<i>IMPORTANT</i> : Check box if Confidential Treatment is real Registered Entity Identifier Code (optional): <u>22-072 (3 of 30)</u>	
Organization: <u>Chicago Mercantile Exchange Inc. ("CME")</u>	<u> </u>
Filing as a: DCM SEF DCO	SDR
Please note - only ONE choice allowed.	
Filing Date (mm/dd/yy): <u>03/08/22</u> Filing Description: <u>Initial</u> Bitcoin Futures and Options on Micro Ether Futures Contra	
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	§ 40.10(h)
Rule Numbers:	3 10110(11)
New Product Please note only ONE product	et 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	§ 40.4(a), § 40.5(a)
"Non-Material Agricultural Rule Change"	§ 40.4(b)(5)
Notification	§ 40.6(d)



March 8, 2022

VIA ELECTRONIC PORTAL

Mr. Christopher J. Kirkpatrick Office of the Secretariat Commodity Futures Trading Commission 3 Lafayette Center 1155 21st Street NW Washington, DC 20581

Re: CFTC Regulation 40.2(a) Certification. Initial Listing of the Options on Micro Bitcoin Futures and Options on Micro Ether Futures Contracts. CME Submission No. 22-072 (3 of 30)

Chicago Mercantile Exchange Inc. ("CME" or "Exchange") certifies to the Commodity Futures Trading Commission ("CFTC" or "Commission") the initial listing of Options on Micro Bitcoin Futures and Options on Micro Ether Futures contracts (the "Contracts") for trading on the CME Globex electronic trading platform ("CME Globex") and for submission for clearing via CME ClearPort effective on Sunday, March 27, 2022 for trade date Monday, March 28, 2022.

Contract Title	Options on Micro Bitcoin Futures	Options on Micro Ether Futures			
Rulebook Chapter	CME 348A	CME 347A			
CME	Monday Weekly: W1A-W5A	Monday Weekly: V1A-V5A			
Globex and	Wednesday Weekly: W1C-W5C	Wednesday Weekly: V1C-V5C			
CME ClearPort	Friday Weekly 1,2,3,4: W1E-W4E	Friday Weekly 1,2,3,4: V1E-V4E			
Code	Monthly: WM	Monthly: VM			
Contract Unit	One Micro Bitcoin Futures contract (CME Chapter <u>348</u> ; Commodity Code: MBT) which represents 0.10 bitcoin, as defined by the CME CF Bitcoin Reference Rate (BRR).	One Micro Ether Futures contract (CME Chapter <u>347</u> ; Commodity Code: MET) which represents 0.10 ether, as defined by the CME CF Ether-dollar Reference Rate (ETHUSD_RR).			
Trading and Clearing Hours		IE Globex: nday Pre-Open 4:00 p.m. Central Time (CT); (5:00 p.m. Eastern Time (ET)) en 5:00 p.m. – 4:00 p.m. CT. (6:00 p.m. – 5:00 p.m. ET)			
	Monday – Thursday Pre-Open 4:45 p.m. CT (5:45 p.m. ET) Open 5:00 p.m. – 4:00 p.m. CT (6:00 p.m. – 5:00 p.m. ET) A maintenance period occurs daily from 4:00 p.m. – 5:00 p.m. CT (5:00 p.m. – 6:00 p.m. ET)				

Section 1 – Contract Specifications

	CME ClearPort: Sunday 5:00 p.m. CT (6:00 p.m. ET)- Friday 5:45 p.m. CT (6:45 p.m. ET) with no reporting Monday – Thursday from 5:45 p.m. – 6:00 p.m. CT (6:45 p.m. – 7:00 p.m. ET)				
Settlement Method	Deliver the nearest to expire future unde	rlying the option			
Listing	1 nearest Monday Weekly contract				
Schedule	1 nearest Wednesday Weekly contract				
	4 nearest Friday Weekly contracts of We	eeks 1,2,3,4			
	2 nearest Monthly contracts				
Price Basis	Prices are quoted and traded in U.S. Dollars per bitcoin	Prices are quoted and traded in U.S. Dollars per ether			
Minimum Price	Outright: 5 index points = \$0.50 per contract	Outright and spreads: 0.50 index points = \$0.05 per contract			
Fluctuation	Reduced tick and Spread: 1 index point = \$0.10 per contract				
Exercise Procedure	European Style (with no contrary instruct	tions)			
Strike Price	All times:	All times:			
Listing Schedule	Persistent strikes: \$500,000; \$100,000; \$50,000; \$10,000; \$5,000; \$1,000	Persistent strikes: \$50,000; \$10,000; \$5,000; \$1,000; \$500; \$100			
	If bitcoin > \$500K: \$100,000: 100% below to 400% above underlying	If ether > \$50K: \$10,000: 100% below to 400% above underlying			
	\$10,000: 50% below to 100% above underlying	\$1,000: 50% below to 100% above underlying			
	If bitcoin <= \$500K: \$50,000: 100% below to 400% above underlying	If ether <= \$50K: \$5,000: 100% below to 400% above underlying			
	\$5,000: 50% below to 100% above underlying	\$500: 50% below to 100% above underlying			
	If bitcoin <= \$100K: \$10,000: 100% below to 400% above underlying	If ether <= \$10K: \$1,000: 100% below to 400% above underlying			
	\$1,000: 50% below to 100% above underlying	\$100: 50% below to 100% above underlying			
	If bitcoin <= \$50K: \$5,000: 100% below to 400% above underlying	If ether <= \$5K: \$500: 100% below to 400% above underlying			
	\$500: 50% below to 100% above underlying	\$50: 50% below to 100% above underlying			
	If bitcoin <= \$10K: \$1000: 100% below to 400% above underlying	If ether <= \$1K: \$100: 100% below to 400% above underlying			

