

SUBMISSION COVER SHEET

IMPORTANT: Check box if Confidential Treatment is requested

Registered Entity Identifier Code (optional): 22-472

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): 10/27/22 **Filing Description:** Increase of Single Month and All Month Position Limits for the Bloomberg Commodity Index Futures Contract.

SPECIFY FILING TYPE

Please note only ONE choice allowed per Submission.

Organization Rules and Rule Amendments

- | | | |
|--------------------------|-------------------------------------|------------|
| <input type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Notification | § 40.6(d) |
| <input type="checkbox"/> | Advance Notice of SIDCO Rule Change | § 40.10(a) |
| <input type="checkbox"/> | SIDCO Emergency Rule Change | § 40.10(h) |

Rule Numbers:

New Product

Please note only ONE product per Submission.

- | | | |
|--------------------------|---------------------------------------|------------|
| <input type="checkbox"/> | Certification | § 40.2(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.23(a) |
| <input type="checkbox"/> | Certification Swap Class | § 40.2(d) |
| <input type="checkbox"/> | Approval | § 40.3(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.23(b) |
| <input type="checkbox"/> | Novel Derivative Product Notification | § 40.12(a) |
| <input type="checkbox"/> | Swap Submission | § 39.5 |

Official Product Name:

Product Terms and Conditions (product related Rules and Rule Amendments)

- | | | |
|-------------------------------------|---|----------------------|
| <input checked="" type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Certification Made Available to Trade Determination | § 40.6(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.24(a) |
| <input type="checkbox"/> | Delisting (No Open Interest) | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Approval Made Available to Trade Determination | § 40.5(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.24(c) |
| <input type="checkbox"/> | Approval Amendments to enumerated agricultural products | § 40.4(a), § 40.5(a) |
| <input type="checkbox"/> | “Non-Material Agricultural Rule Change” | § 40.4(b)(5) |
| <input type="checkbox"/> | Notification | § 40.6(d) |

Official Name(s) of Product(s) Affected: See filing.

Rule Numbers: See filing.

October 27, 2022

VIA ELECTRONIC PORTAL

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

Re: CFTC Regulation 40.6(a) Certification. Increase of Single Month and All Month Position Limits for the Bloomberg Commodity Index Futures Contract. CBOT Submission No. 22-472

Dear Mr. Kirkpatrick:

The Board of Trade of the City of Chicago, Inc. (“CBOT” or “Exchange”) certifies to the Commodity Futures Trading Commission (“CFTC” or the “Commission”) an increase of the single month and all month position limits for the Bloomberg Commodity Index Futures contract (the “Contract”), effective on November 14, 2022 as more specifically described in the table below.

Contract Title	CME Globex / CME ClearPort Code	Rulebook Chapter	Current Single / All Month Position Limit	Increased Single / All Month Position Limit
Bloomberg Commodity Index Futures	AW / 70	29	52,000	100,000

The Position Limit, Position Accountability and Reportable Level Table and Header Notes located in the Interpretations and Special Notices Section of Chapter 5 of the CBOT Rulebook (the “Table”) will be amended to reflect the increased single month and all month position limits of the Contract. Exhibit A reflects the amendments to the Table as of November 15, 2022, the effective date of this submission (collectively, the “Rule Amendments”). Exhibit A is provided in blackline format under separate cover.

Exhibit B provides updated information regarding the Contract’s deliverable supply analysis.

The Exchange reviewed the designated contract market core principles (“Core Principles”) as set forth in the Commodity Exchange Act (“Act”) and identified that the Rule Amendments may have some bearing on the following Core Principles:

Contracts Not Readily Subject to Manipulation: The Contract is not readily subject to manipulation due to the deep liquidity and robustness in the underlying cash and futures markets, which provides diverse participation and are based on liquid futures contract months.

Position Limitations or Accountability: The speculative position limits for the Contract as demonstrated in this submission are consistent with the Commission’s guidance.

Availability of General Information: The Exchange will make publicly available the details of the single and all month position limit increases by publishing a Market Surveillance Notice (“MSN”) to the market. The MSN will also be available on CME Group’s website.

The Exchange certifies that the Rule Amendments comply with the Act and regulations thereunder. There were no opposing views to the amendments to Chapter 5.

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

Should you have any questions concerning the above, please contact the undersigned at 212-299-2200 or via e-mail at CMEGSubmissionInquiry@cmegroup.com.

Sincerely,

/s/ Christopher Bowen
Managing Director and Chief Regulatory Counsel

Attachments: Exhibit A – Amendments to CBOT Rulebook Chapter 5 Position Limit, Position Accountability, and Reportable Level Table (attached under separate cover)
Exhibit B – Deliverable Supply Analysis

Exhibit A

CBOT Rulebook

Chapter 5

(“Trading Qualifications and Practices”)

Position Limit, Position Accountability, and Reportable Level Table

(attached under separate cover)

Exhibit B

Deliverable Supply Analysis

Cash Market Overview

The Bloomberg Commodity Index (“BCOM” or “Index”) is designed to be a highly liquid and diversified benchmark for commodity investments. BCOM provides broad-based exposure to commodities and no single commodity or sector dominates the Index.¹

BCOM uses both liquidity data and U.S.-dollar-weighted production data in determining the relative quantities of included commodities. BCOM purports to provide diversified exposure to commodities as an asset class. The explicit inclusion of liquidity as a weighting factor helps to ensure that BCOM can accommodate substantial investment flows.

BCOM primarily relies on liquidity data, or the relative amount of trading activity of a particular commodity, as an important indicator of the value placed on that commodity by financial and physical market participants. BCOM also relies on production data as a useful measure of the importance of a commodity to the world economy. Production data alone, however, may underestimate the economic significance of storable commodities (e.g., gold) at the expense of relatively non-storable commodities (e.g., live cattle). Production data alone may also underestimate the investment value that financial market participants place on certain commodities and/or the amount of commercial activity that is centered on various commodities. Accordingly, production statistics alone do not necessarily provide as accurate a reflection of economic importance as the pronouncements of the markets themselves. BCOM thus relies on data that is both endogenous to the futures markets (liquidity) and exogenous to the futures markets (production) in determining relative weightings.

