

coinbase DERIVATIVES

March 7, 2024

VIA CFTC Portal

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

Re: CFTC Regulation 40.2(a) Certification: Listing of Bitcoin Cash Futures Contract

Dear Mr. Kirkpatrick:

Pursuant to Commodity Futures Trading Commission (“CFTC” or “Commission”) Regulation 40.2(a), Coinbase Derivatives, LLC (the “Exchange” or “COIN”) hereby submits for self-certification its initial listing of the Bitcoin Cash Futures contract to be offered for trading on the Exchange on or after April 1, 2024.

Contract Description

The Bitcoin Cash Futures contract (the “Contract”) will be a monthly cash-settled and margined Contract with the following specifications:

| | |
|------------------------------------|---|
| Product | Bitcoin Cash Futures |
| Product Type | USD-settled index future |
| Contract Size | 1 Bitcoin Cash |
| Displayed Price Example | \$315.05 |
| Contract Notional | ~\$315.00 Contract notional (i.e. ~\$315 x 1) |
| Contract Code | BCH |
| Minimum Tick Size and Value | Min tick size: \$0.05 per Bitcoin Cash Min tick value: \$0.05 per Contract |
| Listed Contracts | 3 nearest monthly Contracts |
| Daily Settlement | Daily Settlement: 3:00 PM CT 1. 1-min VWAP of futures Contract rounded to the nearest tradable tick 2. 1-min TWAP of futures Contract midpoint of the bid/ask rounded to the nearest tradable tick 3. If a two-sided market is not available during the sixty (60) seconds prior to 3:00 PM CT, then the Settlement Price will be the Market Vector Coinbase CBCH index value - (difference between previous day’s CBCH value and previous day’s futures settlement) |

| | |
|---------------------------------|--|
| Final Settlement | <p>Final settlement price of the expiring Contract will be the value of the Market Vector Coinbase Bitcoin Cash benchmark reference rate (CBCH) at 4:00 PM London time, calculated and disseminated by Market Vector. Contracts will be cleared by Nodal Clear.</p> <p>The CBCH value is determined using a 2-hour settlement window, MVIS breaks the period into 40 3-minute intervals. In each of these intervals, MVIS aggregates all trades and volume from the constituent exchange and calculates a volume weighted median price for the interval. The settlement is based on a simple average of the 40 volume weighted median prices calculated.</p> <p>Should any abnormal activity occur during the settlement window, any combination of the following measures will be considered:</p> <ol style="list-style-type: none"> 1. Should the index provider detect an abnormal price during the settlement window, the price shall be removed from the calculation 2. Should the Coinbase Derivatives Command Center determine the settlement price is not representative of the market, it will manually settle the Contract using sources of historical data and prices on other exchanges and indexes. |
| Daily Price Limits | 30% daily price limits based on previous day settlement |
| Price Fluctuation Limits | 10% of hourly calculated reference price |
| Last Trading Day | Trading terminates at 4:00 PM London time on the last Friday of the Contract month. If that day is not a business day in the U.S., trading terminates on the preceding day that is a U.S. business day. |
| Position Limits | 14,000 BCH Futures |
| Large Trader Reporting | 25 contracts |
| Trading Hours | 5:00 - 4:00 PM CT Sunday - Friday, with a trading halt from 4:00 PM - 5:00 PM CT Monday - Thursday. |

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- II. Contract Description
- III. Volatility
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- V. Compliance with Core Principles

I. Bitcoin Cash Market Overview

Bitcoin Cash is a cryptocurrency that was created on August 1, 2017, as a result of a hard fork from the original Bitcoin blockchain. This fork occurred due to a disagreement within the Bitcoin community over how to address scalability issues as the volume of transactions began to strain the Bitcoin network's capacity. Bitcoin Cash was introduced to increase the block size from 1 MB to an initial 8 MB, aiming to allow more transactions to be processed in each block and

improve transaction processing speed. As of the last update, the block size can be up to 32 MB, significantly higher compared to Bitcoin's current block size limit.

Bitcoin Cash has a total capped supply of 21 million tokens, aligning with Bitcoin's original supply limit. This cap maintains the principle of digital scarcity, similar to Bitcoin's proposition as "digital gold," but with an emphasis on usability as a medium of exchange in daily transactions.

