<i>IMPORTANT</i> : Check box if Confidential Treatment is requested Registered Entity Identifier Code (optional): <u>20-300 (4 of 17)</u>					
Organization: The Board of Trade of the City of Chicago, Inc. ("CBOT")					
Filing as a: DCM SEF DCO	SDR				
Please note - only ONE choice allowed.					
Filing Date (mm/dd/yy): <u>09/04/20</u> Filing Description: <u>Initi</u> SOFR and Six (6) MAC SOFR Swap Futures Contracts	al Listing of Eleven (11) Eri				
SOFK and Six (0) MAC SOFK Swap Futures Contracts					
SPECIFY FILING TYPE					
Please note only ONE choice allowed per Submission. Organization Rules and Rule Amendments					
Certification	§ 40.6(a)				
Approval	§ 40.5(a)				
Notification	§ 40.6(d)				
Advance Notice of SIDCO Rule Change	§ 40.10(a)				
SIDCO Emergency Rule Change Rule Numbers:	§ 40.10(h)				
New Product Please note only ONE product	ct per Submission.				
Certification	§ 40.2(a)				
Certification Security Futures	§ 41.23(a)				
Certification Swap Class	§ 40.2(d)				
Approval	§ 40.3(a)				
Approval Security Futures	§ 41.23(b)				
Novel Derivative Product Notification	§ 40.12(a)				
Swap Submission	§ 39.5				
Product Terms and Conditions (product related Rules and	Rule Amendments)				
Certification	§ 40.6(a)				
Certification Made Available to Trade Determination	§ 40.6(a)				
Certification Security Futures	§ 41.24(a)				
Delisting (No Open Interest)	§ 40.6(a)				
Approval	§ 40.5(a)				
Approval Made Available to Trade Determination	§ 40.5(a)				
Approval Security Futures	§ 41.24(c)				
Approval Amendments to enumerated agricultural products					
"Non-Material Agricultural Rule Change"	§ 40.4(b)(5)				
Notification	§ 40.6(d)				



September 4, 2020

VIA ELECTRONIC PORTAL

Mr. Christopher J. Kirkpatrick Office of the Secretariat Commodity Futures Trading Commission Three Lafayette Centre 1155 21st Street, N.W. Washington, D.C. 20581

Re: CFTC Regulation 40.2(a) Certification. Notification Regarding the Initial Listing of Eleven (11) Eris SOFR and Six (6) MAC SOFR Swap Futures Contracts. CBOT Submission No. 20-300 (4 of 17)

Dear Mr. Kirkpatrick:

The Board of Trade of the City of Chicago, Inc. ("CBOT" or "Exchange") is certifying to the Commodity Futures Trading Commission ("CFTC" or "Commission") the initial listing of eleven (11) Eris SOFR Swap Futures and six (6) Market Agreed Coupon SOFR Swap Futures ("MAC SOFR Swap Futures") contracts (collectively, the "Contracts") for trading on the CME Globex electronic trading platform ("CME Globex") and for submission for clearing on CME ClearPort effective Sunday, October 4, 2020 for trade date of Monday, October 5, 2020.

Contract Title	CME Globex/ CME ClearPort Code	CBOT Rulebook Chapter
Eris		
1-Year Eris SOFR Swap Futures	YIA	62
2-Year Eris SOFR Swap Futures	YIT	62
3-Year Eris SOFR Swap Futures	YIC	62
4-Year Eris SOFR Swap Futures	YID	62
5-Year Eris SOFR Swap Futures	YIW	62
7-Year Eris SOFR Swap Futures	YIB	62
10-Year Eris SOFR Swap Futures	YIY	62
12-Year Eris SOFR Swap Futures	YII	62
15-Year Eris SOFR Swap Futures	YIL	62
20-Year Eris SOFR Swap Futures	YIO	62
30-Year Eris SOFR Swap Futures	YIE	62
MAC		
2-Year MAC SOFR Swap Futures	T1S	63
5-Year MAC SOFR Swap Futures	F1S	63
7-Year MAC SOFR Swap Futures	S1S	63

10-Year MAC SOFR Swap Futures	N1S	63
20-Year MAC SOFR Swap Futures	E1S	63
30-Year MAC SOFR Swap Futures	B1S	63

Section 1 – Contract Specifications

Eris SOFR Swap Futures

CONTRACT UNIT	\$1,000 per point (\$100,000 per contract)
PRICE QUOTATION	Prices are made in terms of price points: 100 points plus the net present value (NPV) of all past and future swap cash flows.
CME GLOBEX	Sunday – Friday: 5:00 p.m 4:00 p.m. Central Time (CT) with a 60- minute break each day beginning at 4:00 p.m. CT
	Pre-Open Sunday: 4:00 p.m. – 5:00 p.m. CT Monday – Friday: 4:45 p.m. – 5:00 p.m. CT
CME CLEARPORT	Sunday 5:00 p.m. – Friday 5:45 p.m. CT (no reporting Monday – Thursday 5:45 p.m. – 6:00 p.m. CT)
MINIMUM PRICE FLUCTUATION	 1-Year Eris SOFR Swap Futures 0.0025 of one point, equal to \$2.50 per contract 2-Year Eris SOFR Swap Futures 0.0025 of one point, equal to \$2.50 per contract 3-Year Eris SOFR Swap Futures 0.005 of one point, equal to \$5 per contract 4-Year Eris SOFR Swap Futures 0.010 of one point, equal to \$10 per contract 5-Year Eris SOFR Swap Futures 0.010 of one point, equal to \$10 per contract 5-Year Eris SOFR Swap Futures 0.010 of one point, equal to \$10 per contract 7-Year Eris SOFR Swap Futures 0.020 of one point, equal to \$20 per contract 10-Year Eris SOFR Swap Futures 0.020 of one point, equal to \$20 per contract 12-Year Eris SOFR Swap Futures 0.020 of one point, equal to \$20 per contract 12-Year Eris SOFR Swap Futures 0.020 of one point, equal to \$20 per contract 12-Year Eris SOFR Swap Futures 0.020 of one point, equal to \$20 per contract 12-Year Eris SOFR Swap Futures 0.020 of one point, equal to \$20 per contract 13-Year Eris SOFR Swap Futures 0.020 of one point, equal to \$20 per contract
CME GLOBEX/ CME CLEARPORT CODE	1-Year Eris SOFR Swap Futures:YIA2-Year Eris SOFR Swap Futures:YIT3-Year Eris SOFR Swap Futures:YIC4-Year Eris SOFR Swap Futures:YID