The Index is composed of commodity futures contracts rather than physical commodities. Unlike equities, which typically entitle the holder to a continuing stake in a corporation, commodity futures contracts normally specify a certain date for delivery of the underlying physical commodity. As the exchange-traded futures contracts that compose the Index approach expiration, they are replaced by similar contracts that have a later expiration. Thus, for example, a futures contract purchased and held in August may specify an October expiration date. As time passes, the contract expiring in October may be replaced by a contract for delivery in December. This process is referred to as “rolling.”

BCOM and all related subindices are cash settled, and, to avoid the physical delivery of commodities from the underlying futures, the indices roll from current to subsequent contracts during the roll period defined in the methodology, which typically falls within the 6th-10th business day of each month.

Weighted average 1 (WAV1) and weighted average 2 (WAV2) are values used in the calculation of the Index. These values are calculated on the basis of prices for the nearest contract month (“Lead Future”) and the next nearest contract month (“Next Future”), respectively. Exhibit 1 below lists the Designated Contract months that are to be used to determine the Lead Future and Next Future for each Index Commodity for this calculation. To illustrate, the Lead Future for Natural Gas Futures in January is March, as is the Next Future, and in February the Lead Future is March and the Next Future is May. Thus, in February, WAV1 will incorporate the price for the March Natural Gas contract, and WAV2 will incorporate the price for the May contract. Note that as a new month begins, the Next Future becomes the Lead Future. Similarly, as a new month begins, the WAV2 from the prior month is redesignated as WAV1.

¹ Explanations of the methodology in this section are adapted and/or copied from BCOM Methodology March 2022 found here: https://assets.bbhub.io/professional/sites/10/BCOM-Methodology-MAR-2022_FINAL.pdf

Exhibit 1: Bloomberg Commodity Index Contract Calendar

Commodity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	(F)	(G)	(H)	(J)	(K)	(M)	(N)	(Q)	(U)	(V)	(X)	(Z)
Natural Gas	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
WTI Crude Oil	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
Brent Crude Oil	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan	Mar
RBOB Gasoline	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
ULS Diesel	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
Live Cattle	Feb	Apr	Apr	Jun	Jun	Aug	Aug	Oct	Oct	Dec	Dec	Feb
Lean Hogs	Feb	Apr	Apr	Jun	Jun	Jul	Aug	Oct	Oct	Dec	Dec	Feb
Wheat (Chicago)	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Dec	Mar
Wheat (KC HRW)	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Dec	Mar
Corn	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Dec	Mar
Soybeans	Mar	Mar	May	May	Jul	Jul	Nov	Nov	Nov	Nov	Jan	Jan
Soybean Oil	Mar	Mar	May	May	Jul	Jul	Dec	Dec	Dec	Dec	Jan	Jan
Soybean Meal	Mar	Mar	May	May	Jul	Jul	Dec	Dec	Dec	Dec	Jan	Jan
Aluminum	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
Copper	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Dec	Mar
Zinc	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
Nickel	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
Lead	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
Tin	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
Gold	Feb	Apr	Apr	Jun	Jun	Aug	Aug	Dec	Dec	Dec	Dec	Feb
Silver	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Dec	Mar
Platinum	Apr	Apr	Apr	Jul	Jul	Jul	Oct	Oct	Oct	Jan	Jan	Jan
Sugar No.11	Mar	Mar	May	May	Jul	Jul	Oct	Oct	Oct	Mar	Mar	Mar
Cotton No.2	Mar	Mar	May	May	Jul	Jul	Dec	Dec	Dec	Dec	Dec	Mar
Coffee "C"	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Dec	Mar
Cocoa	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Dec	Mar
Low Sulphur Gas Oil	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
FCOJ	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Nov	Nov	Jan	Jan
Feeder Cattle	Mar	Mar	May	May	Aug	Aug	Aug	Oct	Oct	Jan	Jan	Jan
Palladium	Mar	Mar	Jun	Jun	Jun	Sep	Sep	Sep	Dec	Dec	Dec	Mar

Once the applicable futures month is determined, the price for each commodity used to calculate WAV1 and WAV2 for each business day is obtained and converted into U.S. dollars. Once settlement prices are obtained for the Lead Future and Next Future for each commodity, the WAVs are calculated in respect of each business day as follows: WAV1 is calculated by multiplying each Commodity Index Multiplier ("CIM") by the settlement price for the respective Lead Future for that day and summing the results. WAV2 is calculated by multiplying each CIM by the settlement price for the respective Next Future for that day and summing the results. The WAVs are rounded to 8 decimal places.

The CIMs are determined using the settlement price for each commodity on the fourth business day of each year, weighted against the multiplier from the previous year.

The BCOM settlement price is calculated on each business day using the applicable settlement prices for WAV1 and WAV2 on the current business day and the prior business day. The suffix "_PS" designates the settlement price for the previous business day, and the suffix "_S" designates the settlement price for the current business day. "BCOM_S" indicates the value of BCOM on the current business day. The manner in which BCOM is calculated on a given business day depends on which of three periods during the month in which this day falls: the period prior to the roll period, the roll period, or the period following the roll period.

The "Roll Period" is used in this Methodology to refer to the sixth through tenth business days of every month.

