floating Rate amounts since contract inception to the settlement date (calculated in accordance with the Day Count Convention)

$C_t$ = Eris PAA on the settlement date t

The Exchange and CME Clearing calculate Daily Settlement Price to 4 decimals of precision (e.g., 100.1234).