\$100: 50% below to 100% above underlying	\$10: 50% below to 100% above underlying
	If ether <= \$500: \$50: 100% below to 400% above underlying
\$50: 50% below to 100% above underlying	\$5: 50% below to 100% above underlying
<35 Days To Expiration:	<35 Days To Expiration:
	Persistent strikes: \$50,000; \$10,000; \$5,000; \$1,000; \$500; \$100
	If ether > \$50K: \$500: 10% below to 20% above underlying
,	lf ether <= \$50K: \$250: 10% below to 20% above underlying
	If ether <= \$10K: \$50: 10% below to 20% above underlying
	lf ether <= \$5K: \$25: 10% below to 20% above underlying
	If ether <= \$1K: \$5: 10% below to 20% above underlying
If bitcoin <= \$5K: \$25: 10% below to 20% above underlying	

Termination Weekly Expiries:

of Trading

Monday Weekly expiry: Trading terminates at 4:00 p.m. London time on Monday of the contract week.

If such Monday is not a scheduled Business Day in both the US and UK, then trading in expiring options shall be scheduled to terminate on the Business Day in either the US or the UK, next following such Monday.

Wednesday Weekly expiry: Trading terminates at 4:00 p.m. London time on Wednesday of the contract week.

If such Wednesday is not a scheduled Business Day in both the US and UK, then trading in expiring options shall be scheduled to terminate on the Business Day in either the US or the UK, first preceding such Wednesday.

Friday Weekly expiry: Trading terminates at 4:00 p.m. London time on Friday of the contract week.

If such Friday is not a scheduled Business Day in both the US and UK, then trading in expiring options shall be scheduled to terminate on the Business Day in either the US or the UK, first preceding such Friday.

Monthly expiry:

Trading terminates at 4:00 p.m. London time on the last Friday of the contract month.

If that day is not a Business Day in both the UK and the US, trading shall terminate on the preceding day that is a Business Day in either the UK or the US.

Final Settlement	last day of trading are automatically exercised. Option exercise results in a position in	Options which are in-the-money on the last day of trading are automatically exercised. Option exercise results in a position in the underlying cash-settled futures contract.
	Monday, Wednesday, and Friday Weekly expiry:	Monday, Wednesday, and Friday Weekly expiry:
	Whether an option expires in the money or out of the money shall be determined by reference to the Fixing Price. The Fixing Price shall be based on the notionally-adjusted volume-weighted average price of transactions in Bitcoin futures and Micro Bitcoin futures on the CME Globex electronic trading platform during the last thirty (30) minutes of trading on expiration day (3:30:00 p.m. – 3:59:59 p.m. London time).	Whether an option expires in the money or out of the money shall be determined by reference to the Fixing Price. The Fixing Price shall be based on the notionally- adjusted volume-weighted average price of transactions in Ether futures and Micro Ether futures on the CME Globex electronic trading platform during the last thirty (30) minutes of trading on expiration day (3:30:00 p.m. – 3:59:59 p.m. London time).
	Monthly expiry:	
	Delivery is by cash settlement by reference to the Final Settlement Price,	Monthly expiry:
	equal to the CME CF Bitcoin Reference Rate (BRR) on the Last Day of Trading.	Delivery is by cash settlement by reference to the Final Settlement Price, equal to the CME CF Ether-Dollar Reference Rate (ETHUSD_RR) on the Last Day of Trading.
Block Trade	10 contracts	100 contracts
Minimum Threshold	Reportable window: RTH 5 minutes; ETH/ATH 15 minutes	Reportable window: RTH 5 minutes; ETH/ATH 15 minutes
CME Globex Matching Algorithm	F: First In, First Out (FIFO)	

Section 2 – Compliance with Core Principles

The Exchange reviewed the designated contract market core principles ("DCM Core Principles") as set forth in the Commodity Exchange Act ("CEA" or the "Act") and identified that the following DCM Core Principles may be impacted as follows:

Core Principle 2 – Compliance with Rules

Trading in the Contracts shall be subject to CME Rulebook Chapter 4, which includes prohibitions against fraudulent, noncompetitive, unfair, and abusive practices. Additionally, trading in these Contracts shall be

subject to the Exchange's trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the Rulebook. Trading activity in the Contracts shall be subject to monitoring and surveillance by CME Group's Market Regulation Department, which has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.