	5-Year Eris SOFR Swap Futures:YIW7-Year Eris SOFR Swap Futures:YIB10-Year Eris SOFR Swap Futures:YIY12-Year Eris SOFR Swap Futures:YII15-Year Eris SOFR Swap Futures:YIL20-Year Eris SOFR Swap Futures:YIO30-Year Eris SOFR Swap Futures:YIE			
LISTING SCHEDULE	At least 2 On-the-Run contract months in the March Quarterly cycle (March, June, September, December) plus Off-the Run contracts until expiry. Quarterly contracts for at least two (2) consecutive March, June, September, December quarters			
SETTLEMENT METHOD	Financially Settled			
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.			
SETTLEMENT PROCEDURES	The Final Settlement Price on the Maturity Date of each contract shall be as follows: Sfinal = 100 + Bfinal - Cfinal Sfinal = Settlement price at Maturity Date Bfinal = Historical Fixed and Floating Rate amounts since contract inception through maturity (Calculated in accordance with the Day Count Convention) Cfinal = Eris Price Alignment Amount (or Eris PAA), at Maturity Date The Exchange and CME Clearing calculate Final Settlement Price to 4 decimals of precision (e.g., 100.1234).			
BLOCK TRADE MINIMUM	100 contracts – subject to a 15-minute reporting window			
CME GLOBEX MATCHING ALGORITHM	First-In, First-Out (FIFO) - F			

MAC SOFR Swap Futures

CONTRACT UNIT	\$1,000 per point (\$100,000 per contract)			
PRICE QUOTATION	Prices are made in terms of price points: 100 points plus net present value (NPV) of IRS that meets Delivery Standard, where NPV is present value of IRS fixed-rate payments minus present value of IRS floating-rate payments as of 3rd Wednesday of Delivery Month. Par is on the basis of 100 points.			
	Sunday – Friday: 5:00 p.m 4:00 p.m. Central Time (CT) with a 60- minute break each day beginning at 4:00 p.m. CT			
CME GLOBEX	Pre-Open Sunday: 4:00 p.m. – 5:00 p.m. CT Monday – Friday: 4:45 p.m. – 5:00 p.m. CT			
CME CLEARPORT	Sunday 5:00 p.m. – Friday 5:45 p.m. CT (no reporting Monday – Thursday 5:45 p.m. – 6:00 p.m. CT)			
MINIMUM PRICE FLUCTUATION	One-half of one thirty-second (1/32) of one point (\$15.625, rounded to the nearest cent per contract), except for intermonth spreads, where the minimum price fluctuation is one-quarter of one thirty-second of one point (\$7.8125 per contract)			
CME GLOBEX/ CME CLEARPORT	2-Year MAC SOFR Swap Futures:T1S5-Year MAC SOFR Swap Futures:F1S7-Year MAC SOFR Swap Futures:S1S10-Year MAC SOFR Swap Futures:N1S20-Year MAC SOFR Swap Futures:E1S30-Year MAC SOFR Swap Futures:B1S			
LISTING SCHEDULE	March Quarterly cycle (March, June, September, December) Quarterly contracts for at least two (2) consecutive March, June,			
	September, December quarters			
SETTLEMENT METHOD	Deliverable			
TERMINATION OF TRADING	Second London business day before 3rd Wednesday of futures Delivery Month. Trading in expiring contracts closes at 2:00 p.m. CT on the last trading day.			
	Physical delivery of IRS that meets Delivery Standard. Clearing Acceptance Date and Clearing Effective Date = First CME Clearing Business Day preceding 3rd Wednesday of Delivery Month.			
SETTLEMENT PROCEDURES	Delivery invoice price = IRS Initial Payment Amount, as determined by contract final settlement price, P:			
	If $P > 100$, then IRS Floating Rate Payer pays, and IRS Fixed Rate			

	Payer receives,				
	\$1,000 x (P – 100) per contract, rounded to nearest penny.				
	If P ≤ 100, then IRS Fixed Rate Payer pays, and IRS Floating Rate Payer receives,				
	\$1,000 x (100 – P) per contract, rounded to nearest penny.				
DELIVERY PROCEDURE	To participate in physical delivery, a futures position holder must be an Eligible Contract Participant (17 CFR 1.3(m) and CME Rule 90005.C.) and must be registered with CME by a CME IRS Clearing Member as an IRS Participant (CME Rules 90005.A. and 90005.B.).				
DELIVERY PERIOD	3rd Wednesday of Delivery Month				
BLOCK TRADE MINIMUM	2-Year MAC SOFR Swap Futures: 3000 contracts 5-Year MAC SOFR Swap Futures: 1500 contracts 7-Year MAC SOFR Swap Futures: 1250 contracts 10-Year MAC SOFR Swap Futures: 1000 contracts 20-Year MAC SOFR Swap Futures: 500 contracts 30-Year MAC SOFR Swap Futures: 500 contracts Subject to a 5-minute reporting window during RTH, 15-minute reporting window during ETH/ATH				
CME GLOBEX MATCHING ALGORITHM	First-In, First-Out (FIFO) - F				

Section 2 – The Secured Overnight Financing Rate ("SOFR")

Underlying Instrument

Eris SOFR Swap futures will reference an underlying interest rate swap consisting of fixed annual payments, and floating annual payments equal to daily compounded SOFR fixing during the accrual period. These swaps will run from the contract effective date, corresponding to the IMM date of the named contract quarter, through the corresponding tenor of each contract (ie 1-30 years).

Contracts will be listed 9 months prior to the contract effective date, leaving in most cases 3 "on the run" contracts whose swaps have not yet begun accruing payments, as well as "off the run" contracts for swaps with remaining term to maturity. It is expected that most trading activity will be concentrated in the nearest "on the run" contract, with open interest spread throughout the expiries.

MAC Swap futures will deliver into an interest rate swap at the time of their expiry, created and cleared by CME Clearing. Unlike the Eris Swap futures, the MAC futures will cease trading once the swap is initiated. That is, the Eris contracts behave like cash-settled futures, while the MAC contracts are physically delivered.