Prior to the Roll Period

On business day 1 of the month, the Index is calculated as follows:

$$\text{BCOM_S} = \text{BCOM_PS} * \text{WAV1_S} / \text{WAV2_PS}^2$$

On business days 2 through 5 of the month, BCOM is calculated as follows:

$$\text{BCOM_S} = \text{BCOM_PS} * \text{WAV1_S} / \text{WAV1_PS}$$

During the Roll Period

On each day of the Roll Period, the dependence of BCOM is shifted, at the rate of 20% per day, from WAV1 to WAV2 as follows:

Day 1 of Roll Period (business day 6 of the month):

$$\text{BCOM_S} = \text{BCOM_PS} * (\text{WAV1_S} * .80 + \text{WAV2_S} * .20) / (\text{WAV1_PS} * .80 + \text{WAV2_PS} * .20)$$

Day 2 of Roll Period (business day 7 of the month):

$$\text{BCOM_S} = \text{BCOM_PS} * (\text{WAV1_S} * .60 + \text{WAV2_S} * .40) / (\text{WAV1_PS} * .60 + \text{WAV2_PS} * .40)$$

Day 3 of Roll Period (business day 8 of the month):

$$\text{BCOM_S} = \text{BCOM_PS} * (\text{WAV1_S} * .40 + \text{WAV2_S} * .60) / (\text{WAV1_PS} * .40 + \text{WAV2_PS} * .60)$$

Day 4 of Roll Period (business day 9 of the month):

$$\text{BCOM_S} = \text{BCOM_PS} * (\text{WAV1_S} * .20 + \text{WAV2_S} * .80) / (\text{WAV1_PS} * .20 + \text{WAV2_PS} * .80)$$

Day 5 of Roll Period (business day 10 of the month):

$$\text{BCOM_S} = \text{BCOM_PS} * (\text{WAV2_S} / \text{WAV2_PS}) \quad (3)$$

After the Roll Period

For the remainder of the month, the calculation of BCOM will be

$$\text{BCOM_S} = \text{BCOM_PS} * (\text{WAV2_S} / \text{WAV2_PS})$$

As the calculation above shows, during the roll period, the value of BCOM is gradually shifted from the utilization of WAV1 for Index calculation to the utilization of WAV2, at the rate of 20% per business day. Upon the 10th business day, the current Lead Future officially rolls off. Exhibit 2 below represents an example of a roll calculation.

² On the first Business Day of the month, WAV1 is comprised of the same group of commodities that comprised the WAV2 of the prior month. Therefore, when calculating the change in the WAV1, it is divided by the WAV2 from the last Business Day of the prior month. This does not represent a "roll", but rather a redesignation of the WAV2 to WAV1.

Exhibit 2: Roll Period Calculation Example

Unit Date	Business Day	WAV1	Roll Weight1	WAV2	Roll Weight2	BCOM
2-Jan-97	1	1196.764	1	1195.469	0	122.574
3-Jan-97	2	1196.121	1	1195.107	0	122.509
6-Jan-97	3	1214.668	1	1213.927	0	124.408
7-Jan-97	4	1214.314	1	1214.285	0	124.372
8-Jan-97	5	1220.453	1	1220.608	0	125.001
9-Jan-97	6	1218.382	0.8	1219.878	0.2	124.816
10-Jan-97	7	1216.373	0.6	1220.351	0.4	124.712
13-Jan-97	8	1207.51	0.4	1214.11	0.6	123.966
14-Jan-97	9	1209.179	0.2	1214.664	0.8	124.046
15-Jan-97	10	1226.924	0	1230.74	1	125.687
16-Jan-97	11	1212.804	0	1218.939	1	124.482
17-Jan-97	12	1206.098	0	1213.536	1	123.93
21-Jan-97	13	1194.815	0	1203.879	1	122.944
22-Jan-97	14	1197.584	0	1206.081	1	123.169
23-Jan-97	15	1197.393	0	1206.424	1	123.204

Continuing the Natural Gas example, the December 2022, CBOT's BCOM Index Futures contract will be comprised of January 2023 Natural Gas futures contracts, among others, as noted in Exhibit 1 above. These January 2023 Natural Gas contracts will roll to March 2023 contracts over the period of the 6th and 10th business days of December (this equates to the period from December 8, 2022 – December 14, 2022). After December 14, the underlying Natural Gas futures contract within the December 2022 BCOM Index Futures contract will reference the March 2023 as the Lead Future.

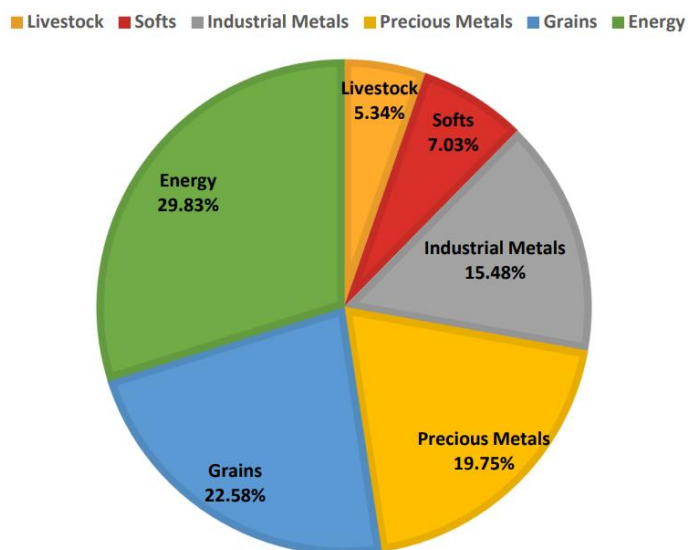
This example illustrates that the underlying futures contracts comprising CME Group futures on the BCOM Index, including its related subindices, will roll to the next available contract month during the 6th-10th business days of each month. The way the Contract is designed, the roll period for the underlying futures will occur just before the overarching futures contract expires. To complete the example, the December 2022 BCOM Index Futures contract will expire on December 21, 2022, the 3rd Wednesday of the contract month. Thus, in conjunction with the roll period, the listing schedule and expiration of the Contract makes it so that there is zero possibility of the underlying contracts going spot.

Each of the Commodities eligible for inclusion in BCOM are assigned to "Commodity Groups." The Commodity Groups, and the Commodities composing each Commodity Group, are as follows:

Commodity Group	Commodities
Energy	Crude Oil (WTI & Brent) Natural Gas RBOB Gasoline Low Sulphur Gas Oil ULS Diesel
Precious Metals	Gold Platinum Silver
Industrial Metals	Aluminum Copper Lead Nickel

	Tin Zinc
Livestock	Live Cattle Lean Hogs
Grains	Corn Soybeans Soybean Oil Soybean Meal Wheat (Chicago and KC HRW)
Softs	Cocoa Coffee Cotton Sugar

The 2022 target weights for BCOM are shown in the pie chart below.