Core Principle 3 – Contracts Not Readily Subject to Manipulation

The Exchange certifies that the underlying reference rate, the CME CF Bitcoin Reference Rate (BRR), is not readily subject to manipulation. The index is calculated from a large number of trades observed during the calculation window. The combination of volume weighting of medians plus non-weighted partitions prevents manipulation in the reference rate. Ultimately, influencing the BRR would require significant trading activity on several exchanges over an extended period of time.

BRR is calculated and administered by CF Benchmarks (registered with the European Securities and Markets Authority as a benchmark administrator in accordance with Article 34 of the EU Benchmarks Regulation) under the regulatory supervision of the UK Financial Conduct Authority.

The BRR was first published on November 14, 2016 and has been calculated and published daily without exception to date. It is published daily on the CME Group website.

Core Principle 4 – Prevention of Market Disruption

Trading in the Contracts will be subject to CME Rulebook Chapters 4 and 7, which include prohibitions on manipulation, price distortion, and disruption to the expiration and assignment process. As with any new product listed for trading on a CME Group designated contract market, trading activity in the contracts certified herein will be subject to monitoring and surveillance by CME Group's Market Regulation Department.

Core Principle 5 – Position Limits or Accountability

Positions for Options on Micro Bitcoin Futures will be aggregated with the Exchange's Bitcoin Futures contract (BTC) at the applicable ratio given the differing notional values. The spot month position limit will remain 4,000 standard Bitcoin Futures contract equivalents, effective on the first trading day of the expiring contract month, reducing to 2,000 contracts at the close of business three (3) business days (T-3) prior to expiration. Standard Bitcoin Futures, options on Bitcoin Futures, Micro Bitcoin Futures and Options on Micro Bitcoin Futures will share the same position limit.

Spot month position limits are 4,000 standard Bitcoin Futures contract equivalents, effective on the first trading day of the expiring contract month, reducing to 2,000 contracts at the close of business three (3) business days (T-3) prior to expiration in the spot month. Single month and all month accountability levels are 5,000 standard Bitcoin Futures contract equivalents.

Additionally, to allow for enhanced transparency and more effective market surveillance, a reportable position level of one (1) Option on Micro Bitcoin Futures contract will be implemented.

Positions for Options on Micro Ether Futures will be aggregated with the Exchange's Ether Futures contract (ETH) at the applicable ratio given the differing notional values. The spot month position limit will remain 8,000 standard Ether Futures contract equivalents, Micro Ether Futures and Options on Micro Ether Futures will share the same position limit.

Position limits are 8,000 standard Ether Futures contract equivalents, in the spot month and are effective on the first trading day of the expiring contract month. Single month and all month accountability levels are 20,000 standard Ether Futures contract equivalents.

Additionally, to allow for enhanced transparency and more effective market surveillance, a reportable position level of one (1) Option on Micro Ether Futures contract will be implemented.

The position limits for the Contract are consistent with the Commission's guidance.

Core Principle 7 – Availability of General Information

The Exchange shall disseminate a Special Executive Report ("SER") that sets forth information in regard to specifications, terms, and conditions of the Contracts. The SER will also be published on the Exchange's website.

Core Principle 8 – Daily Publication of Trading Information

The Exchange shall publish trading volumes, open interest levels, and price information daily of the Contracts on the CME Group website and through quote vendors.

Core Principle 9 – Execution of Transactions

The Contracts will be listed for trading on the CME Globex electronic trading and for clearing through CME ClearPort. The CME Globex electronic trading venue provides for competitive and open execution of transactions. CME Globex affords the benefits of reliability and global connectivity.

Core Principle 10 – Trade Information

All requisite trade information shall be included in the audit trail and will suffice for the Market Regulation Department to monitor for market abuse.

Core Principle 11 – Financial Integrity of Transactions

The Contracts shall be cleared by CME Clearing, which is registered with the Commission as a derivative clearing organization, and which is subject to all CFTC regulations related thereto.

Core Principle 12 – Protection of Markets and Market Participants

Chapters 4 and 5 in the CME Rulebook set forth multiple strictures that preclude intermediaries from disadvantaging their customers. These Rules apply to trading in the Exchange's competitive trading venues and will apply to transactions in the Contracts.

Core Principle 13 – Disciplinary Procedures

Chapter 4 of the CME Rulebook provide for the Exchange to discipline, suspend, or expel members or market participants who violate the rules of the Exchange. Trading in the Contracts shall be subject to these provisions. The Exchange's Market Regulation Department has the authority to exercise its powers of enforcement, in the event that rule violations in the Contracts are identified.