Secured Overnight Financing Rate Overview

In November 2014, the Federal Reserve System convened the Alternative Reference Rates Committee ("ARRC") to (i) identify a set of alternative interest rate benchmarks that would be firmly based on transactions in an active underlying market and that would comply with emerging standards for financial benchmarks, such as the IOSCO *Principles for Financial Benchmarks*, and (ii) to identify an adoption plan with means to facilitate broad acceptance and use of such alternative reference rate benchmarks. The 300 Vesey Street New York, NY 10282 T 212 299 2200 F 212 301 4645 christopher.bowen@cmegroup.com cmegroup.com

ARRC also was asked to consider the best practices related to financial contract design that would ensure that financial contracts are resilient to possible cessation or material alteration of existing or new benchmarks.¹ In June 2017, the ARRC identified SOFR as the interest rate benchmark that, in its consensus view, would represent best practice for use as the underlying reference in new US dollar interest rate derivatives and other US dollar-denominated financial contracts.² Since April 2, 2018, the Federal Reserve Bank of New York ("FRBNY"), in cooperation with the US Office of Financial Research, has computed and published a SOFR benchmark value for each US government securities market business day.³

SOFR is a fully transactions-based interest rate benchmark incorporating data on transactions in overnight Treasury collateral repurchase agreements ("repo") drawn from three sources:⁴

- 1. All tri-party Treasury general collateral repo transactions settled on the books of Bank of New York Mellon. The FRBNY collects such trade-by-trade data directly from Bank of New York Mellon, pursuant to the supervisory authority of the Board of Governors of the Federal Reserve System.
- 2. All tri-party Treasury general collateral repo transactions mediated through the General Collateral Finance (GCF) repo market of the Fixed Income Clearing Corporation (FICC). FRBNY has entered into an agreement with DTCC Solutions LLC, an affiliate of the Depository Trust & Clearing Corporation (DTCC), to obtain these transaction data.
- 3. Bilateral Treasury repo transactions cleared through the FICC Delivery-versus-Payment (DVP) service. Here too, FRBNY has entered into an agreement with DTCC Solutions LLC to obtain these transaction data.

On any given day, prior to pooling transaction data from these three sources, the FRBNY ranks the day's FICC DVP bilateral repo transaction volumes by their transaction rates, from lowest to highest, and then filters out 25 percent of trading volume corresponding to the lowest transaction rates. The object of such filtering is to remove repo transactions in which Treasury collateral is likeliest to be trading "special", so as to achieve a residual set of bilateral repo data that largely (if not purely) reflects general collateral transactions.

After filtering the FICC DVP bilateral repo transaction data, the FRBNY pools the data from all three sources, ranks all repo transaction volumes by their transaction rates, from lowest to highest, and then computes the transaction-weighted median repo rate, i.e., the repo trade rate for which half of the day's repo transaction volume is made at transaction rates that are equal to it or less than it, and for which the other half of the day's repo transaction volume is made at transaction rate at transaction rates that are equal to it or greater than it. The transaction-weighted median repo rate becomes the day's SOFR benchmark value.

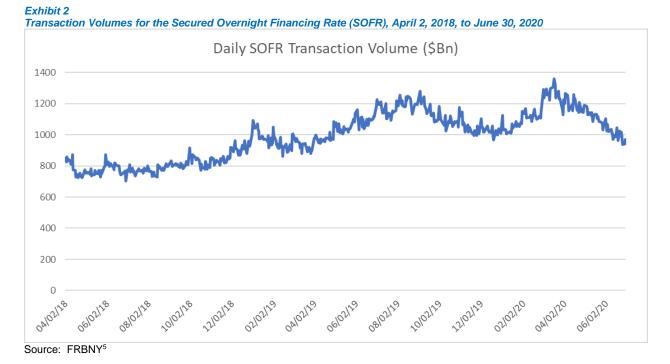
¹ See Alternative Reference Rates Committee at: <u>https://www.newyorkfed.org/arrc/index.html</u>

² See ARRC Agenda, Minutes, and Presentation for June 16, 2017, and ARRC Agenda, Minutes, and Press Release for June 22, 2017 at: <u>https://www.newyorkfed.org/medialibrary/microsites/arrc/files/2017/ARRC-Minutes-Jun-22-2017.pdf</u> https://www.newyorkfed.org/medialibrary/microsites/arrc/files/2017/ARRC-press-release-Jun-22-2017.pdf

³ The SOFR value for any US government securities market business day is published at approximately 7:00am Chicago time on the next following such business day.

⁴ See Federal Reserve System, *Request for Information Relating to Production of Rates*, 82 FR 41259, August 30, 2017, available at: <u>https://www.federalregister.gov/documents/2017/08/30/2017-18402/request-for-information-relating-to-production-of-rates</u>, and Federal Reserve System, *Production of Rates Based on Data for Repurchase Agreements*, 82 FR 58397, December 12, 2017, available at: <u>https://www.federalregister.gov/documents/2017/12/12/2017-26761/production-of-rates-based-on-data-for-repurchase-agreements</u>

³⁰⁰ Vesey Street New York, NY 10282 ⊤ 212 299 2200 F 212 301 4645 christopher.bowen@cmegroup.com cmegroup.com



The history of aggregate daily transaction volumes that have entered into daily SOFR settings is depicted in Exhibit 2. The magnitude of minimum daily transaction volume is critical from the standpoint of benchmark reliability and robustness. Throughout this more than two-year period, daily volume never dropped below \$702 billion, with a peak of \$1,358 billion. Median and mean daily volumes were \$1,009 and \$988 billion, respectively.

Section 3 -- Compliance with Core Principles

The Exchange reviewed the Designated Contract Market Core Principles ("Core Principles") as set forth in the Commodity Exchange Act (the "Act") and has identified that the Contracts may bear upon the following Core Principles:

- <u>Compliance with Rules:</u> Trading of the Contracts will be subject to all CBOT Rules, including prohibitions against fraudulent, noncompetitive, unfair and abusive practices as outlined in CBOT Rule Chapter 4, the Exchange's trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the CBOT Rulebook, and the dispute resolution and arbitration procedures of CBOT Rule Chapter 6. As with all products listed for trading on one of CME Group's designated contract markets, trading activity in the Contract will be subject to monitoring and surveillance by CME Group's Market Regulation Department. The Market Regulation Department has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.
- Contracts Not Readily Subject to Manipulation: As discussed above, the SOFR benchmark is supported by a demonstrably large pool of transaction data, drawn from multiple reliable sources. The statistical measure employed to produce the benchmark value on any given day the transaction-volume-weighted median repo rate is highly robust. Because the underlying swap for an Eris future is a synthetic one based on the SOFR benchmark, and the underlying swap for a MAC future is created by CME Clearing as part of the delivery process, there is little opportunity for manipulation of the contracts' underliers.

⁵ SOFR transaction history: <u>https://apps.newyorkfed.org/markets/autorates/sofr</u>

³⁰⁰ Vesey Street New York, NY 10282 τ 212 299 2200 F 212 301 4645 christopher.bowen@cmegroup.com cmegroup.com

Prevention of Market Disruption: Trading in the Contracts will be subject to the rules of the Exchange, which include prohibitions on manipulation, price distortion, and disruption to the settlement process. As with any new product listed for trading on a CME Group designated contract market, trading activity in the Contracts shall be subject to monitoring and surveillance by CME Group's Market Regulation Department.