The weights of each sector in BCOM may fluctuate according to market price fluctuations, however, upon each annual rebalancing, the weights are reset to the target weights.

BCOM is rebalanced annually, and it is during this rebalancing that the CIMs are determined. At the start of each calendar year, new CIMs are calculated for each component future in the BCOM Index on the “CIM Determination Date.” The CIM Determination Date is always the 4th business day of each calendar year. After the CIMs are calculated, they remain fixed for the remainder of the year. The CIMs are a critical input to the calculation of the Index and help determine the target weightings for each component future in the Index. Again, the component futures weightings may fluctuate from the target weighting illustrated in the pie chart above throughout the course of the year.

Constituents for the Index are included in Exhibit 3 below with data as of October 19, 2022.³

Exhibit 3 – Bloomberg Commodity Index Constituents

Exchange	Ticker	Constituent Futures Name	Expiration	Weight (%)
CBOT	SMF3	SOYBEAN MEAL	23-Jan	3.23
CBOT	BOF3	SOYBEAN OIL	23-Jan	3.48
CME	LCZ2	CATTLE	22-Dec	3.75

³ Exhibit 3 contains data pulled from the Bloomberg Terminal

CBOT	C Z2	CORN	22-Dec	5.97
NYMEX	CLF3	WTI CRUDE	23-Jan	8.08
COMEX	GCZ2	COMEX GOLD	22-Dec	13.03
COMEX	HGZ2	COMEX COPPER	22-Dec	3.91
NYMEX	HOF3	HEATING OIL PHY	23-Jan	2.74
CBOT	KWZ2	KC WHEAT	22-Dec	1.94
CME	LHZ2	HOGS	22-Dec	1.76
NYMEX	NGF23	NATURAL GAS PHY	23-Jan	12.81
NYMEX	XBF3	RBOB PHY	23-Jan	2.16
CBOT	S F3	SOYBEAN	23-Jan	5.49
COMEX	SIZ2	COMEX SILVER	22-Dec	3.74
CBOT	W Z2	CHI WHEAT	22-Dec	3.05
ICE Europe	COF3	BRENT CRUDE	23-Jan	7.32
ICE Europe	QSF3	LOW SU GASOIL	23-Jan	3.48
LME	LNF3	NICKEL	23-Jan	2.77
LME	LAF23	PRI ALUM	23-Jan	3.00
LME	LXF3	ZINC	23-Jan	2.42
ICE US	SBH3	SUGAR	23-Mar	2.73
ICE US	KCZ2	COFFEE	22-Dec	2.16
ICE US	CTZ2	COTTON	22-Dec	0.98

Analysis of Deliverable Supply

Bloomberg calculates and publishes official closing values for the Bloomberg Commodity Index based on the settlements of the index's component commodity futures contracts. CME Group's BCOM futures settle to the Bloomberg Commodity Index official closing value on a daily basis.

If Bloomberg does not provide a Bloomberg Commodity Index official closing value by 16:00 Central Time (CT), then CBOT's Bloomberg Commodity Index Futures contract (the "Contract") will settle to the most recent index value available.

Under normal market conditions, Bloomberg provides and distributes final settlements for all related Bloomberg Commodity Index Futures contracts with open interest. The final settlement price is based on a special quotation of the Bloomberg Commodity Index which corresponds to the expiring futures contract at the close of business on the third Wednesday of the contract month, or, if the related Index is not published for that day, on the first preceding day on which the Index was published.⁴

The Bloomberg Commodity Index is calculated using the settlement prices of the index's component futures on that day, except under the special conditions noted below:

- If an exchange that lists a component or components of the commodity index is not open on the final settlement day because of a scheduled closing, then the contribution to the final settlement price for the affected component or components shall be based on the settlement quotation of the first preceding trading day; or
- Market Disruption Event ("MDE") shall mean: (a) the termination or suspension of, or material limitation or disruption in the trading of, any futures contract used in the calculation of the Bloomberg Commodity Index on that day, including if due to the closing of an exchange prior to the regularly scheduled closing time of an exchange; (b) the settlement price of any such contract reflects the maximum permitted price change from the previous day's settlement price; or (c) the failure of an exchange to publish official Settlement Prices for any such contract. If an MDE occurs on the expiration date, the Bloomberg Commodity Index contract will settle based on a special value calculated using all component futures prices as of the expiration date that were not subject

⁴ Adapted from CME Group's Settlement Methodology - <https://www.cmegroup.com/confluence/display/EPICSANDBOX/Commodity+Index+Products>

to an MDE and, for any futures contracts which were subject to an MDE, using the next available futures settlement price for which an MDE is no longer in effect, with a delay limited to 10 business days from the original expiration date. If on the 10th business day, an MDE is still in effect for the affected contracts, then UBS Securities LLC and CBOT will agree upon an appropriate estimated futures price or prices to be used to calculate the final adjusted settlement value of the Bloomberg Commodity Index.

To provide a snapshot of the underlying futures that would be used in the final settlement for the Contract, price and volume data are provided in Exhibits 4-7 below for the past four expiration dates corresponding to the 3rd Wednesday of the past four quarterly contract months (Sep 21, 2022; Jun 15, 2022; Mar 16, 2022; Dec 15, 2021). The contract months shown relate to Bloomberg's methodology on which contract months are eligible (please refer back to Exhibit 1 for more detail).

Given that the final settlement price for the Index is calculated from the underlying futures contracts on the final settlement day (i.e., the 3rd Wednesday of the contract month), settlement prices for the underlying futures contracts comprising the Contract are provided below. Data for both the Lead Future and Next Future contract months for each commodity are included. The volume data represents the individual commodity futures contracts volume during the respective settlement window on the final settlement day of the Index.