For its consensus mechanism, Bitcoin Cash continues to use the SHA-256 algorithm, identical to Bitcoin. This choice means that while Bitcoin Cash benefits from the robust security and mining infrastructure of Bitcoin, it also faces competition for mining resources from the original Bitcoin network. The block reward for Bitcoin Cash, like Bitcoin, halves approximately every four years. As of the last halving event, miners are awarded 6.25 Bitcoin Cash for each block they mine, with the next halving expected to take place in late-March 2024 to reduce this reward further.

Bitcoin Cash was designed with the purpose of restoring the original intent of Bitcoin as a fast, cheap, and reliable form of cash for everyday use. By increasing the block size, Bitcoin Cash aims to reduce fees and transaction times, making it more practical for transactions of all sizes. This approach seeks to address some of the challenges that have limited Bitcoin's use as a daily payment system, positioning Bitcoin Cash as an alternative for merchants and consumers seeking the benefits of blockchain technology with lower fees and faster confirmation times than Bitcoin's network during peak times.

The market position of Bitcoin Cash reflects its role as an alternative to Bitcoin that prioritizes transaction efficiency. While it has not matched Bitcoin in terms of market capitalization or price, Bitcoin Cash has established itself as a significant player in the cryptocurrency space, with a dedicated user base and ecosystem. The price of Bitcoin Cash and its market capitalization fluctuate based on various factors, including adoption rates, market sentiment, and developments within the broader cryptocurrency market.

As of February 29, 2024, the price of Bitcoin Cash is ~\$315 with a market cap of ~\$6.2B:¹

¹Per coinmarketcap.com

 **Bitcoin Cash** BCH



\$314.93 ▼ 0.98% (1d)

 Add to watchlist



 Track in portfolio



Market cap  ▼ 0.97% **\$6,190,110,053**

| #19

Volume (24h)  > ▼ 13.89% **\$668,273,392**

| #23

Volume/Market cap (24h)  **11.05%**

Circulating supply   **19,655,606 BCH**

| 93.60%

Total supply  **19,655,606 BCH**

Max. supply  **21,000,000 BCH**

Fully diluted market cap  **\$6,613,880,874**

II. Contract Description

The Bitcoin Cash Futures Contract is a cash-settled Contract based on the Market Vector Coinbase Bitcoin Cash Benchmark Rate (“Index”). This Index tracks the price of Bitcoin Cash traded on the Coinbase, Inc. spot exchange. Market Vector is an Index Provider based in Frankfurt, Germany and is regulated by the Federal Financial Supervisory Authority (“BaFin”).

Each Contract represents 1 Bitcoin Cash. The Exchange will initially offer the three front consecutive months of the Contract for trading.

III. Volatility

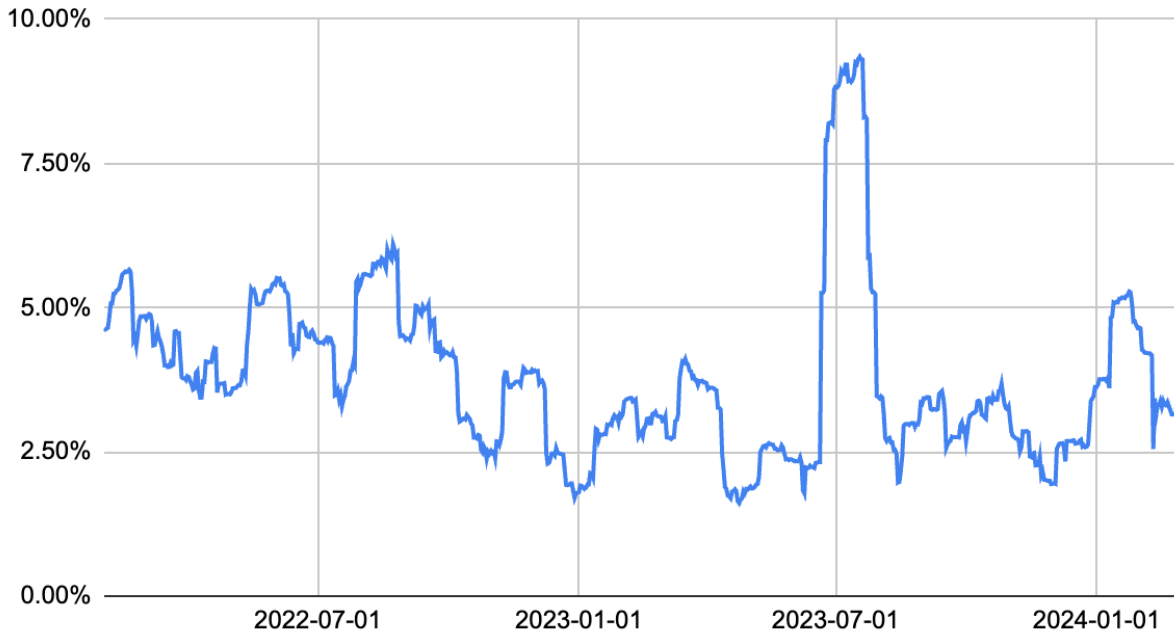
Bitcoin Cash is considered a relatively volatile commodity. Some of the reasons include its later adoption as a cryptocurrency and lower market cap. Since the start of 2022, the 30-day trailing standard deviation of daily price changes has averaged 3.8%. Spikes in volatility occur periodically, similar to our other product classes, such as oil futures.