- Position Limitations or Accountability: Eris SOFR Swap futures will be subject to the same Position Reporting Level of 3000 contracts as their existing LIBOR-linked equivalents. Though there is no practical limit on deliverable supply due to the synthetic nature of the swap, 3000 contracts equate to an effective notional swap value of \$300 million. For the Single and All Month accountability levels of 6000, this corresponds to \$600 million in effective swap notional value for the Eris contracts. SOFR MAC Swap futures will likewise mirror the existing MAC reportable level of 1 contract. In the latter case, this makes all MAC Swap futures activity highly visible, which is appropriate given that only parties already eligible to clear Interest Rate Swaps at CME can take the contracts to delivery. For the Single and All Month accountability levels of 5000, this corresponds to \$500 million in effective swap notional value for the contracts to \$500 million in effective swap notional value for the Source store store the source store store
- <u>Emergency Authority:</u> As with all CME Group futures and options product, the Exchange shall have full authority to act appropriately and as necessary in emergency situations.
- <u>Availability of General Information</u>: The Exchange will publish on its website information in regard to contract specifications, terms, and conditions, as well as daily trading volume, open interest, and price information for the Contract. The Exchange previously issued a Special Executive Report ("SER") regarding the launch of the Contracts. The SER has been posted on the CME Group website.
- <u>Daily Publication of Trading Information</u>: The Exchange will publish the Contracts' trading volumes, open interest levels, and price information daily on its website and through quote vendors for the Contracts.
- <u>Execution of Transactions</u>: The Contracts will be listed for trading on the CME Globex and for submission of clearing through the CME ClearPort platform. The CME Globex trading venue provides for competitive and open execution of transactions and affords the benefits of reliability and global connectivity.
- <u>**Trade Information:**</u> All requisite trade information for the Contracts will be included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.
- <u>Financial Integrity of Contracts:</u> The Contracts will be cleared by the CME Clearing, a derivatives clearing organization registered with the CFTC and subject to all CFTC Regulations related thereto.
- <u>Protection of Market Participants:</u> CBOT Rulebook Chapters 4 and 5 set forth multiple prohibitions that preclude intermediaries from disadvantaging their customers. These rules apply to trading in all of the Exchange's competitive trading venues.
- <u>Disciplinary Procedures:</u> Chapter 4 of the Rulebook contains provisions that allow the Exchange to discipline, suspend or expel members or market participants that violate the Rulebook. Trading in the Contracts will be subject to Chapter 4, and the Market Regulation Department has the authority to exercise its enforcement power in the event rule violations in these products are identified.
- <u>Dispute Resolution</u>: Disputes with respect to trading in the Contracts will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. Chapter 6 allows all non-members to submit a claim for financial losses resulting from transactions on the Exchange to arbitration. A

member named as a respondent in a claim submitted by a non-member is required to participate in the arbitration pursuant to Chapter 6. Additionally, the Exchange requires that members resolve all disputes concerning transactions on the Exchange via arbitration.

Pursuant to CFTC Regulation 40.2(a), the Exchange hereby certifies that listing the Contracts comply with the Act, including regulations under the Act. There were no substantive opposing views to this proposal.

The Exchange certifies that this submission has been concurrently posted on the Exchange's website at: <u>http://www.cmegroup.com/market-regulation/rule-filings.html</u>.

Should you have any questions concerning the above, please contact me at (212) 299-2200 or via e-mail at <u>CMEGSubmisisonInquiry@cmegroup.com</u>.

Sincerely,

/s/Christopher Bowen Managing Director and Chief Regulatory Counsel

Appendix A	CBOT Chapter 62 ("Eris SOFR Swap Futures")
Appendix B	CBOT Chapter 63 ("MAC SOFR Swap Futures")
Appendix C	CME Rule 588.H. – ("Globex Non-Reviewable Trading Ranges") Table
Appendix D	Position Limit, Position Accountability, and Reportable Level Table, CME Rulebook Chapter 5 (attached under separate cover)
Appendix E	CME Rule 589. – ("Special Price Fluctuation Limits and Daily Price Limits") Table
Appendix F Appendix G	Exchange Fees - Eris SOFR Swap Futures Exchange Fees - MAC SOFR Swap Futures
	Appendix B Appendix C Appendix D Appendix E Appendix F

Appendix A CBOT Rulebook 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)
- 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
- 8. **Floating Rate:** "USD-SOFR-COMPOUND", calculated as follows:

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

where:

"d $_{\it 0}$, 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;

"SOFRi", 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 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

9

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. 0.020 of one point, equal to \$20 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
 - 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:

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

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

At = 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).

<u>Appendix B</u> CBOT Rulebook Chapter 63 MAC SOFR Swap Futures

63100. SCOPE OF CHAPTER

This chapter is limited in application to trading of the Market Agreed Coupon SOFR Swap futures ("MAC SOFR Swap futures"). The procedures for trading, clearing, delivery, and settlement, and any other matters not specifically covered herein, shall be governed by the general rules of the Exchange ("Rules").

Capitalized terms in this Chapter that are not otherwise defined in this Chapter shall have the meanings given to such terms in the other Chapters of the Rules. Capitalized terms in this Chapter that are not otherwise defined in either this Chapter or the other Chapters of the Rules shall have the meanings set forth in the ISDA Definitions (Chicago Mercantile Exchange ("CME") Rule 90002.N.).

All times referenced in this chapter are Chicago times and are subject to change by the Exchange.