Exhibit 4: September 21, 2022 Final Settlement – Underlying Futures Settlement Prices and Volume⁵

Contract Month Year (YYYY-MM)	Contract Month Rank	Underlying Futures Product	Commodity Code	Settle Price ⁶	Volume during Settlement Window	Settlement Window
2022-12	Lead	CHICAGO WHEAT	W	903.75	1,206	13:14:00 to 13:15:00 CT
2022-12	Next			903.75	1,206	
2022-12	Lead	CORN	C	685.50	1,734	13:14:00 to 13:15:00 CT
2022-12	Next			685.50	1,734	
2022-11	Lead	LIGHT SWEET CRUDE OIL	CL	82.94	4,170	14:28:00 to 14:30:00 ET
2023-01	Next			81.62	152	
2022-12	Lead	GOLD	GC	1,675.70	973	13:29:00 to 13:30:00 ET
2022-12	Next			1,675.70	97.	
2022-11	Lead	RBOB GASOLINE	RB	2.41	1,151	14:28:00 to 14:30:00 ET
2023-01	Next			2.32	62	
2022-12	Lead	COPPER	HG	3.47	561	12:59:00 to 13:00:00 ET
2022-12	Next			3.47	561	
2022-12	Lead	KC HRW WHEAT	KW	967.00	350	13:14:00 to 13:15:00 CT
2022-12	Next			967.00	350	
2022-12	Lead	LEAN HOG	LN	86.45	688	12:59:30 to 13:00:00 CT
2022-12	Next			86.45	688	
2022-12	Lead	LIVE CATTLE	48	150.75	1,183	12:59:30 to 13:00:00 CT
2022-12	Next			150.75	1,183	
2022-11	Lead	NATURAL GAS	NG	7.83	633	14:28:00 to 14:30:00 ET
2023-01	Next			8.11	90	
2022-11	Lead	NY HEATING OIL	HO	3.26	774	

⁵ CME Group futures price data sourced from Inforsource. Competitor exchange price data and all volume data sourced from Bloomberg Terminal.

⁶ Please note the prices used in the calculation of the Index and all related Subindices are converted from the raw futures settlement prices provided in Exhibits 4-7. The raw settlement prices are provided for purposes of surveillance. The conversions used in the Index calculation for each contract can be found on page 34 of the methodology document.

2023-01	Next			3.15	5	14:28:00 to 14:30:00 ET
2022-12	Lead	SILVER	SI	19.48	417	13:24:00 to
2022-12	Next			19.48	417	13:25:00 ET
2022-11	Lead	SOYBEAN	S	1,461.25	798	13:14:00 to
2023-01	Next			1,467.00	52	13:15:00 CT
2023-03	Lead	SUGAR #11	SB	17.81	874	12:53:00 to
2023-03	Next			17.81	874	12:55:00 ET
2022-12	Lead	COFFEE	KC	221.30	361	12:23:00 to
2022-12	Next			221.30	361	12:25:00 ET
2022-12	Lead	COTTON NO 2	CT	96.92	661	14:14:00 to
2022-12	Next			96.92	661	14:15:00 ET
2023-01	Lead	BRENT CRUDE	CO	87.31	214	19:28:00 to
2023-01	Next			87.31	214	19:30:00 London Time
2022-11	Lead	LOW SU GASOIL	QS	934.50	44	16:28:00 to
2023-01	Next			896.00	13	16:30:00 London Time
2022-11	Lead	LME NICKEL	LN	24,921.00	-	12:20:00 to
2023-01	Next			24,983.00	-	13:25:00 London Time
2022-11	Lead	LME PRI ALUM	LA	2,195.00	5	12:20:00 to
2023-01	Next			2,209.90	-	13:25:00 London Time
2022-11	Lead	LME ZINC	LX	3,110.75	-	12:20:00 to
2023-01	Next			3,084.50	-	13:25:00 London Time

Exhibit 5: June 15, 2022 Final Settlement – Underlying Futures Settlement Prices and Volume

Contract Month Year (YYYY-MM)	Contract Month Rank	Underlying Futures Product	Commodity Code	Settle Price	Volume during Settlement Window	Settlement Window
2022-09	Lead	CHICAGO WHEAT	W	1,063.50	292	13:14:00 to 13:15:00 CT
2022-09	Next			1,063.50	292	
2022-09	Lead	CORN	C	729.00	400	13:14:00 to 13:15:00 CT
2022-09	Next			729.00	400	
2022-09	Lead	LIGHT SWEET CRUDE OIL	CL	110.75	1,058	14:28:00 to 14:30:00 ET
2022-09	Next			110.75	1,058	
2022-08	Lead	GOLD	GC	1,819.60	1,826	13:29:00 to 13:30:00 ET
2022-12	Next			1,839.40	66	
2022-09	Lead	RBOB GASOLINE	RB	3.62	279	14:28:00 to 14:30:00 ET
2022-09	Next			3.62	279	
2022-09	Lead	COPPER	HG	4.18	494	12:59:00 to 13:00:00 ET
2022-09	Next			4.18	494	
2022-09	Lead	KC HRW WHEAT	KW	1,140.25	120	13:14:00 to 13:15:00 CT
2022-09	Next			1,140.25	120	
2022-08	Lead	LEAN HOG	LN	104.33	830	12:59:30 to 13:00:00 CT
2022-10	Next			91.70	555	
2022-08	Lead	LIVE CATTLE	48	136.80	695	12:59:30 to 13:00:00 CT
2022-10	Next			142.23	283	