While Bitcoin Cash prices can be volatile due to factors stated above, the Exchange has managed both periods of prolonged volatility as well as unexpected spikes in volatility in its existing products. The Exchange is prepared to deploy proven risk controls applied to all of its listed products, including daily price limits, price banding, exposure limits, kill switches, and margin levels that appropriately reflect the volatility of Bitcoin Cash.

Bitcoin Cash's current 30D volatility is just above 3%. Under comparable timeframes, other commodities have experienced realized volatility levels that are in line with Bitcoin Cash realized volatility. For reference current Gold and Bitcoin 30D volatility are also just under 2%².

Since launch, the Exchange has had multiple instances of successful management of high volatility environments in its existing commodity contracts, as Bitcoin volatility was above 4% and Oil volatility was above 5% in 2022.

Bitcoin Cash 30 Day Volatility



² <https://buybitcoinworldwide.com/volatility-index/>

IV. Analysis of Deliverable Supply

As stated above, Bitcoin Cash was created with a limited supply of 21 million Bitcoin Cash, with 19.6 million currently in circulation.

Because the contract will be settled upon transactions of Bitcoin Cash in U.S. dollars (USD), the deliverable supply analysis herein conservatively focuses on the proportion of Bitcoin Cash globally traded versus USD, which is estimated at 12% of total Bitcoin Cash traded³. Using this as a proxy results in a deliverable supply of 2.4 million Bitcoin Cash.

Given that each of the COIN Bitcoin Cash cash-settled Contract represents 1 Bitcoin Cash, a single contract is <0.00004% of the deliverable supply.

A common practice is to set the position limit so that a market participant holds no more than 25% of the deliverable supply of a commodity. This would result in a position limit of 588,000 Bitcoin Cash, or 588,000 Bitcoin Cash futures. The Exchange does not recommend using this approach to set the position limit.

Rather, the Exchange will be referencing the position limits to market cap ratio for existing crypto currency futures such as Bitcoin and adjusting downwards.

The Exchange will set the position limit to 14,000 BCH futures, which is equivalent to 14,000 Bitcoin Cash. With a \$315 price of Bitcoin Cash, this is equal to \$4.4M notional, which would be 0.07% of the Bitcoin Cash market cap, currently at \$6.2B.

As a comparison, the COIN Bitcoin Futures position limits are currently 0.10% of the Bitcoin market cap. The proposed BCH position limits would be 30% lower as a percentage of the underlying asset's market cap.

V. Compliance with Core Principles

The Exchange has reviewed the designated contract market ("DCM") core principles ("Core Principles") set forth in the Commodity Exchange Act and has identified that the Contract may most directly implicate the following Core Principles:

Core Principle 2 -- Compliance with Rules

Trading in the Contract is subject to the Exchange Rulebook (the "Rulebook") including Chapter 5, which prohibits fraud, non-competitive trading, market manipulation and abusive and disruptive trade practices. Additionally, as with all contracts traded on the Exchange, trading will be subject to monitoring and surveillance by the Market Regulation Department, which has the authority to investigate and enforce Exchange Rules, as described in Chapter 7.

Core Principle 3 -- Contracts Not Readily Subject to Manipulation

The Bitcoin Cash future is based on the Market Vector Coinbase Bitcoin Cash Benchmark Rate, which was first published in March 2024. MV Index Solutions GmbH ("MVIS") is governed by the European Benchmark Regulation (the "EUBMR") and supports the International Organisation of Securities Commissions (IOSCO) "Principles for Financial Benchmarks" (the IOSCO Principles). COIN has a licensing agreement for the use of Market Vector for Coinbase Bitcoin Cash futures.