63101. CONTRACT SPECIFICATIONS

63101.A. Contract Grade

The contract grade for delivery on expiring futures made under these Rules shall be an Interest Rate Swap Contract ("IRS Contract" per CME Rule 90002.J.) that is accepted for clearing by the Clearing House (CME Rulebook Chapters 8F, 8G, 900, and 901) and that is subject to the following Contract Elections (CME Rule 90002.F.):

1.	Fixed Rate Payer:	Subject to CBOT Rules 63104., an account required to deliver on a short position in such expiring futures contract shall be the Fixed Rate Payer to the Clearing House. Where such account is required to accept delivery on a long position in such expiring futures contract, the Clearing House shall be the Fixed Rate Payer to such account.
2.	Floating Rate Payer:	Subject to CBOT Rules 63104., an account required to accept delivery on a long position in such expiring futures contract shall be the Floating Rate Payer to the Clearing House. Where such account is required to deliver on a short position in such expiring futures contract, the Clearing House shall be the Floating Rate Payer to such account.
3.	IRS Effective Date:	Third (3 rd) Wednesday of futures contract delivery month (CBOT Rules 63102. and 63103.A.).
4.	Currency:	US dollars (CME Rule 90102.B.).
5.	Notional Amount:	\$100,000.
6.	Business Day(s):	New York
7.	Business Day Convention:	Modified Following.
8.	Termination Date:	Anniversary of the IRS Effective Date as determined by the contract tenor. (CBOT Rule 63101.A.3.).
9.	Initial Payment Amount:	See CBOT Rule 63101.B.
10.	Initial Amount Payer:	See CBOT Rule 63101.B.
11.	Fixed Rate Payment Dates:	Annually from IRS Effective Date (CBOT Rule 63101.A.3.) subject to CBOT Rules 63101.A.6. and 63101.A.7.
12.	Fixed Rate:	Futures contract fixed interest rate set by the Exchange at an integer multiple of 25 basis points (ie, one quarter of one percent) per annum when such futures contract is initially listed for trading (CBOT Rule 63102.).
13.	Fixed Rate Day Count:	Actual/360.
14.	Floating Rate Payment Dates:	Annually from IRS Effective Date (CBOT Rule 63101.A.3.) subject to CBOT Rules 63101.A.6. and 63101.A.7.
15.	Floating Rate Option:	USD-SOFR-COMPOUND
	.	(CME Rule 90102.E.1.).

16. Designated Maturity:Overnight17. Floating Rate Day Count:Actual/360.18. Spread:None.19. Compounding:Daily.

63101.B. Physical Delivery

Each individual futures contract lot that is delivered shall be an IRS Contract (CME Rule 90002.J.) that meets Contract Grade (CBOT Rule 63101.A.).

For an IRS Clearing Member carrying an account that is required to make or accept delivery on an expiring futures contract (CBOT Rules 63104.), the IRS Initial Payment Amount (CBOT Rule 63101.A.9.) due upon delivery (CBOT Rule 63103.) of such IRS Contract, and the Initial Amount Payer (CBOT Rule 63101.A.10.), shall be determined as follows:

Define *P* as the Final Settlement Price (CBOT Rule 812.) of an expiring futures contract, as determined by the Exchange at such contract's Termination of Trading (CBOT Rule 63102.F.), where such Final Settlement Price is expressed in points and fractions of points, with par on the basis of 100 points (Rule 63102.C.).

1. If *P* is greater than 100 points, then the long IRS Clearing Member taking delivery shall pay to the Clearing House, and the short IRS Clearing Member making delivery shall receive from the Clearing House, an Initial Payment Amount equal to:

(\$1,000 per point) x (*P* points minus 100 points) per contract.

2. Else, if *P* is less than or equal to 100 points, then the short IRS Clearing Member making delivery shall pay to the Clearing House, and the long IRS Clearing Member taking delivery shall receive from the Clearing House, an Initial Payment Amount equal to:

(\$1,000 per point) x (100 points minus *P* points) per contract.

3. For each individual contract lot that is delivered, such Initial Payment Amount shall be rounded to the nearest cent, with half-cents rounded up to the nearest cent.

Example: For a hypothetical expiring futures contract, assume the final settlement price P is 100-205 (ie, 100 and $20.5/32^{nds}$ or 100.640625 points). On the third Wednesday of the contract Delivery Month the holder of a long futures position taking delivery (the Floating Rate Payer in the delivered IRS Contract) shall pay to the Clearing House an Initial Payment Amount of \$640.63 per contract, equal to (\$1,000 per point) x (100.640625 points minus 100 points), or \$640.625 (CBOT Rule 63101.B.1.) rounded up to the nearest penny (CBOT Rule 63101.B.3.). Conversely, the holder of a short futures position making delivery (the Fixed Rate Payer in the delivered IRS Contract) shall receive from the Clearing House an Initial Payment Amount of \$640.63 per contract.

63102. TRADING SPECIFICATIONS

The number of contract delivery months open for trading at a given time shall be determined by the Exchange. Without limitation to the foregoing, the Exchange customarily shall list for trading futures contracts for delivery in at least each of the two nearest months in the March-June-September-December quarterly cycle.

For a given futures contract for a given delivery month, the Exchange shall determine the value of the Fixed Rate that shall standardize the Contract Grade for such futures contract (CBOT Rule 63101.A.12.). The Exchange also shall determine whether, and when, to list for trading any additional futures contract(s) for such delivery month that are standardized to Fixed Rate value(s) different from the Fixed Rate value of such futures contract.

63102.A. Trading Schedule

The hours of trading shall be determined by the Exchange. On the last day of trading in an expiring contract (CBOT Rule 63102.F.), the close of the expiring contract shall begin at 1:59 pm, and trading shall be permitted thereafter for a period not to exceed one minute.

63102.B. Trading Unit

The unit of trading shall be IRS Contracts that meet Contract Grade (CBOT Rule 63101.A.) having notional amount of one hundred thousand US dollars (\$100,000) or multiples thereof.

63102.C. Price Increments

Par shall be on the basis of 100 points, with each point equal to \$1,000 per contract. The minimum price fluctuation shall be one-half of one thirty-second (1/2 of 1/32nd) of one point (equal to \$15.625 per contract), except for intermonth spreads for which the minimum price fluctuation shall be one-quarter of one thirty-second (1/4 of 1/32nd) of one point (equal to \$7.8125 per contract). Contracts shall not be made on any other price basis.

63102.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.

63102.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.

63102.F. Termination of Trading

Trading in an expiring futures contract shall terminate no later than 2:00 pm (CBOT Rule 63102.A.) on the second London business day before the third Wednesday of the contract delivery month.

63103. DATE OF DELIVERY

Subject to CBOT Rules 63104., delivery on an expiring futures contract shall be made by a short IRS Clearing Member, and shall be taken by a long IRS Clearing Member, on the third Wednesday of the futures delivery month (CBOT Rule 63102.).

63103.A. IRS Effective Date

Such Date of Delivery shall be the Effective Date (CBOT Rule 63101.A.3.) of the IRS Contract that is delivered or accepted for delivery in fulfillment of such expiring futures contract.

63103.B. Acceptance Date and Clearing Effective Date

The first Clearing Business Day (CME Rule 90002.D.) preceding such Date of Delivery shall be the Acceptance Date (CME Rule 90002.B.) and the Clearing Effective Date (CME Rule 90002.E.) of the IRS Contract to be delivered or accepted for delivery in fulfillment of such expiring futures contract.