2022-09	Lead	NATURAL GAS	NG	7.37	375	14:28:00 to 14:30:00 ET
2022-09	Next			7.37	375	
2022-09	Lead	NY HEATING OIL	HO	4.29	206	14:28:00 to 14:30:00 ET
2022-09	Next			4.29	206	
2022-09	Lead	SILVER	SI	21.50	10	13:24:00 to 13:25:00 ET
2022-09	Next			21.50	10	
2022-11	Lead	SOYBEAN	S	1,523.50	515	13:14:00 to 13:15:00 CT
2022-11	Next			1,523.50	515	
2022-10	Lead	SUGAR #11	SB	18.57	1,459	12:53:00 to 12:55:00 ET
2022-10	Next			18.57	1,459	
2022-09	Lead	COFFEE	KC	228.50	233	12:23:00 to 12:25:00 ET
2022-09	Next			228.50	233	
2022-12	Lead	COTTON NO 2	CT	117.92	346	14:14:00 to 14:15:00 ET
2022-12	Next			117.92	346	
2022-09	Lead	BRENT CRUDE	CO	115.47	1,635	19:28:00 to 19:30:00 London Time
2022-11	Next			110.76	1,163	
2022-09	Lead	LOW SU GASOIL	QS	1,250.00	301	16:28:00 to 16:30:00 London Time
2022-09	Next			1,250.00	301	
2022-09	Lead	LME NICKEL	LN	25,854.0 0	-	12:20:00 to 13:25:00 London Time
2022-09	Next			25,854.0 0	-	
2022-09	Lead	LME PRI ALUM	LA	2,591.50	19	12:20:00 to 13:25:00 London Time
2022-09	Next			2,591.50	19	
2022-09	Lead	LME ZINC	LX	3,641.50	-	12:20:00 to 13:25:00 London Time
2022-09	Next			3,641.50	-	

Exhibit 6: March 16, 2022 Final Settlement – Underlying Futures Settlement Prices & Volume

Contract Month Year (YYYY-MM)	Contract Month Rank	Underlying Futures Product	Commodity Code	Settle Price	Volume during Settlement Window	Settlement Window
2022-05	Lead	CHICAGO WHEAT	W	1,069.25	57	13:14:00 to 13:15:00 CT
2022-07	Next			1,042.50	14	
2022-05	Lead	CORN	C	730.00	1,974	13:14:00 to 13:15:00 CT
2022-07	Next			697.00	685	
2022-05	Lead	LIGHT SWEET CRUDE OIL	CL	93.59	1,171	14:28:00 to 14:30:00 ET
2022-07	Next			89.53	121	
2022-06	Lead	GOLD	GC	1,914.30	285	13:29:00 to 13:30:00 ET
2022-06	Next			1,914.30	285	
2022-05	Lead	RBOB GASOLINE	RB	2.95	586	14:28:00 to 14:30:00 ET
2022-07	Next			2.80	15	
2022-05	Lead	COPPER	HG	4.60	553	12:59:00 to 13:00:00 ET
2022-07	Next			4.60	9	
2022-05	Lead	KC HRW WHEAT	KW	1,072.50	5	13:14:00 to 13:15:00 CT
2022-07	Next			1,058.50	28	

2022-06	Lead	LEAN HOG	LN	120.48	595	12:59:30 to 13:00:00 CT
2022-06	Next			120.48	595	
2022-06	Lead	LIVE CATTLE	48	135.53	731	12:59:30 to 13:00:00 CT
2022-06	Next			135.53	731	
2022-05	Lead	NATURAL GAS	NG	4.78	944	14:28:00 to 14:30:00 ET
2022-07	Next			4.88	228	
2022-05	Lead	NY HEATING OIL	HO	2.97	407	14:28:00 to 14:30:00 ET
2022-07	Next			2.83	58	
2022-05	Lead	SILVER	SI	24.71	572	13:24:00 to 13:25:00 ET
2022-07	Next			24.74	12	
2022-05	Lead	SOYBEAN	S	1,649.25	819	13:14:00 to 13:15:00 CT
2022-07	Next			1,626.00	309	
2022-05	Lead	SUGAR #11	SB	18.56	1,555	12:53:00 to 12:55:00 ET
2022-07	Next			18.47	647	
2022-05	Lead	COFFEE	KC	217.50	90	12:23:00 to 12:25:00 ET
2022-07	Next			217.25	49	
2022-05	Lead	COTTON NO 2	CT	119.80	245	14:14:00 to 14:15:00 ET
2022-07	Next			116.00	62	
2022-05	Lead	BRENT CRUDE	CO	98.02	11	19:28:00 to 19:30:00 London Time
2022-07	Next			93.66	11	
2022-05	Lead	LOW SU GASOIL	QS	887.75	3	16:28:00 to 16:30:00 London Time
2022-07	Next			836.75	-	
2022-05	Lead	LME NICKEL	LN	45,697.0 0	-	12:20:00 to 13:25:00 London Time
2022-07	Next			45,585.0 0	-	
2022-05	Lead	LME PRI ALUM	LA	3,257.50	1	12:20:00 to 13:25:00 London Time
2022-07	Next			3,253.25	-	
2022-05	Lead	LME ZINC	LX	3,812.50	-	12:20:00 to 13:25:00 London Time
2022-07	Next			3,805.00	3	

Exhibit 7: December 15, 2021 Final Settlement – Underlying Futures Settlement Prices & Volume

Contract Month Year (YYYY-MM)	Contract Month Rank	Underlying Futures Product	Commodity Code	Settle Price	Volume during Settlement Window	Settlement Window
2022-03	Lead	CHICAGO WHEAT	W	756.00	1,798	13:14:00 to 13:15:00 CT
2022-03	Next			756.00	1,798	
2022-03	Lead	CORN	C	585.75	3,000	13:14:00 to 13:15:00 CT
2022-03	Next			585.75	3,000	
2022-03	Lead	LIGHT SWEET CRUDE OIL	CL	70.36	539	14:28:00 to 14:30:00 ET
2022-03	Next			70.36	539	
2022-02	Lead	GOLD	GC	1,764.50	1,638	13:29:00 to 13:30:00 ET
2022-04	Next			1,766.90	19	
2022-03	Lead	RBOB GASOLINE	RB	2.11	73	

