

November 3, 2025

Christopher J. Kirkpatrick Secretary Commodity Futures Trading Commission Three Lafayette Centre 1155 21st Street, N.W. Washington, D.C. 20581

Re: <u>Cboe Futures Exchange, LLC</u>

Weekly Notification of Rule Amendments Submission Number CFE-2025-030

Dear Mr. Kirkpatrick:

Pursuant to Section 5c(c)(1) of the Commodity Exchange Act, as amended ("Act"), and Regulation 40.6(d)(2)(iii) of the regulations promulgated by the Commodity Futures Trading Commission ("CFTC" or "Commission") under the Act, Cboe Futures Exchange, LLC ("CFE" or "Exchange") hereby provides a summary notice of a routine change in the composition of the component entities of the Cboe Kaiko Bitcoin Index and Cboe Kaiko Ether Index (collectively, "Cboe Kaiko Indexes") made to the Cboe Kaiko Indexes during the week of November 3, 2025 ("Amendment"). The Amendment went into effect on November 3, 2025.

The Cboe Kaiko Indexes each have an hourly rate and a real-time rate. The Cboe Kaiko Bitcoin Rate ("CKBR") and the Cboe Kaiko Ether Rate ("CKER") are used to determine the final settlement value of financially-settled Bitcoin ("FBT") and financially-settled Ether ("FET") futures, respectively, currently listed on CFE. The Cboe Kaiko Bitcoin Real-Time Rate ("CKBRT") and Cboe Kaiko Ether Real-Time Rate ("CKERT") are used in connection with the daily settlement price determination process for FBT and FET futures.

Effective November 3, 2025, Kaiko has added the following two constituent exchanges to each of the Cboe Kaiko Indexes: EDX Markets and Crypto.com. With these additions, each of the Cboe Kaiko Indexes has five constituent exchanges from which prices are used to calculate the relevant hourly and real-time rates: Bitstamp, Crypto.com, EDX Markets, itBit, and LMAX Digital.

The Exchange represents that the Exchange or an affiliate of the Exchange has an Information Sharing Agreement ("ISA") in place with each of the constituent exchanges that comprise the Cboe Kaiko Indexes, including Crypto.com and EDX Markets, under which the Exchange may exercise the provisions of the ISA.

Kaiko implements a vetting process for constituent exchanges used for the purpose of any Kaiko index computation, including the Cboe Kaiko Indexes. Kaiko may change the constituent exchanges used as data sources for determining the Cboe Kaiko Indexes from time to time in connection with the following process.

- The Cboe Kaiko Indexes follow a quarterly rebalancing calendar (March, June, September and December) so that the rates are composed of relevant price data feeds and comply with Kaiko's methodology, including initial vetting, liquidity, and optimization requirements.
- At each quarterly review, Kaiko conducts asset-agnostic vetting, asset-specific vetting, and additional optimization of each constituent exchange.
- Each constituent exchange must meet the following criteria as part of the asset-agnostic vetting process conducted by Kaiko based on available information, including information made available by the constituent exchanges: is absent from any sanction list; has been operating for the past five years; is located in a stable and open country; is regulated by an independent government body; has Know Your Customer ("KYC") and Anti-Money Laundering ("AML") controls in place; has trading policies in place; offers reliable Representational State Transfer Application Programming Interface ("REST API") and WebSocket data feeds; offers reliable live and historical trade data; and provides cold storage for customer funds.
- As part of the asset-specific vetting process for the Cboe Kaiko Indexes, each constituent exchange must have at least 0.5% of the total observed liquidity across all the constituent exchanges in the Cboe Kaiko Indexes over the past three months.
- As part of the additional optimization process, the trading volume (specifically, any zero-volume gaps) on each constituent exchange is individually analyzed as compared to its levels of liquidity.

CFE conducted an analysis of the prices of the Cboe Kaiko Indexes, inclusive of the additional two constituent exchanges—Crypto.com and EDX Markets—as compared to other comparable indexes over the last year to determine any pricing or volume impact to the Cboe Kaiko Indexes as a result of the addition of Crypto.com and EDX Markets. The results of that analysis are described below and are based on a review conducted over the time period from October 2024 through September 2025.

The analysis compared the Cboe Kaiko Indexes, inclusive of Crypto.com and EDX Markets, in relation to the corresponding digital asset indexes representative of the broader digital asset spot market in bitcoin and ether—CME CF Reference Rates, the CoinDesk Price Index rates, and the standard Kaiko Real-Time rates, in connection with the Cboe Kaiko Real-Time rates, and the standard Kaiko Hourly rates, in connection with the Cboe Kaiko Hourly rates.

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¹ CME bitcoin and ether futures are based on the CME CF Bitcoin and Ether Reference Rate, respectively. The CME CF Reference Rates are comprised of pricing sourced from Bitstamp, Bullish, Coinbase, Crypto.com, Gemini, itBit, Kraken, and LMAX Digital. CFE reviewed the CME CF Reference Rates published daily at 10:00 a.m. CT.