63104. DELIVERIES ON EXPIRING FUTURES CONTRACTS

63104.A. Requirements for Participation in Delivery

For an account carried by a clearing member to make or accept delivery on an expiring futures contract, the holder of such account is required to be:

- 1. an Eligible Contract Participant, as that term is defined in Section 1a(18) of the Commodity Exchange Act (7 USC §1a(18) and 17 CFR 1.3(m)), and
- 2. either an IRS Clearing Member (CME Rule 90005.A.) or an IRS Participant registered with CME by an IRS Clearing Member (CME Rule 8F009. and CME Rule 90005.B.).

Subject to these requirements and to CBOT Rules 63104.B. and 63104.C., upon Termination of Trading in such expiring futures (CBOT Rule 63102.F.), the holder of each such account that holds a long interest in such futures contract shall be required to accept delivery from the Clearing House of IRS Contracts that meet Contract Grade (CBOT Rule 63101.A.), and the holder of each such account that holds a short interest in such futures contract shall be required to make delivery to the Clearing House of IRS Contracts that meet Contract Grade.

63104.B. IRS Product Account Registration

Any IRS Contract delivered or accepted for delivery in fulfillment of an expiring futures contract must be identified with an IRS Product account number that identifies the holder of such IRS Product account, and that specifies whether such IRS Product account is either (1) a proprietary account of an IRS Clearing Member or

(2) held by a customer registered with CME by an IRS Clearing Member as an IRS Participant (CME Rule 8F009. and CME Rule 90005.B.).

63104.C. Clearing Member Obligations in Delivery

Subject to the provisions of CBOT Rulebook Chapters 7, 8, and 9, as of the termination of trading in an expiring futures contract (CBOT Rule 63102.F.), each clearing member that carries accounts holding long or short interest in such expiring futures contract shall:

- 1. ensure that the requirements set forth in CBOT Rule 63104.A. are met.
- 2. in accord with the requirements set forth in CBOT Rule 63104.B., ensure that the holder of each such account has designated (a) the IRS Product account(s) in which the holder shall make or accept any deliveries on expiring futures contracts and (b) the IRS Clearing Member(s) carrying such IRS Product account(s).
- 3. ensure that any IRS Clearing Member carrying such IRS Product account(s) as may be designated pursuant to CBOT Rule 63104.C.2. has been notified of such designation.
- 4. obtain acknowledgement from each IRS Clearing Member designated pursuant to CBOT Rule 63104.C.2. that such IRS Clearing Member shall guarantee and assume complete responsibility for the performance of all delivery requirements in respect of such expiring futures (CBOT Rule 63104.E.)

(CBOT Rule 63104.E.).

Where a clearing member carries accounts holding interest both long and short in such expiring futures contract, the clearing member must fulfill these Rules 63104.C. so as to procure that delivery shall be made by all such accounts holding short interest and shall be accepted by all such accounts holding long interest.

63104.D. Clearing Member Reporting Obligations Prior to Delivery

Each clearing member that carries accounts holding long or short interest in an expiring futures contract shall report to the Clearing House, on each of the last 5 days of trading in such expiring futures, an accurate inventory of such long and short interest, in such manner and at such times as the Clearing House may prescribe, provided that such inventory must include, for each account holding long or short interest:

1. declaration of the number of expiring futures contracts held long, and the number of expiring futures contracts held short, in such account;

2. confirmation whether such account meets, or does not meet, the requirements set forth in CBOT Rule 63104.A.;

3. where such account meets the requirements set forth in CBOT Rule 63104.A., (a) the IRS Product account number, and the IRS Product account origin (house or customer), and the IRS Clearing Member carrying such IRS Product account, as designated pursuant to CBOT Rule 63104.C.2., and (b) confirmation that such IRS Clearing Member has been notified as required by CBOT Rule 63104.C.3., and has made such acknowledgements as are required by CBOT Rule 63104.C.4.

63104.E. Notification of IRS Clearing Members in Delivery

Following the termination of trading in an expiring futures contract (CBOT Rule 63102.F.), the Clearing House shall notify each IRS Clearing Member carrying one or more IRS Product accounts that are required to make or accept delivery in fulfillment of such expiring futures, as designated pursuant to CBOT Rules 63104.C. For each such IRS Clearing Member, such Clearing House notification shall include:

- 1. identification of IRS Product accounts, carried by such IRS Clearing Member, that are required to accept delivery on long futures positions; the size of each such long futures position; and the identity of the clearing member firm(s) carrying the account(s) in which each such long futures position is held; and /or
- identification of IRS Product Accounts, carried by such IRS Clearing Member, that are required to make delivery on short futures positions; the size of each such short futures position; and the identity of the clearing member firm(s) carrying the account(s) in which each such short futures position is held.

63104.F. IRS Clearing Member Obligations in Delivery

In the event that an IRS Clearing Member disputes such notification of delivery on expiring futures as it may receive from the Clearing House, pursuant to CBOT Rule 63104.E., such IRS Clearing Member shall promptly notify the Clearing House, and the dispute must be settled no later than 12:30 p.m. Chicago time on the Acceptance Date and Clearing Effective Date for delivery in fulfillment of such expiring futures (CBOT Rule 63103.B.),

As of 12:30 p.m. Chicago time on the Acceptance Date and Clearing Effective Date for delivery in fulfillment of an expiring futures, an IRS Clearing Member who carries an IRS Product account that is required to make or accept delivery on such expiring futures contract (CBOT Rules 63104.A, 63104.B., 63104.C., 63104.D. and 63104.E.) shall guarantee and assume complete responsibility for the performance of all delivery requirements set forth in the Rules.

63104.G. Clearing House Financial Safeguards

A futures contract made under these Rules shall be a Base Guaranty Fund Product subject to the Clearing House financial safeguards provided by the General Guarantee Fund (CME Rule 802.A.).

An IRS Contract that is delivered or accepted for delivery in fulfillment of a futures contract made under these Rules shall be an IRS Product subject to the Clearing House financial safeguards provided by the IRS Guaranty Fund (CME Rule 8G07.).

63105. [RESERVED]

63106. [RESERVED]

63107. PAYMENT

Where an Initial Payment Amount is required in fulfillment of delivery on an expiring futures contract (CBOT Rule 63101.B.), an IRS Clearing Member that is determined as an Initial Payment Payer shall pay to the Clearing House, and an IRS Clearing Member that is determined as the receiver of an Initial Payment Amount shall receive from the Clearing House, an amount equal to such Initial Payment Amount on the Date of Delivery (CBOT Rule 63103.) at such time as the Clearing House may designate.