Core Principle 14 – Dispute Resolution

Disputes in respect of the Contracts shall be subject to the arbitration provisions set forth in Chapter 6 of both the CME Rulebook, which allow all nonmembers to submit to arbitration claims for financial loss resulting from transactions on the Exchange. Pursuant to these provisions, any member named as a respondent in any such claim submitted by a nonmember is required to participate in arbitration proceedings. Additionally, the Exchange requires members to resolve via arbitration all disputes concerning transactions on the Exchange.

Pursuant to Section 5c(c) of the Act and Regulation 40.2(a), the Exchange certifies that the Contracts comply with the Act, including all regulations thereunder. 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 http://www.cmegroup.com/market-regulation/rule-fillings.html.

Should you have any questions concerning the above, please contact the undersigned at (212) 299-2200 or <u>CMEGSubmissionInquiry@cmegroup.com</u>.

Sincerely,

/s/ Christopher Bowen Managing Director and Chief Regulatory Counsel

Attachments:	Appendix A Appendix B	CME Rulebook Chapters 348A and 347A Position Limit, Position Accountability, and Reportable Level Table, CME Rulebook Chapter 5 (attached under separate cover)
	Appendix C	CME Rule 588.H. – ("Globex Non-Reviewable Trading Ranges") Table
	Appendix D	CME Rule 589. – Special Price Fluctuation Limits and Daily Price Limits Table
	Appendix E	Exchange Fees

Appendix A

Chapter 348A Options on Micro Bitcoin Futures

348A00. SCOPE OF CHAPTER

This chapter is limited in application to options on Micro Bitcoin Futures ("futures"). In addition to this chapter, options on futures shall be subject to the general rules and regulations of the Exchange as applicable.

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

348A01. OPTIONS CHARACTERISTICS

348A01.A. Contract Months, Trading Hours, and Trading Halts

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, *provided that* there shall be no trading in options when trading is halted in the underlying Futures Contract Month for Micro Bitcoin Futures.

348A01.B. Trading Unit

The trading unit shall be an option to buy in the case of a call, or to sell in the case of a put, one Micro Bitcoin Futures contract (Chapter 348). Such Micro Bitcoin Futures contract shall represent one tenth (1/10) bitcoin as valued by the CME CF Bitcoin Reference Rate ("BRR") in accordance with Rule 34801.

348A01.C. Minimum Fluctuations

1. Outright

Option prices shall be quoted in BRR Index points (USD per bitcoin).

The minimum price fluctuation shall be 5 Index points (equal to \$0.50 per option contract), provided that trades at a premium equal to or less than 25 Index points (equal to \$2.50 per option contract) may occur at price levels that are integer multiples of 1 Index point (equal to \$0.10 per option contract).

2. Option Spreads and Combinations

Any option contract that trades as a component of a spread or combination shall be traded at a price that conforms to the applicable minimum price fluctuation as set forth in this Rule, provided that for any option spread or combination that trades at a net premium of 25 Index points (equal to \$2.50 per option contract spread) or less than, each option contract comprised within such spread or combination may trade in price increments of 1 Index point (equal to \$0.10 per option contract).

348A01.D. Underlying Futures Contract

1. Monthly Options

For any Monthly option, the Underlying Futures Contract shall be for delivery on the last Friday of the same month as such option's named month of expiration, subject to Rule 34803.A.

2. Weekly Monday Options

For any Weekly Monday option, the Underlying Futures Contract shall be the next expiring Futures Contract after such option's expiration, subject to Rule 34803.A.

3. Weekly Wednesday Options

For any Weekly Wednesday option, the Underlying Futures Contract shall be the next expiring Futures Contract after such option's expiration, subject to Rule 34803.A.

4. Weekly Friday Options

For any Weekly Friday option, the Underlying Futures Contract shall be the next expiring Futures Contract after such option's expiration, subject to Rule 34803.A.

348A01.E. Exercise Prices

1. Regularly-Listed Exercise Prices

On any Business Day, and subject to Rule 348A01.A., the Exchange shall ensure that Monthly, Weekly Monday, Weekly Wednesday and Weekly Friday put and call options are listed for trading at all eligible exercise prices set forth in the <u>Strike Price Listing and Exercise Procedures Table</u>.

2. Dynamically-Listed Exercise Prices

Upon demand and at the discretion of the Exchange, an option with an out-of-current-range exercise price may be listed for trading as a User-Defined Instrument, on an as-soon-as-possible basis, provided that the exercise price of such option shall be an integer multiple of 25 Index points (\$25 per bitcoin). The Exchange may modify the provisions governing the establishment of exercise prices as it deems appropriate.

348A01.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.