³ <https://www.cryptocompare.com/coins/bch/analysis/USD>

Market Vector manages the governance and oversight of the Index, as described in Appendix A below. COIN has signed an information sharing agreement with Coinbase, Inc. to allow the Exchange to request spot market data when necessary. Given that the Bitcoin Cash token is traded on multiple exchanges both in the United States and abroad, and the manner in which the Index is calculated, it would be difficult, if not impossible, to manipulate the price of the underlying market in a way that would affect the futures Contract. In addition Coinbase, Inc. has in place an experienced surveillance team and policies and procedures to detect suspected manipulation in the spot market. Given this oversight, the Index is not readily subject to manipulation.

Core Principle 4 -- Prevention of Market Disruption

Chapter 5 of the Rulebook prohibits Participants from manipulating, distorting the price of, and disrupting the settlement process of the Contract. As with all contracts traded on the Exchange, trading in the Contract will be subject to monitoring and surveillance by the Market Regulation Department. Further, trading in the Contract shall be subject to price limits consistent with the US equity market-wide circuit breakers. In addition, the Index Provider uses a Methodology which makes potential manipulation of the underlying spot market unlikely to have an effect on the Index price.

Core Principle 5 -- Position Limits or Accountability

The Contract shall be subject to a position limit of no more than 14,000 Bitcoin Cash futures, or 14,000 Bitcoin Cash, with a reportable level of 25 Contracts.

Core Principle 7 -- Availability of General Information

The Exchange shall publish on its website and in its Rulebook the specifications, terms and conditions of the Contract.

Core Principle 8 -- Daily Publication of Trading Information

The Exchange shall publish on its website on a daily basis the trading volumes, open interest, and price information for the Contract.

Core Principle 9 -- Execution of Transactions

The Contract shall be listed for trading on the Exchange's trading system, which provides for efficient, competitive, and open execution of transactions.

Core Principle 10 -- Trade Information

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

Core Principle 11 -- Financial Integrity of Transactions

The Contract shall be cleared by Nodal Clear, LLC, a CFTC registered derivatives clearing organization subject to the CFTC regulations related thereto.

Core Principle 12 -- Protection of Markets and Market Participants

Chapters 4 and 5 of the Rulebook require all market participants, including futures commission merchants ("FCMs") carrying customer accounts, to observe high standards of integrity, market conduct, commercial honor, fair dealing, and just and equitable principles of trade and prohibits, among other things, fraud, non-competitive trading, market manipulation, and abusive and disruptive trade practices. As with all contracts traded on the Exchange, trading will be subject to monitoring and surveillance by the Market Regulation Department.

Core Principle 13 -- Disciplinary Procedures

Rulebook Chapter 7 sets forth the rules and procedures for the investigation, enforcement, and sanctioning of persons that violate the Exchange's Rules.

Core Principle 14 - Dispute Resolution

Disputes related to the Contract are governed by Chapter 8 of the Rulebook, which provides for arbitration procedures overseen by the National Futures Association.

Certification

The Exchange has spoken with FCMs and market participants who support the decision to launch a Bitcoin Cash Contract. The Exchange is not aware of any substantive opposing views to the Contract. The Exchange certifies that the Contract and related rules certified herein

comply with the Commodity Exchange Act and the rules and regulations promulgated thereunder.

The Exchange certifies that this submission has been concurrently posted on the Exchange's website at: www.coinbase.com/derivatives.

If you have any questions or require any further information, please contact me at jane.downey@coinbase.com.

Sincerely,

/s/

Jane Downey
Chief Regulatory Officer

Attachments:

| | |
|------------|--|
| Appendix A | Market Vector Bitcoin Cash Coinbase Benchmark Rate Index Methodology |
| Appendix B | Amendments to COIN Rulebook Chapter 11 |
| Appendix C | Amendments to COIN Rulebook Chapter 5 |
| Appendix D | Amendments to the COIN Fee Schedule |

APPENDIX A

Market Vector Coinbase Bitcoin Cash Benchmark Rate Contract Methodology

The Market Vector Coinbase Bitcoin Cash Benchmark Rate (“Index”) is produced by Market Vector Indexes of Frankfurt, Germany, an affiliate of Van Eck Associates Corporation (“MVIS”). The Index is calculated and disseminated in USD and tracks the price of Bitcoin Cash as traded on the Coinbase, Inc. spot exchange.