2022-03	Next			2.11	73	14:28:00 to 14:30:00 ET
2022-03	Lead	COPPER	HG	4.18	468	12:59:00 to 13:00:00 ET
2022-03	Next			4.18	468	
2022-03	Lead	KC HRW WHEAT	KW	785.50	793	13:14:00 to 13:15:00 CT
2022-03	Next			785.50	793	
2022-02	Lead	LEAN HOG	LN	79.33	855	12:59:30 to 13:00:00 CT
2022-04	Next			84.20	190	
2022-02	Lead	LIVE CATTLE	48	136.58	1,170	12:59:30 to 13:00:00 CT
2022-04	Next			140.93	448	
2022-03	Lead	NATURAL GAS	NG	3.67	372	14:28:00 to 14:30:00 ET
2022-03	Next			3.67	372	
2022-03	Lead	NY HEATING OIL	HO	2.20	97	14:28:00 to 14:30:00 ET
2022-03	Next			2.20	97	
2022-03	Lead	SILVER	SI	21.55	885	13:24:00 to 13:25:00 ET
2022-03	Next			21.55	885	
2022-03	Lead	SOYBEAN	S	1,265.25	537	13:14:00 to 13:15:00 CT
2022-03	Next			1,265.25	537	
2022-03	Lead	SUGAR #11	SB	19.29	2,182	12:53:00 to 12:55:00 ET
2022-03	Next			19.29	2,182	
2022-03	Lead	COFFEE	KC	237.30	226	12:23:00 to 12:25:00 ET
2022-03	Next			237.30	226	
2022-03	Lead	COTTON NO 2	CT	105.79	410	14:14:00 to 14:15:00 ET
2022-03	Next			105.79	410	
2022-03	Lead	BRENT CRUDE	CO	73.78	1,029	19:28:00 to 19:30:00 London Time
2022-05	Next			73.13	78	
2022-03	Lead	LOW SU GASOIL	QS	630.50	381	16:28:00 to 16:30:00 London Time
2022-03	Next			630.50	381	
2022-03	Lead	LME NICKEL	LN	19,110.0 0	29	12:20:00 to 13:25:00 London Time
2022-03	Next			19,110.0 0	29	
2022-03	Lead	LME PRI ALUM	LA	2,597.00	145	12:20:00 to 13:25:00 London Time
2022-03	Next			2,597.00	145	
2022-03	Lead	LME ZINC	LX	3,270.50	40	12:20:00 to 13:25:00 London Time
2022-03	Next			3,270.50	40	

The Exchange believes that positions of 100,000 contracts of the Contract could be held without exceeding any non-spot single month position limit for any of the component futures contracts. There is no spot month pricing from any component used in the index, so no spot month position limit is specified.

The position limit calculation methodology described below is based on an approach suggested by the Commission and has been previously used to adjust position limit levels for S&P GSCI contracts in 2012 and 2013. (See Chicago Mercantile Exchange Inc. ("CME") Submission No. [13-036](#), dated February 8, 2013.) The same methodology has also been used to determine positions limit levels for Dow Jones–UBS

Roll Select Commodity Index Futures, launched in 2013, as well as Dow Jones-UBS Commodity Index Futures (See CBOT Submission No. [13-232](#), dated June 12, 2013, and CBOT Submission No. [13-494](#), dated October 10, 2013, respectively).

This position limit calculation methodology draws from the BCOM methodology, which utilizes each component's CIM. These CIMs are updated on a yearly basis and are calculated based on the liquidity, production, and settlement prices of each component. Also critical to this calculation is the WAV1 figure as it serves as the "normalizing constant" which can be thought of as a weighting factor for each commodity. The WAV1 figure is 5651.324 and this figure is calculated by multiplying each CIM by the settlement price for the component future for that day (in this case, the prices for each component future on September 21, 2022) and summing the results. Dividing each constituent's CIM by the WAV1 gives us the "Hedge Ratio." To find the Equivalent Position, the Exchange multiplied the Hedge Ratio by an arbitrary index value then divide that product by the component's contract unit, then multiply by the proposed position limit of 100,000 and then finally multiply by the BCOM futures contract multiplier of 100.

The component futures equivalency is a positive function of the value of the BCOM. That is, when the BCOM's value increases, more futures contracts of the underlying components are needed to replicate a position in BCOM. The current value (as of October 19, 2022) of the BCOM is 111.20. However, the highest index value over the whole history of the index is 237.95 set in July 2008. Setting the index value at 237.95 for this analysis makes it extremely unlikely that position limits for any component will be exceeded.

Once the component equivalent positions are calculated, they are then compared to each component's single month limit.⁷ All CME and CBOT products in the Index have single month position limits, in addition to Cotton, and these limits are used in comparison to the equivalent positions. For those products that either have single month accountability levels or no limits/levels (the remaining balance of products in the Index), a hypothetical limit is calculated using open interest of each contract. The hypothetical limit is calculated by finding the average annual open interest ("OI") for each contract over the past two years and using the higher annual figure. In this case, the two time periods observed were Sep. 15, 2020 – Sep. 15, 2021 and Sep. 15, 2021 – Sep. 15, 2022, and for each component, the higher annual average OI figure was used between the two time periods. Once this annual OI figure is calculated, if the figure is over 50,000, the hypothetical limit is calculated by summing 10% of 50,000 and 2.5% for the amount above 50,000. For example, COMEX Silver had an annual average OI figure of 191,801. The hypothetical limit for Silver is thus 8,545 ($0.1 \times 50,000 + 0.025 \times (191,801 - 50,000)$). For those contracts with an annual average OI less than 50,000, the hypothetical limit is simply calculated as 10% of the annual average OI figure.

The equivalent positions were calculated using the OI approach for the following constituent futures: WTI Crude, Heating Oil, Natural Gas, RBOB Gasoline (NYMEX); Gold, Copper, Silver (COMEX); Brent Crude, Low Sulphur Gasoil (ICE U.S.); Nickel, Aluminum, Zinc (LME); Sugar and Coffee (ICE Europe). The NYMEX and COMEX equivalent positions were calculated using a *futures equivalent* open interest figure, whereas the equivalent positions for the LME, ICE U.S., and ICE Europe products were calculated using a *futures-only* open interest figure.

The component equivalencies using 2022 weighting variables for 100,000 BCOM futures contracts with a multiplier of \$100 when the index value is set at the Index high of 237.9531 are as follows:

⁷ The following links contain references for the constituent futures position limits/accountability levels. CME Group position limit page: <https://www.cmegroup.com/market-regulation/position-limits.html>; LME accountability level memo: <https://www.lme.com/api/sitecore/MemberNoticesSearchApi/Download?id=1278bb3c-4a12-4afd-9065-7a494deabf47>; ICE U.S. Market Resource page: <https://www.theice.com/futures-us/market-resources>; ICE Europe Market Resource page: <https://www.theice.com/futures-europe/market-resources>.