348A01.G. Nature of Options

Upon exercise of a put option on behalf of the long holder of such option, the short holder of such option shall incur the obligation to assume a long position in one Underlying Futures Contract (Rule 348A01.D.) at such option's exercise price (Rule 348A01.E.). Upon exercise of a call option on behalf of the long holder of such option, the short holder of such option shall incur the obligation to assume a short position in one Underlying Futures Contract at such option's exercise price.

Any Monthly, Weekly Monday, Weekly Wednesday or Weekly Friday option will be exercised only at its expiration.

348A01.H. Daily Price Limits

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

348A01.I. Termination of Trading

Any Monthly option (Rule 348A01.D.1.), Weekly Monday option (Rule 348A01.D.2.), Weekly Wednesday option (Rule 348A01.D.3.) or Weekly Friday option (Rule 348A01.D.4.) may be exercised only at, and not before, the expiration of such option. Following termination of trading in expiring options, any such option that is in the money shall be automatically exercised by the Clearing House, and any such option that is out of the money shall be abandoned by the Clearing House. For the avoidance of doubt, no such option that expires in the money may be abandoned, and no such option that expires out of the money may be exercised.

1. Monthly Options

Trading in any Monthly option shall terminate on the same date and at the same time as the termination of trading in such option's Underlying Futures Contract (Rule 348A01.D.1.).

If that day is not a business day in both the UK and the US, trading shall terminate on the preceding day that is a business day in either the UK or the US.

2. Weekly Monday, Weekly Wednesday and Weekly Friday Options

Trading in any Weekly Monday, Weekly Wednesday and Weekly Friday option shall terminate on its expiration date at 4:00:00 p.m. London time.

If such Monday is not a scheduled Business Day in both the US and the UK, then trading in expiring options shall be scheduled to terminate on the Business Day, in either the US or the UK, that next following such Monday.

If such Wednesday is not a scheduled Business Day in both the US and the UK, then trading in expiring options shall be scheduled to terminate on the Business Day, in either the US or the UK, that first precedes such Wednesday.

If such Friday is not a scheduled Business Day in both the US and the UK, then trading in expiring options shall be scheduled to terminate on the Business Day, in either the US or the UK, that first precedes such Friday.

If the market in the Underlying Futures Contract for any such Weekly Monday, Weekly Wednesday or Weekly Friday option does not open on the day scheduled for termination of option trading and for option expiration, then trading in such option shall terminate, and such option shall expire, on the next day on which the market in such Underlying Futures Contract is open for trading.

348A01.J. [Reserved]

348A02. EXERCISE AND ASSIGNMENT

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

Options which are in-the-money on the last day of trading are automatically exercised.

348A02.A. Exercise

Any Monthly option (Rule 348A01.D.1.), Weekly Monday option (Rule 348A01.D.2.), Weekly Wednesday option (Rule 348A01.D.3.) or Weekly Friday option (Rule 348A01.D.4.) may be exercised only at, and not before, the expiration of such option. Following termination of trading in expiring options, any such option that is in the money shall be automatically exercised by the Clearing House, and any such option that is out of the money shall be abandoned by the Clearing House. For the avoidance of doubt, no such option that expires in the money may be abandoned, and no such option that expires out of the money may be exercised.

1. Monthly Options

An expiring Monthly call option (Rule 348A01.D.1.) shall be in the money if the corresponding Final Settlement Price for the Underlying Futures Contract (Rule 34803.A.) is at or above such option's exercise price, and shall be out of the money if the corresponding Final Settlement Price is strictly below such option's exercise price.

An expiring Monthly put option (Rule 348A01.D.1.) shall be in the money if the corresponding Final Settlement Price for the Underlying Futures Contract (Rule 34803.A.) is strictly below such option's exercise price, and shall be out of the money if the corresponding Final Settlement Price is at or above such option's exercise price.

2. Weekly Monday, Weekly Wednesday and Weekly Friday Options

Whether an option expires in the money or out of the money shall be determined by the Exchange, in its sole discretion, by reference to the Fixing Price of such option, as follows:

Such Fixing Price shall be based on the notionally-adjusted volume-weighted average price of transactions in Bitcoin futures and Micro Bitcoin futures on the CME Globex electronic trading platform during the last thirty (30) minutes of trading on expiration day (3:30:00 p.m. – 3:59:59 p.m. London time)

In the event such Fixing Price calculation cannot be determined pursuant to the above calculation, the Exchange, in its sole discretion, shall set such Fixing Price by alternative means.

An expiring Weekly Monday call option (Rule 348A01.D.2.), Weekly Wednesday call option (Rule 348A01.D.3) or Weekly Friday call option (Rule 348A01.D.4.) shall be in the money if the corresponding Fixing Price for the Underlying Futures Contract (Rule 34803.A.) is at or above such option's exercise price, and shall be out of the money if the corresponding Fixing Price is strictly below such option's exercise price.