Advisory Board

The MVIS Advisory Board is governed by the Rules of Procedure for the Advisory Board. The Advisory Board is responsible to supervise and advise the Managing Directors of MV. The approval of the Advisory Board is required for certain important decisions.

Independent Oversight Function

MVIS has implemented an Independent Oversight Function (“IOF”) that consists of employees of the Legal and Compliance department of VanEck (Europe) GmbH. Some of the key task and responsibilities of the IOF are:

- Periodic review of the Index Guide and Methodology;
- Review and approval of the procedures for index cessation;
- Oversee third parties involved in the provision of the indices, including calculation or dissemination agents;
- Assess internal and external audits or reviews, and monitor the implementation of identified remedial actions; and
- Monitor input data and contributors and MVI’s related actions in challenging or validating contributions of input data.

Managing Directors

MVIS has two Managing Directors (MD), the Operations and the Shared Services MD. The roles and responsibilities of the two different MDs are documented and serve to ensure mitigation of conflicts of interest and enhance governance standards. The Managing Directors are responsible for the ongoing review and monitoring of compliance with MVIS’ policies and procedures by all involved parties and the notification of possible breaches or incidents to the IOF.

The MVIS Bitcoin Cash Benchmark Rate Index is not Subject to Manipulation

The Index is calculated as an average of 2-hour quantity weighted median prices, which are calculated for 40 3-minute intervals. The Contract price is determined by using a median price, which filters out any prices that might be considered outliers, either high or low.

$$Index\ Value = \frac{1}{n} \sum_{i=1}^n M(i).$$

where the quantity weighted median price for each interval i is

$$M(i) = \begin{cases} p_{i,k} & \text{if } k \text{ satisfies } \sum_{j=1}^{k-1} q_{i,j} < \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j} \text{ and } \sum_{j=k+1}^{J_i} q_{i,j} \leq \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j}, \\ p_{i,1} & \text{if } q_{i,1} \geq \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j}, \\ \frac{p_{i,k} + p_{i,k+1}}{2} & \text{if } \sum_{j=k+1}^{J_i} q_{i,j} = \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j}, \end{cases}$$

with the number of intervals calculated as the total index time window divided by the interval window:

$$n = \frac{T}{b},$$

and

- $p_{i,j}$ = j th price in i th interval,
- $q_{i,j}$ = j th quantity/volume traded in i th interval,
- J_i = number of trades in i th interval,
- b = interval window for the calculation of the median prices,
- n = number of intervals,
- T = total index time window for the calculation of an index price.

The set of trades for the total index calculation consists of transactions occurring within the total index time window as follows:

$$\theta_t = \{a_{i,j}(s_{i,j}, p_{i,j}, q_{i,j}) | t - T \leq s < t\},$$

with

- θ_t = set of trades for the calculation of the index price at time t ,
- $a_{i,j}$ = trade j in trade set A_i ,
- $s_{i,j}$ = time of trade $a_{i,j}$.

Each interval consists of a subset of trades of θ_t :

$$A_i \subset \theta_t$$

A_i being the set of trades for the calculation of the median price in interval i , where each trade $a_{i,j}$ within A_i is sorted by price $p_{i,j}$ in ascending order and it holds that trades occur within the interval window as follows:

$$A_i = \{a_{i,j}(s_{i,j}, p_{i,j}, q_{i,j}) | (t - T) + (i - 1)b \leq s < (t - T) + ib\}.$$

Due to the sheer number of times the price is recalculated, and the use of median prices, any attempt to manipulate the price of the Index would be extremely difficult. In addition to the calculation safeguards, MVIS has procedures in place to prevent manipulation, MVIS has a number of policies and procedures in place to ensure a fair marketplace. MVIS has instituted measures to investigate and correct a potentially erroneous price due to bad data, late or delayed transactions and non-reporting exchanges. Incorrect or missing data is corrected immediately.

Disruptions with calculation agents are handled by Compliance and Senior Management at MVIS. MVIS will communicate any error to all affected clients. In addition, if MVI identifies any conduct that may involve manipulation of an index by calculation/dissemination agent, it will report this to its regulator, BaFin.