A	B	C	D	E	F	G	H	I	J	K	L	M	O	Q	R	S
1	BCOM Index															
2	Contract Multiplier	100		As of	9/21/2022		BCOM Limit	100,000								
3	Index Value	237.9531														
4																
5						WAV1	5651.324									
6	Exchange	Symbol	Constituent	Month	Unit	Contract Unit	2022 CIM*	As of Price	Weight %	Hedge Ratio	Equivalent Position	Non-Spot Single Month Limit or Calculated Hypothetical Limit	Difference	5,651	Higher Annual Avg FE or Futures-Only OI**	Use as hypothetical Limit in Column L for products without Limits
7	CBOT	SM	SOYBEAN MEAL	22-Dec	s/ston	100	0.43715955	438.8	3.39%	0.00007736	1841	16900	15,059.31	191,8256105	Limit	
8	CBOT	BO	SOYBEAN OIL	22-Dec	c/lb	60000	274.8530348	0.65	3.16%	0.04863516	1929	17400	15,471.19	178,6544726	Limit	
9	CME	LC	CATTLE	22-Dec	c/lb	40000	133.0704101	1.5075	3.55%	0.02354677	1401	6300	4,899.24	200,6036432	Limit	
10	CBOT	C	CORN	22-Dec	c/bu	5000	47.26883853	6.855	5.73%	0.00836244	3980	57800	53,820.26	323,959381	Limit	
11	NYMEX	CL	WTI CRUDE	22-Nov	\$/bbl	1000	5.20063777	82.94	7.63%	0.00092025	2190	80973	78,783.26	431,3408966	Accountability	3088921
12	COMEX	GC	COMEX GOLD	22-Dec	\$/oz	100	0.42792562	1675.7	12.69%	0.00007572	1802	22059	20,256.97	717,0749614	Accountability	732351
13	COMEX	HG	COMEX COPPER	22-Dec	c/lb	25000	63.27818201	3.467	3.88%	0.01119706	1066	9875	8,808.81	219,385457	Accountability	244982
14	NYMEX	HO	HEATING OIL PHY	22-Nov	c/gal	42000	42.77649928	3.2615	2.47%	0.00756929	429	14141	13,712.26	139,5155524	Accountability	415644
15	CBOT	KW	KC WHEAT	22-Dec	c/bu	5000	11.04990952	9.67	1.89%	0.00195526	931	12000	11,069.48	106,8516581	Limit	
16	CME	LH	HOGS	22-Dec	c/lb	40000	107.9717216	0.8945	1.65%	0.01910566	1137	6000	4,953.44	93,34155332	Limit	
17	NYMEX	NG	NATURAL GAS PHY	22-Nov	\$/mmbtu	10000	110.6376072	7.83	15.32%	0.01957729	4658	36593	30,934.23	866,2924644	Accountability	1273708
18	NYMEX	NB	RBOB PHY	22-Nov	c/gal	42000	48.00511233	2.4124	2.05%	0.00849449	481	13599	13,117.61	115,807533	Accountability	393955
19	CBOT	S	SOYBEAN	22-Nov	c/bu	5000	21.29967754	14.6125	5.61%	0.00376897	1794	27300	25,506.32	311,2415381	Limit	
20	COMEX	SI	COMEX SILVER	22-Dec	c/oz	5000	10.91913049	19.48	3.76%	0.00193214	920	8545	7,625.50	212,7046619	Accountability	191801
21	CBOT	W	CHI WHEAT	22-Dec	c/bu	5000	19.4754306	9.0375	3.11%	0.00344617	1640	19300	17,659.95	176,009204	Limit	
22	ICE Eur	CO	BRENT CRUDE	23-Jan	\$/bbl	1000	4.33489702	87.31	6.70%	0.00076706	1825	12458	10,633.19	378,4798588	Neither	348337
23	ICE Eur	QS	LOW SU GASOIL	22-Nov	\$/mton	100	0.19217715	934.5	3.18%	0.00003401	809	6554	5,745.13	179,5895467	Neither	112172
24	LME	LN	NICKEL	22-Nov	\$/mton	6	0.0667833	24921	2.99%	0.00000120	476	1542	1,065.74	169,0466193	Accountability	15518
25	LME	LA	PRI ALUM	22-Nov	\$/mton	25	0.07417965	2195	2.88%	0.00001313	1249	5156	3,906.33	162,8243316	Accountability	56395
26	LME	LX	ZINC	22-Nov	\$/mton	25	0.04469693	3110.75	2.46%	0.00000791	753	1539	786.30	139,040976	Accountability	15341
27	ICE US	SB	SUGAR	23-Mar	c/lb	112000	784.1159508	0.1781	2.47%	0.13874908	2948	12051	9,103.38	139,6510508	Accountability	332049
28	ICE US	KC	COFFEE	22-Dec	c/lb	37500	60.21517077	2.213	2.36%	0.01065506	676	4785	4,108.48	133,2561729	Accountability	47846
29	ICE US	CT	COTTON	22-Dec	c/lb	50000	66.88653209	0.9692	1.15%	0.01183555	563	5000	4,436.74	64,8264269	Limit	
30																
31	CIM = Commodity Index Multiplier															
32	*source: https://assets.bbhub.io/professional/sites/10/BCOM-Methodology-MAR-2022_FINAL.pdf															
33	**Annual average OI for the affected NYMEX and COMEX products are calculated using FE data; annual average OI for the affected ICE and LME products are calculated using futures-only data															

The largest component equivalency is for natural gas futures. The calculated single-month limit for that component is 35,593 contracts so the limit of 100,000 index futures contracts results in an equivalency (4,658 contracts) that is under the calculated limit. For all other components, the component equivalencies are lower than their respective position limits.

CBOT proposes a single and all month position limit of 100,000 index futures contracts of the Contract. The reporting limit for the Contract shall remain 200 contracts.