² CFE reviewed the CoinDesk Bitcoin and Ether Price Index rates only in connection with its review of CKBRT and CKERT price differences because the CoinDesk Bitcoin and Ether Price Index rates are calculated on a real-time, per-minute basis. The CoinDesk Price Index rates are comprised of pricing sourced from Bitstamp, Coinbase, Crypto.com, Gemini, itBit, Kraken, and LMAX Digital.

³ In connection with its review of CKBRT and CKERT, CFE reviewed the standard Kaiko Bitcoin and Ether Real-Time Rates published each hour. In connection with its review of CKBR and CKER, CFE reviewed the standard Kaiko Bitcoin and Ether Hourly Rates at 10:00 a.m. each day. The standard Kaiko Real-Time and Hourly Rates are comprised of pricing sourced from Bitstamp, Crypto.com, Gemini, Kraken, and LMAX Digital.

CFE reviewed the correlation between the daily returns of the Cboe Kaiko Real-Time rates (CKBRT and CKERT), and the corresponding digital asset daily CME CF Reference Rate and standard Kaiko Real-Time Rate.

- The correlation between the daily returns of the CKBRT and CME CF Bitcoin Reference Rate was 0.966.
- The correlation between the daily returns of the CKBRT and standard Kaiko Bitcoin Real-Time Rate was 0.999.
- The correlation between the daily returns of the CKERT and CME CF Ether Reference Rate was 0.976.
- The correlation between the daily returns of the CKERT and standard Kaiko Ether Real-Time Rate was 0.999.

Likewise, CFE reviewed the correlation between the daily returns of the Cboe Kaiko Hourly rates (CKBR and CKER), and the corresponding digital asset daily CME CF Reference Rate and standard Kaiko Hourly Rate at 10:00 a.m. each day.

- The correlation between the daily returns of the CKBR and CME CF Bitcoin Reference Rate at 10:00 a.m. CT was 0.996.
- The correlation between the daily returns of the CKBR and standard Kaiko Bitcoin Hourly Rate at 10:00 a.m. CT was 0.999.
- The correlation between the daily returns of the CKER and CME CF Ether Reference Rate at 10:00 a.m. CT was 0.997.
- The correlation between the daily returns of the CKER and standard Kaiko Ether Hourly Rate at 10:00 a.m. CT was 0.999

These daily return correlations of 0.966 and 0.999 for the CKBRT, 0.976 and 0.999 for the CKERT, 0.996 and 0.999 for the CKBR, and 0.997 and 0.999 for the CKER indicate that the prices generated by the Cboe Kaiko Index rates, inclusive of Crypto.com and EDX Markets, remain very strongly aligned with the prices generated by the corresponding digital asset CME CF Reference Rates and standard Kaiko Rates.

CFE also reviewed the differences between the Cboe Kaiko Real-Time rates (CKBRT and CKERT) and the corresponding digital asset daily CME CF Reference Rate, the CoinDesk Price Index rate, and standard Kaiko Bitcoin Real-Time Rate.

- The average difference between the CME CF Bitcoin Reference Rate and CKBRT was 0.26%, and the median difference was 0.18%.
- The average difference between the CoinDesk Bitcoin Price Index and CKBRT was 0.04%, and the median difference was 0.02%.
- The average difference between the standard Kaiko Bitcoin Real-Time Rate and CKBRT

was 0.01%, and the median difference was 0.01%.

- The average difference between the CME CF Ether Reference Rate and CKERT was 0.37%, and the median difference was 0.26%.
- The average difference between the CoinDesk Ether Price Index and CKERT was 0.06%, and the median difference was 0.04%.
- The average difference between the standard Kaiko Ether Real-Time Rate and CKERT was 0.01%, and the median difference was 0.01%.

CFE also reviewed the differences between the Cboe Kaiko Hourly rates (CKBR and CKER) and the corresponding digital asset daily CME CF Reference Rate and standard Kaiko Hourly Rate at 10:00 a.m. CT each day.

- The average difference between the CKBR and CME CF Bitcoin Reference Rate at 10:00 a.m. CT was 0.09%, and the median difference was 0.06%.
- The average difference between the CKBR and standard Kaiko Bitcoin Hourly Rate at 10:00 a.m. CT was 0.01%, and the median difference was 0.01%.
- The average difference between the CKER and CME CF Ether Reference Rate at 10:00 a.m. CT was 0.13%, and the median difference was 0.09%.
- The average difference between the CKER and standard Kaiko Ether Hourly Rate at 10:00 a.m. CT was 0.01%, and the median difference was 0.005%.

CFE's analysis demonstrates that the Cboe Kaiko Indexes, inclusive of Crypto.com and EDX Markets, adequately and consistently represent the price of bitcoin and ether in the spot market for these digital assets as reflected by the high price correlation between, and the marginal price divergence from, other bitcoin and ether spot market indexes that are generally representative of the corresponding spot digital asset market. CFE notes that the marginal differences in reference prices are by and large due to the differences in index methodology calculations between the different indexes.