An expiring Weekly Monday put option (Rule 348A01.D.2.), Weekly Wednesday put option (Rule 348A01.D.3.) or Weekly Friday put option (Rule 348A01.D.4.) shall be in the money if the corresponding Fixing Price for the Underlying Futures Contract (Rule 34803.A.) is strictly below such option's exercise price, and shall be out of the money if the corresponding Fixing Price is at or above such option's exercise price.

348A02.B. Assignment

For a given option contract, an exercise by the Clearing House in accordance with Rules 348A02.A. shall be assigned by the Clearing House to clearing members carrying open short positions in such option contract.

The clearing member representing the short holder of such option shall be assigned a short position in such option's Underlying Futures Contract (Rule 348A01.D.) if such option is a call, or a long position in such option's Underlying Futures Contract if such option is a put.

The clearing member representing the long holder of such option shall be assigned a long position in such option's Underlying Futures Contract if such option is a call, or a short position in such option's Underlying Futures Contract if such option is a put.

All such futures positions shall be assigned at a price equal to the exercise price of such option contract, and shall be marked to market (in accordance with Rule 814) on the Business Day on which the Clearing House automatically exercises such.

Chapter 347A Options on Micro Ether Futures

347A00. SCOPE OF CHAPTER

This chapter is limited in application to options on Micro Ether Futures ("futures"). In addition to this chapter, options on futures shall be subject to the general rules and regulations of the Exchange as applicable.

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

347A01. OPTIONS CHARACTERISTICS

347A01.A. Contract Months, Trading Hours, and Trading Halts

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, *provided that* there shall be no trading in options when trading is halted in the underlying Futures Contract Month for Micro Ether Futures.

347A01.B. Trading Unit

The trading unit shall be an option to buy in the case of a call, or to sell in the case of a put, one Micro Ether Futures contract (Chapter 347). Such Micro Ether Futures contract shall represent one tenth (1/10) ether as valued by the CME CF Ether-Dollar Reference Rate ("ETHUSD_RR") in accordance with Rule 34701.

347A01.C. Minimum Fluctuations

1. Outright

Option prices shall be quoted in ETHUSD_RR Index points (USD per ether),

The minimum price fluctuation shall be 0.50 Index Points, equal to \$0.05 per option contract.

2. Option Spreads and Combinations

Any option contract that trades as a component of a spread or combination shall be traded at a price that conforms to the applicable minimum price fluctuation as set forth in this Rule. The minimum price fluctuation shall be 0.50 Index Points, equal to \$0.05 per option contract

347A01.D. Underlying Futures Contract

1. Monthly Options

For any Monthly option, the Underlying Futures Contract shall be for delivery on the last Friday of the same month as such option's named month of expiration, subject to Rule 34703.A.

2. Weekly Monday Options

For any Weekly Monday option, the Underlying Futures Contract shall be the next expiring Futures Contract after such option's expiration, subject to Rule 34703.A

3. Weekly Wednesday Options

For any Weekly Wednesday option, the Underlying Futures Contract shall be the next expiring Futures Contract after such option's expiration, subject to Rule 34703.A.

4. Weekly Friday Options

For any Weekly Friday option, the Underlying Futures Contract shall be the next expiring Futures Contract after such option's expiration, subject to Rule 34703.A.

347A01.E. Exercise Prices

1. Regularly-Listed Exercise Prices

On any Business Day, and subject to Rule 347A01.A., the Exchange shall ensure that Monthly, Weekly Monday, Weekly Wednesday and Weekly Friday put and call options are listed for trading at all eligible exercise prices set forth in the <u>Strike Price Listing and Exercise Procedures Table.</u>

2. Dynamically-Listed Exercise Prices

Upon demand and at the discretion of the Exchange, an option with an out-of-current-range exercise price may be listed for trading as a User-Defined Instrument, on an as-soon-as-possible basis, provided that the exercise price of such option shall be an integer multiple of 25 Index points (\$25 per ether). The

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

347A01.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.

347A01.G. Nature of Options

Upon exercise of a put option on behalf of the long holder of such option, the short holder of such option shall incur the obligation to assume a long position in one Underlying Futures Contract (Rule 347A01.D.) at such option's exercise price (Rule 347A01.E.). Upon exercise of a call option on behalf of the long holder of such option, the short holder of such option shall incur the obligation to assume a short position in one Underlying Futures Contract at such option's exercise price.

Any Monthly, Weekly Monday, Weekly Wednesday or Weekly Friday option will be exercised only at its expiration.

347A01.H. Daily Price Limits

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

347A01.I. Termination of Trading

1. Monthly Options

Trading in any Monthly option shall terminate on the same date and at the same time as the termination of trading in such option's Underlying Futures Contract (Rule 347A01.D.1.).

If that day is not a business day in both the UK and the US, trading shall terminate on the preceding day that is a business day in either the UK or the US.