If such Initial Payment Amount is equal to or greater than \$100,000,000, then the IRS Clearing Member that is determined as the Initial Payment Payer shall pay such Initial Payment Amount to the Clearing House no later than 6:00pm on the Acceptance Date of the IRS Contracts that are delivered, and accepted for delivery, in fulfillment of such expiring futures contract (CBOT Rule 63103.B. and CME Rule 90102.C.).

Appendix C

CBOT Rulebook Chapter 5 ("Trading Qualifications and Practices")

Rule 588.H. ("Globex Non-Reviewable Trading Ranges") Table

			Outrights			Spreads
Instrument	Globex Symbol	Globex Non-Reviewable Ranges (NRR)	NRR: Global Format	NRR: Minimum Ticks	NRR: Globex Format	NRR: Minimum Ticks
1-Year Eris SOFR Swap Futures	<u>YIA</u>	0.25 of 1 point (\$1,000)	<u>2500</u>	<u>100</u>	Each leg	evaluated as an outright
2-Year Eris SOFR Swap Futures	YIT	0.25 of 1 point (\$1,000)	<u>2500</u>	<u>100</u>	Each leg	evaluated as an outright
3-Year Eris SOFR Swap Futures	YIC	0.25 of 1 point (\$1,000)	<u>2500</u>	<u>50</u>	Each leg	evaluated as an outright
4-Year Eris SOFR Swap Futures	YID	0.47 of 1 point (\$1,000)	<u>4700</u>	<u>47</u>	Each leg	evaluated as an outright
5-Year Eris SOFR Swap Futures	YIW	0.47 of 1 point (\$1,000)	<u>4700</u>	<u>47</u>	Each leg	evaluated as an outright
7-Year Eris SOFR Swap Futures	<u>YIB</u>	0.62 of 1 point (\$1,000)	<u>6200</u>	<u>31</u>	Each leg	evaluated as an outright
10-Year Eris SOFR Swap Futures	<u>YIY</u>	0.94 of 1 point (\$1,000)	<u>9400</u>	<u>47</u>	Each leg	evaluated as an outright
12-Year Eris SOFR Swap Futures	<u>YII</u>	0.94 of 1 point (\$1,000)	<u>9400</u>	<u>47</u>	Each leg	evaluated as an outright
15-Year Eris SOFR Swap Futures	<u>YIL</u>	0.94 of 1 point (\$1,000)	<u>9400</u>	<u>47</u>	Each leg	evaluated as an outright
20-Year Eris SOFR Swap Futures	YIO	0.96 of 1 point (\$1,000)	<u>9600</u>	<u>24</u>	Each leg	evaluated as an outright
30-Year Eris SOFR Swap Futures	<u>YIE</u>	0.96 of 1 point (\$1,000)	<u>9600</u>	<u>24</u>	Each leg	evaluated as an outright
2-Year MAC SOFR Swap Futures	<u>T1S</u>	8/32 of 1 point (\$1,000)	0.25	<u>32</u>	Each leg	evaluated as an outright
5-Year MAC SOFR Swap Futures	<u>F1S</u>	15/32 of 1 point (\$1,000)	0.46875	<u>60</u>	Each leg	evaluated as an outright
7-Year MAC SOFR Swap Futures	<u>S1S</u>	20/32 of 1 point (\$1,000)	0.625	<u>40</u>	Each leg	evaluated as an outright
10-Year MAC SOFR Swap Futures	<u>N1S</u>	30/32 of 1 point (\$1,000)	0.9375	<u>60</u>	Each leg	evaluated as an outright
20-Year MAC SOFR Swap Futures	<u>E1S</u>	30/32 of 1 point (\$1,000)	0.9375	<u>30</u>	Each leg	evaluated as an outright
30-Year MAC SOFR Swap Futures	<u>B1S</u>	30/32 of 1 point (\$1,000)	<u>0.9375</u>	<u>30</u>	Each leg	evaluated as an outright

Appendix D

CBOT Rulebook Chapter 5 ("Trading Qualifications and Practices")

Position Limit, Position Accountability, and Reportable Level Table

(attached under separate cover)

Appendix E

CBOT Rulebook Chapter 5 ("Trading Qualifications and Practices")

Rule 589. ("Special Price Fluctuation Limits and Daily Price Limits") Table

Product	RULEBOOK CHAPTER	Commodity Code	PRIMARY / ASSOCIATED	ASSOCIATED WITH	Dynamically Calculated Variant - All Hours
1-Year Eris SOFR OIS Swap Futures	<u>62</u>	YIA	Primary	<u>Primary</u>	0.75 of 1 point
2-Year Eris SOFR OIS Swap Futures	<u>62</u>	<u>YIT</u>	Primary Primary	Primary	0.75 of 1 point
3-Year Eris SOFR OIS Swap Futures	<u>62</u>	YIC	Primary	Primary	<u>1.00 point</u>
4-Year Eris SOFR OIS Swap Futures	<u>62</u>	YID	Primary	Primary	1.50 points
5-Year Eris SOFR OIS Swap Futures	<u>62</u>	YIW	Primary	Primary	1.50 points
7-Year Eris SOFR OIS Swap Futures	<u>62</u>	<u>YIB</u>	Primary	Primary	2.00 points
10-Year Eris SOFR OIS Swap Futures	<u>62</u>	YIY	Primary	Primary	3.00 points
12-Year Eris SOFR OIS Swap Futures	<u>62</u>	YII	Primary	Primary	3.00 points
15-Year Eris SOFR OIS Swap Futures	<u>62</u>	YIL	Primary	Primary	4.50 points
20-Year Eris SOFR OIS Swap Futures	<u>62</u>	YIO	Primary	Primary	4.50 points
30-Year Eris SOFR OIS Swap Futures	<u>62</u>	YIE	Primary	Primary	8.00 points
2-Year SOFR OIS MAC Swap Futures	<u>63</u>	<u>T1S</u>	Primary	Primary	0.75 of 1 point
5-Year SOFR OIS MAC Swap Futures	<u>63</u>	<u>F1S</u>	Primary	Primary	1.50 points
7-Year SOFR OIS MAC Swap Futures	<u>63</u>	<u>S1S</u>	Primary	Primary	2.00 points
<u>10-Year SOFR OIS MAC Swap</u> <u>Futures</u>	<u>63</u>	<u>N1S</u>	Primary	Primary	3.00 points
20-Year SOFR OIS MAC Swap Futures	<u>63</u>	<u>E1S</u>	Primary	Primary	4.50 points
<u>30-Year SOFR OIS MAC Swap</u> <u>Futures</u>	<u>63</u>	<u>B1S</u>	<u>Primary</u>	<u>Primary</u>	8.00 points