The Exchange has in place an agreement with Coinbase, Inc. to share information and trade data occurring on Coinbase, Inc. in connection with regulatory inquiries. This agreement gives the Exchange the opportunity to investigate activity in the spot market which may have an impact on the listed futures Contract.

How Settlement is Calculated

During the 2-hour settlement window, MVIS breaks the hour into 40 3-minute intervals. In each of these intervals, MVI aggregates all trades and volume from the Coinbase spot exchange and calculates a volume weighted median price for the interval. The settlement is based on a simple average of the 40 volume weighted median prices calculated.

APPENDIX B

Additions underscored; deletion are ~~struckthrough~~

CHAPTER 11: CONTRACTS

* * *

RULE 1110. Bitcoin Cash Futures

- (a) Scope. Rule 1110 is limited in application to the trading of the Bitcoin Cash futures (“BCH Contract”). In addition to Rule 1110, the Bitcoin Cash Contract is subject to all Rules of the Exchange as applicable. Unless otherwise stated, all times referred to herein are Central Time Zone. The relevant index for the BCH Contract is the MarketVector™ Coinbase BitcoinCash Benchmark Rate (“Index”), as calculated and disseminated by MarketVector Indexes GmbH as the index provider and calculation agent (the “Index Provider”).
- (b) Trading Schedule. The Bitcoin Cash Contract shall be offered for monthly trading in the front three (3) months during such hours as the Exchange shall determine from time-to-time.
- (c) Contract Size. The Contract size is equal to the price of one (1) Bitcoin Cash.
- (d) Price Increments. The minimum price increment shall be 0.05 Index points (\$0.05 per BCH Contract).
- (e) Position Limits, Position Accountability, and Reportable Levels. Pursuant to Rules 530 to 533 and subject to the requirements and exceptions therein, the Bitcoin Cash Contract is subject to the following:
 - (1) Position Limit. 14,000 BCH Contracts.
 - (2) Reportable Level. 25 BCH Contracts.
- (f) Price Fluctuation Limits. Trading in the BCH Contract shall be subject to price fluctuation limits. If a price fluctuation limit is reached on the lead month of BCH Contract, all related instruments will be halted. If a price fluctuation limit is reached on the non-lead month BCH Contracts, only the specific instrument which reached the price fluctuation limit will be halted.
 - (1) Each hour, a Reference Price is calculated for each Contract using the Lead Month settlement procedures outlined in Rule 906(b)(ii)(1) (the “Reference Price”).
 - (2) A 10% up and down price limit will be applied to that Contract’s Reference Price.
 - (3) The market will enter a halt state for two (2) minutes if a price fluctuation limit is reached. Orders can be submitted, canceled, and amended during this state but no matching will occur.

- (4) If a price fluctuation limit is reached, the new Reference Price will be the last price fluctuation limit for the remainder of that hour.
- (5)
- (g) Daily Price Limits. Trading in the BCH Contract shall be subject to the following daily price limits:
- (1) 30% daily price limits using the previous day's Settlement Price will be applied to the next trading session.
 - (2) If daily price limits are reached the market will remain open but will not trade beyond the daily price limit.
- (h) Termination of Trading. Trading terminates at 4:00 PM London time on the last Friday of the Contract month. If that day is not a Business Day, trading terminates on the preceding day that is a Business Day ("Termination of Trading").
- (i) Settlement. The BCH Contract is cash settled.
- (1) Daily Settlement of the Contract, which is an Exchange Futures Contract based on a crypto currency, will be determined pursuant to the process set forth in Exchange Rule 906(b)(ii).
 - (2) On the day of expiration, the Final Settlement of the Contract, which is an Exchange Futures Contract based on a crypto currency, will be determined pursuant to the process set forth in Exchange Rule 906(c)(ii).
 - (3) Final Settlement. Clearing Firms holding open positions in an expiring BCH Contract at the Termination of Trading shall make or receive payment in accordance with the rules of the Clearing House.
- (j) Forks. In the event of a hard fork, the BCH Contract will settle to the Index. The Exchange may, in its sole discretion, take alternative action with respect to hard forks in consultation with its Index Provider, its Clearing House and its market Participants.
- (k) Disclaimer.