2. Weekly Monday, Weekly Wednesday and Weekly Friday Options

Trading in any Weekly Monday, Weekly Wednesday and Weekly Friday option shall terminate on its expiration date at 4:00:00 p.m. London time.

If such Monday is not a scheduled Business Day in both the US and the UK, then trading in expiring options shall be scheduled to terminate on the Business Day, in either the US or the UK, that next following such Monday.

If such Wednesday is not a scheduled Business Day in both the US and the UK, then trading in expiring options shall be scheduled to terminate on the Business Day, in either the US or the UK, that first precedes such Wednesday.

If such Friday is not a scheduled Business Day in both the US and the UK, then trading in expiring options shall be scheduled to terminate on the Business Day, in either the US or the UK, that first precedes such Friday.

If the market in the Underlying Futures Contract for any such Weekly Monday, Weekly Wednesday or Weekly Friday option does not open on the day scheduled for termination of option trading and for option expiration, then trading in such option shall terminate, and such option shall expire, on the next day on which the market in such Underlying Futures Contract is open for trading.

347A01.J. [Reserved]

347A02. EXERCISE AND ASSIGNMENT

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

Options which are in-the-money on the last day of trading are automatically exercised.

347A02.A. Exercise

Any Monthly option (Rule 347A01.D.1.), Weekly Monday option (Rule 347A01.D.2.), Weekly Wednesday option (Rule 347A01.D.3.) or Weekly Friday option (Rule 347A01.D.4.) may be exercised only at, and not before, the expiration of such option. Following termination of trading in expiring options, any such option that is in the money shall be automatically exercised by the Clearing House, and any such option that is out of the money shall be abandoned by the Clearing House. For the avoidance of doubt, no such option that expires in the money may be abandoned, and no such option that expires out of the money may be exercised.

1. Monthly Options

An expiring Monthly call option (Rule 347A01.D.1.) shall be in the money if the corresponding Final Settlement Price for the Underlying Futures Contract (Rule 34703.A.) is at or above such option's exercise price, and shall be out of the money if the corresponding Final Settlement Price is strictly below such option's exercise price.

An expiring Monthly put option (Rule 347A01.D.1.) shall be in the money if the corresponding Final Settlement Price for the Underlying Futures Contract (Rule 34703.A.) is strictly below such option's exercise price, and shall be out of the money if the corresponding Final Settlement Price is at or above such option's exercise price.

2. Weekly Monday, Weekly Wednesday and Weekly Friday Options

Whether an option expires in the money or out of the money shall be determined by the Exchange, in its sole discretion, by reference to the Fixing Price of such option, as follows:

Such Fixing Price shall be based on the notionally-adjusted volume-weighted average price of transactions in Ether futures and Micro Ether futures on the CME Globex electronic trading platform during the last thirty (30) minutes of trading on expiration day (3:30:00 p.m. – 3:59:59 p.m. London time)

In the event such Fixing Price calculation cannot be determined pursuant to the above calculation, the Exchange, in its sole discretion, shall set such Fixing Price by alternative means.

An expiring Weekly Monday call option (Rule 347A01.D.2.), Weekly Wednesday call option (Rule 347A01.D.3) or Weekly Friday call option (Rule 347A01.D.4.) shall be in the money if the corresponding Fixing Price for the Underlying Futures Contract (Rule 34703.A.) is at or above such option's exercise price, and shall be out of the money if the corresponding Fixing Price is strictly below such option's exercise price.

An expiring Weekly Monday put option (Rule 347A01.D.2.), Weekly Wednesday put option (Rule 347A01.D.3.) or Weekly Friday put option (Rule 347A01.D.4.) shall be in the money if the corresponding Fixing Price for the Underlying Futures Contract (Rule 34703.A.) is strictly below such option's exercise price, and shall be out of the money if the corresponding Fixing Price is at or above such option's exercise price.

347A02.B. Assignment

For a given option contract, an exercise by the Clearing House in accordance with Rules 347A02.A. shall be assigned by the Clearing House to clearing members carrying open short positions in such option contract.

The clearing member representing the short holder of such option shall be assigned a short position in such option's Underlying Futures Contract (Rule 347A01.D.) if such option is a call, or a long position in such option's Underlying Futures Contract if such option is a put.

The clearing member representing the long holder of such option shall be assigned a long position in such option's Underlying Futures Contract if such option is a call, or a short position in such option's Underlying Futures Contract if such option is a put.

All such futures positions shall be assigned at a price equal to the exercise price of such option contract, and shall be marked to market (in accordance with Rule 814) on the Business Day on which the Clearing House automatically exercises such.