Additionally, CFE conducted an analysis of the bitcoin and ether trading volume during the final settlement value period (from 9:00 a.m. to 10:00 a.m.) as well as during the one-hour period prior to daily settlement (from 2:00 p.m. to 3:00 p.m.) between the Cboe Kaiko Indexes constituent exchanges, inclusive of Crypto.com and EDX Markets, and the corresponding digital asset MarketVector Coinbase Benchmark Rates, which are comprised only of Coinbase ether and bitcoin spot market trading volume and are used to settle Coinbase bitcoin and ether futures, as applicable. That is, Coinbase bitcoin and ether futures are based on prices sourced from only one digital asset exchange. The percentages below reflect the amount of trading volume taken into consideration in the calculation of the Cboe Kaiko Index in relation to the amount of trading volume taken into consideration in the calculation of the MarketVector Coinbase Benchmark Rate during these time periods.

• 288% of the bitcoin trading volume included in the MarketVector Coinbase Bitcoin Benchmark Rate during the final settlement value period (9:00 a.m. to 10:00 a.m.);

- 295% of the bitcoin trading volume included in the MarketVector Coinbase Bitcoin Benchmark Rate from 2:00 p.m. to 3:00 p.m.;
- 498% of the ether trading volume included in the MarketVector Coinbase Ether Benchmark Rate during the final settlement value period (9:00 a.m. to 10:00 a.m.); and
- 494% of the ether trading volume included in the MarketVector Coinbase Ether Benchmark Rate from 2:00 p.m. to 3:00 p.m.

CFE believes the material level of ether trading volume included in the Cboe Kaiko Indexes along with the correlations between the Cboe Kaiko Indexes and other prominent bitcoin and ether indexes demonstrate that the Cboe Kaiko Indexes, inclusive of Crypto.com and EDX Markets, continue to be representative of the corresponding digital asset spot market and that the digital asset exchange constituents of the Cboe Kaiko Indexes experience sufficient levels of liquidity as compared to another bitcoin and ether index on which competing futures products are currently offered for trading.

CFE believes that the Amendment is consistent with the Designated Contract Market ("DCM") Core Principles under Section 5 of the Act.

In particular, CFE believes that the Amendment is consistent with DCM Core Principle 3 (Contracts Not Readily Susceptible to Manipulation) because of, among other things:

- The Cboe Kaiko Indexes will continue to be calculated from a material amount of bitcoin and ether trading volume across five eligible digital asset exchanges during the final settlement period as well as over the last hour of a trading day, as measured in relation to bitcoin and ether trading volume on the sole constituent digital asset exchange used to calculate a rate that underlies comparable digital asset futures products certified for trading by another DCM to those of FBT and FET futures.
- The Cboe Kaiko Indexes will continue to accurately represent underlying bitcoin and ether spot market prices. As demonstrated and explained above, the Cboe Kaiko Indexes adequately and consistently represent the price of corresponding digital asset spot markets due to high price correlation and insignificant levels of price divergence as compared to other corresponding digital asset spot market indexes.
- o The data-sharing provisions and ISAs in place between CFE and Kaiko and the constituent digital asset exchanges will continue to assist CFE in reviewing for market manipulation and abuses, and in enforcing compliance with CFE rules.
- o Kaiko implements a vetting process for constituent exchanges used for the purpose of any Kaiko index computation, including the Cboe Kaiko Indexes. This process involves the constituent exchanges that comprise the Cboe Kaiko Indexes needing to meet strict regulatory, data quality, and liquidity standards which helps to maintain the integrity and reliability of the Cboe Kaiko Indexes.
- Based on available information, each of the constituent digital asset exchanges in the Cboe Kaiko Indexes has a set of rules or binding terms and conditions for their participants that prohibit participants from engaging in fraudulent acts, market manipulation, and/or abusive practices.

 As each constituent exchange is a regulated as a money services business under the Financial Crimes Enforcement Network, each constituent exchange is required to subject its participants to AML/KYC checks and procedures during the onboarding process.

CFE believes that the impact of the Amendment will be beneficial to the public and market participants. CFE is not aware of any substantive opposing views to the Amendment. CFE hereby certifies that the Amendment complies with the Act and the regulations thereunder. CFE further certifies that CFE has posted a notice of this submission on CFE's website (http://www.cboe.com/us/futures/regulation/rule_filings/cfe/) concurrent with the filing of this submission with the Commission.

Questions regarding this submission may be directed to Rebecca Tenuta at (773) 485-7926 or Arthur Reinstein at (312) 786-7570. Please reference our submission number CFE-2025-030 in any related correspondence.

Cboe Futures Exchange, LLC

/s/ Meaghan Dugan

By: Meaghan Dugan Managing Director