Appendix F Exchange Fees - Eris SOFR Swap Futures

	Account Owner	Trading Rights of Executor	Venue/ Transaction Type	MAC SOFR Swap Futures
	Individual Members	Member Account Owner	CME Globex	\$0.16
1			EFP EFR Block	
	Individual Delegates	Delegate Account Owner	CME Globex	\$0.31
			EFP EFR Block	
	EQUITY MEMBERS (Individual Equity Members, Clearing E	quity Member Firms and Equ	ity Member Firms)	
	Rule 106.J Equity Member Firms Rule 106.I Affiliate Equity Member Firms Individual Equity Members (Other Member/Delegate	Member or Delegate	CME Globex	
	executing trade)		EFP EFR Block	\$0.16
2	Clearing Equity Member Firms	New Meastern	CME Globex	
	Rule 106.1 Åffiliate Membership Umbrella - Qualified Affiliate	Non-Member	EFP EFR Block	
	Rule 106.S Family of Funds Equity Member Firms	Member, Delegate or Non-Member	CME Globex	\$0.16
			EFP EFR Block	-
	TRADING MEMBERS (Individual Non-Equity Members, Clea	aring Non-Equity Member Firr	ns and Non-Equity Member F	irms)
	Individual Non-Equity Members (Other Member/Delegate executing trade) Clearing Non-Equity Member Firms	Member, Delegate or Non-Member	CME Globex	\$0.31
	Rule 106.H Member Firms Rule 106.I Affiliate Trading Member Firms (w/ an owned seat)		EFP EFR Block	
3	Individual Delegates (Other Member/Delegate executing trade) Rule 106.I Affiliate Trading Member Firms (w/ a leased seat)	Member, Delegate or Non-Member	CME Globex	\$0.31
			EFP EFR Block	
	Rule 106.S Family of Funds Trading Member Firms	Member, Delegate or Non-Member	CME Globex	\$0.31
			EFP EFR Block	
4	Rule 106.R Electronic Corporate Member Firms (For Other than CME Globex - See Non-Members)	Member, Delegate or Non-Member	CME Globex	\$0.44
	International Incentive Program (IIP)	Member, Delegate or		\$0.49
5	International Volume Incentive Program (IVIP) Central Bank Incentive Program (CBIP) Emerging Markets Bank Incentive Program (EMBIP) Latin American Fund Manager Incentive Program (FMIP) (For Other than CME Globex - See Non-Members)	Non-Member Member, Delegate or Non-Member	EFP EFR Block	\$0.56
	Non-Members	N/A	CME Globex	\$0.56
			EFP EFR Block	

Processing Fees	Fee	
Exchange Fees for Non Trades (Member/Delegate/Non-Member)	\$0.10/\$0.25/\$0.55	
Exchange Fees for Non-Trades - Expired Options	\$0.10	
Facilitation Fee	\$0.00	
Brokerage Fees – with discretion 106F within/106D or 106F outside	\$0.00/\$0.15	
Brokerage Fees – without discretion Member or 106F within/106D, 106F outside or CMACE Permit Holder	\$0.04/\$0.17	
Position Adjustment/Position Transfer	\$0.10	
Position Maintenance Fee on Eris Swap Futures per quarter	\$1.00	
Give-Up Surcharge	\$0.06	

Appendix G Exchange Fees - MAC SOFR Swap Futures

	Account Owner	Trading Rights of Executor	Venue/ Transaction Type	MAC SOFR Swap Futures
1	Individual Members	Member Account Owner	CME Globex	\$0.16
			EFP EFR Block	
	Individual Delegates	Delegate Account Owner	CME Globex	\$0.31
			EFP EFR Block	
	EQUITY MEMBERS (Individual Equity Members, Clearing E	quity Member Firms and Equ	ity Member Firms)	
	Rule 106.J Equity Member Firms Rule 106.I Affiliate Equity Member Firms	Member or Delegate	CME Globex	
	Individual Equity Members (Other Member/Delegate executing trade)		EFP EFR Block	\$0.16
2	Clearing Equity Member Firms		CME Globex	1
	Rule 106.I Affiliate Membership Umbrella - Qualified Affiliate	Non-Member	EFP EFR Block	_
	Rule 106.S Family of Funds Equity Member Firms	Member, Delegate or Non-Member	CME Globex	\$0.16
			EFP EFR Block	
		• •		•
	TRADING MEMBERS (Individual Non-Equity Members, Clea	aring Non-Equity Member Fire	ms and Non-Equity Member I	Firms)
	Individual Non-Equity Members (Other Member/Delegate executing trade) Clearing Non-Equity Member Firms Rule 106.H Member Firms	Member, Delegate or Non-Member	CME Globex	\$0.31
	Rule 106.1 Affiliate Trading Member Firms (w/ an owned seat)		EFP EFR Block	
3	Individual Delegates (Other Member/Delegate executing trade) Rule 106.I Affiliate Trading Member Firms (w/ a leased seat)	Member, Delegate or Non-Member	CME Globex	\$0.31
			EFP EFR Block	
	Rule 106.S Family of Funds Trading Member Firms	g Member Firms Member, Delegate or Non-Member	CME Globex	\$0.31
			EFP EFR Block	
4	Rule 106.R Electronic Corporate Member Firms (For Other than CME Globex - See Non-Members)	Member, Delegate or Non-Member	CME Globex	\$0.44
	International Incentive Program (IIP) International Volume Incentive Program (IVIP)	Member, Delegate or Non-Member	CME Globex EFP EFR Block	\$0.49 \$0.56
5	Central Bank Incentive Program (CBIP) Emerging Markets Bank Incentive Program (EMBIP) Latin American Fund Manager Incentive Program (FMIP) (For Other than CME Globex - See Non-Members)	Member, Delegate or Non-Member	CME Globex	\$0.56
	Non-Members	N/A		
	Non-Members	N/A	CME Globex	\$0.56

Processing Fees	Fee	
Exchange Fees for Non Trades (Member/Delegate/Non-Member)	\$0.10/\$0.25/\$0.55	
Exchange Fees for Non-Trades - Expired Options	\$0.10	
Facilitation Fee	\$0.00	
Brokerage Fees – with discretion 106F within/106D or 106F outside	\$0.00/\$0.15	
Brokerage Fees – without discretion Member or 106F within/106D, 106F outside or CMACE Permit Holder	\$0.04/\$0.17	
Position Adjustment/Position Transfer	\$0.10	
Position Maintenance Fee on Eris Swap Futures per quarter	\$1.00	
Give-Up Surcharge	\$0.06	