Appendix B

CME Rulebook Chapter 5 ("Trading Qualifications and Practices") Position Limit, Position Accountability, and Reportable Level Table

(attached under separate cover)

Appendix C

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

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

Equity Options		
	Globex Symbol	Globex Non-Reviewable Ranges (NRR)
Γ		
Monday Weekly Options on Micro Bitcoin Futures - Weeks 1-5	<u>W1A-W5A</u>	The greater of the following:
Wednesday Weekly Options on Micro Bitcoin Futures - Weeks 1-5	<u>W1C-W5C</u>	 <u>The greater of the following:</u> Delta multiplied by the
Friday Weekly Options on Micro Bitcoin Futures - Weeks 1-4	<u>W1E-W4E</u>	underlying futures non-
Monthly Options on Micro Bitcoin Futures	<u>WM</u>	reviewable range
Monday Weekly Options on Micro Ether Futures - Weeks 1-5	V1A-V5A	• 20% of premium up to the
Wednesday Weekly Options on Micro Ether Futures - Weeks 1-5	V1C-V5C	futures underlying non- reviewable range
Friday Weekly Options on Micro Ether Futures - Weeks 1-4	<u>V1E-V4E</u>	• 5 ticks
Monthly Options on Micro Ether Futures	VM	

Appendix D

CME 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	Daily Price Limit
Monday Weekly Options on Micro Bitcoin Futures - Weeks 1-5	<u>348A</u>	<u>W1A-W5A</u>	Associated	<u>MBT</u>	Daily Price Limit Table
<u>Wednesday Weekly</u> Options on Micro Bitcoin Futures - Weeks 1-5	<u>348A</u>	<u>W1C-W5C</u>	Associated	<u>MBT</u>	Daily Price Limit Table
Friday Weekly Options on Micro Bitcoin Futures - Weeks 1-4	<u>348A</u>	<u>W1E-W4E</u>	Associated	<u>MBT</u>	Daily Price Limit Table
Monthly Options on Micro Bitcoin Futures	<u>348A</u>	WM	Associated	MBT	Daily Price Limit Table
Monday Weekly Options on Micro Ether Futures - Weeks 1-5	<u>347A</u>	<u>V1A-V5A</u>	Associated	<u>MET</u>	Daily Price Limit Table
<u>Wednesday Weekly</u> Options on Micro Ether Futures - Weeks 1-5	<u>347A</u>	<u>V1C-V5C</u>	Associated	MET	Daily Price Limit Table
Friday Weekly Options on Micro Ether Futures - Weeks 1-4	<u>347A</u>	<u>V1E-V4E</u>	Associated	MET	Daily Price Limit Table
Monthly Options on Micro Ether Futures	<u>347A</u>	<u>VM</u>	Associated	MET	Daily Price Limit Table

Appendix E

Exchange Fees Effective through July 31, 2022, Exchange Fees for Options on Micro Bitcoin Futures and Options and Micro Ether Futures will be discounted by 50%.

Membership Type	Venue/ Transaction Type	Options on Micro Bitcoin Futures	Options on Micro Ether Futures
Individual Members	CME Globex	\$1.25	\$0.10
Clearing Members Rule 106.J Equity Member Firms & Rule 106.J	EFP EFR Block	\$2.00	\$0.16
Qualified Subsidiaries	Delivery	\$0.65	\$0.05
Rule 106.I Members & Rule 106.I Qualified Affiliates Rule 106.S Member Approved Funds	Exe Asn Future From	\$0.70	\$0.05
	CME Globex	\$2.00	\$0.16
Rule 106.D Lessees	EFP EFR Block	\$3.20	\$0.26
Rule 106.F Employees	Delivery	\$1.00	\$0.08
	Exe Asn Future From	\$1.05	\$0.08
Rule 106.R Electronic Corporate Members (For other than CME Globex - Non-Member rates apply)	CME Globex	\$2.05	\$0.17
	CME Globex	\$2.20	\$0.18
	EFP EFR Block	\$3.55	\$0.29
Rule 106.H and 106.N Firms	Delivery	\$1.10	\$0.09
	Exe Asn Future From	\$1.15	\$0.09
International Incentive Program (IIP) and International Volume Incentive Program (IVIP) Participants (For other than CME Globex - Non-Member rates apply)	CME Globex	\$2.50	\$0.20
Central Bank Incentive Program (CBIP) and Latin American Fund Manager Incentive Program (FMIP) Participants (For other than CME Globex - Non-Member rates apply)	CME Globex	\$2.50	\$0.20
Members Trading Outside of Division (For other than CME Globex During ETH - Non- Member rates apply)	CME Globex During ETH Only	\$2.40	\$0.18
	CME Globex	\$2.50	\$0.20
	EFP EFR Block	\$4.00	\$0.32
Non-Members	Delivery	\$1.25	\$0.10
	Exe Asn Future From	\$1.30	\$0.10

Processing Fees	Fee
Position Adjustment/Position Transfer	\$0.10
Give-Up Surcharge	\$0.05
Facilitation Fee	\$0.40