The MarketVector™ Coinbase Bitcoin Cash Benchmark Rate is a trademark of MarketVector Indexes GmbH and its affiliates (collectively "MarketVector"). MarketVector or MarketVector's licensors own all proprietary rights in the MarketVector™ Coinbase Bitcoin Cash Benchmark Rate. MarketVector is NOT affiliated with Coinbase Derivatives, LLC, and neither approves, endorses, reviews or recommends the BCH Contract. MarketVector does not guarantee the timeliness, accurateness or completeness of any data or information relating to the MarketVector™ Coinbase Bitcoin Cash Benchmark Rate, and neither shall be liable in any way to Coinbase Derivatives, LLC, investors in the BCH Contract or other third parties in respect of the use or accuracy of the MarketVector™ Coinbase Bitcoin Cash Benchmark Rate Index or any data included therein.

APPENDIX C

Additions underscored; deletion are ~~struckthrough~~

CHAPTER 5: TRADING PRACTICES AND BUSINESS CONDUCT

* * *

RULE 533. Position Limit, Position Accountability, Reportable Level, and Volume Threshold Level Table

The reportable levels for all Contracts covering Position Limit, Position Accountability, Reportable Level, and Volume Thresholds will be made available to Market Participants.

| Product | CDE Code | Contract Size | Aggregate Into Futures | Aggregate Ratio | Exchange Reporting Level | Position Limit |
|-----------------------------|------------|---------------|------------------------|-----------------|--------------------------|--|
| Nano Bitcoin Futures | BIT | 0.01 | BTI | 100 BIT = 1 BTI | 25 | 20,000 (BTI Aggregate) |
| Bitcoin Futures | BTI | 1 | BTI | N/A | 25 | |
| Nano Ether Futures | ET | 0.1 | ETI | 100 ET = 1 ETI | 25 | 40,000 (ETI Aggregate) |
| Ether Futures | ETI | 10 | ETI | N/A | 25 | |
| <u>Bitcoin Cash Futures</u> | <u>BCH</u> | <u>1</u> | <u>BCH</u> | <u>N/A</u> | <u>25</u> | <u>14,000</u> |
| Micro Crude Oil Futures | OIL | 100 | OIL | N/A | 350 | 5,000 three (3) days prior to the end of trading in the spot month |

APPENDIX D

Additions underscored; deletion are ~~struckthrough~~

Fee Schedule

~~December 22, 2023~~ April 1, 2024

Coinbase Derivatives, LLC charges fees according to the below schedule:

| Exchange Product Symbol | Symbol | Fees Charged Per Side | | | | | |
|-----------------------------|------------|-----------------------|------------|---------------|------------|---------------|------------|
| | | Market Maker | | Non-Pro | | Pro | |
| | | Electronic | Block | Electronic | Block | Electronic | Block |
| Bitcoin Futures | BTI | \$0.45 | \$0.60 | \$0.75 | \$1.00 | \$0.75 | \$1.00 |
| Ether Futures | ETI | \$0.45 | \$0.60 | \$0.75 | \$1.00 | \$0.75 | \$1.00 |
| nano Bitcoin Futures | BIT | \$0.07 | N/A | \$0.10 | N/A | \$0.07 | N/A |
| nano Ether Futures | ET | \$0.07 | N/A | \$0.10 | N/A | \$0.07 | N/A |
| <u>Bitcoin Cash Futures</u> | <u>BCH</u> | <u>\$0.07</u> | <u>N/A</u> | <u>\$0.10</u> | <u>N/A</u> | <u>\$0.07</u> | <u>N/A</u> |
| Micro Crude Oil Futures | OIL | \$0.30 | N/A | \$0.02 | N/A | \$0.05 | N/A |
| Delivery Fee All | All | \$0.00 | | \$0.00 | | \$0.00 | |

*For purposes of determining the fee amount the following definitions apply:

Market Maker - Account in the name of any person that has signed a market maker agreement with Coinbase Derivatives.

Non-Professional Trader - Account in the name of an individual or entity that is:

A. Not registered, qualified, or otherwise identified as a professional trader, market maker, liquidity provider, money manager, commodity trading advisor, or investment adviser with any stock, commodities or futures exchange or contract market, or with any financial regulatory authority;

B. Not engaged in brokerage, banking, investment, or financial activities, as part of their regular course of business;

C. Not using a fully automated order generating computer system; and

D. Trading for its own account.

Professional Trader - Account in the name of any person that is not a Market Maker or a Non-Professional Trader.