

tpSEF Inc.
101 Hudson Street
Jersey City
NJ 07302-3908
USA

tel +1 201 557 5000
fax +1 201 557 5995

web www.tullettprebon.com

June 11, 2019

By CFTC Portal

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

Re: *tpSEF Inc. – Regulation 40.2 Certification of Commodity Index Swaps – BCOM Live Cattle ER (tpSEF Submission #19-65P)*

Dear Mr. Kirkpatrick:

tpSEF Inc. (“tpSEF”) hereby notifies the Commodity Futures Trading Commission (the “Commission”) of its intent to list Commodity Index Swaps – BCOM Live Cattle ER (the “Contract”) on tpSEF’s swap execution facility. tpSEF intends to list this Contract on June 13, 2019.

Pursuant to Commission Regulation 40.2, this submission includes:

- i. The intended listing date – June 13, 2019;
- ii. A certification by tpSEF that: (a) the Contract complies with the Commodity Exchange Act, as amended, and the Commission regulations thereunder; and (b) concurrent with this submission, tpSEF posted on its website: (i) a notice of pending certification of the Contract, and (ii) a copy of this submission, attached as Exhibit A;
- iii. The terms and conditions of the Contract, attached as Exhibit B; and
- iv. An explanation and analysis of the Contract’s compliance with applicable core principles and Commission regulations, attached as Exhibit C.

tpSEF is listing the Contract by virtue of updating the terms and conditions of Commodity Index Swaps originally submitted to the Commission for self-certification pursuant to Commission Regulation 40.2 on May 23, 2019. A copy of the terms and conditions marked to show changes from the version submitted on May 23, 2019 is attached as Exhibit D.

tpSEF will be separately updating Appendix B to its Rulebook (tpSEF Inc. Swap Specifications) to reflect this change.

Mr. Christopher J. Kirkpatrick
June 11, 2019
Page 2

Questions regarding this submission should be directed to Brian Donnelly, Chief Compliance Officer, at (201) 984-6956 or by email at bddonnelly@tullettprebon.com.

Very truly yours,

tpSEF Inc.

By: 

Name: Brian D. Donnelly

Title: Chief Compliance Officer

Date: June 11, 2019

Enclosures

cc: CFTC Division of Market Oversight (dmosubmissions@cftc.gov)
Nancy Markowitz, CFTC (nmarkowitz@cftc.gov)

EXHIBIT A

CERTIFICATIONS PURSUANT TO SECTION 5c OF THE COMMODITY EXCHANGE ACT,
7 U.S.C. §7A-2 AND COMMODITY FUTURES TRADING COMMISSION REGULATION 40.2,
17 C.F.R. §40.2

tpSEF Inc. (“tpSEF”) hereby certifies that: (i) Commodity Index Swaps – BCOM Live Cattle ER (the “Contract”) complies with the Commodity Exchange Act, 7 U.S.C. §1 *et seq.* and Commodity Futures Trading Commission (“Commission”) regulations thereunder; and (ii) concurrent with this submission, tpSEF posted on its website: (a) a notice of pending certification of the Contract with the Commission and (b) a copy of this submission.

tpSEF Inc.

By: 

Name: Brian D. Donnelly

Title: Chief Compliance Officer

Date: June 11, 2019

EXHIBIT B

Terms and Conditions

Summary:	This covers commodity index swaps (each, a “Commodity Index Swap”).
Limitations on Available Selections and Default Settings:	<p>The terms under which a Commodity Index Swap may be traded are shown below and in the attached tables.</p> <p>For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.</p> <p>In many cases there are normal “vanilla” terms on which the parties will transact. These are shown as “Default” and will apply unless the parties vary them.</p>
Incorporated Standards:	<p>This contract description incorporates by reference the following industry standard documentation and standards:</p> <p>2005 ISDA Commodity Derivatives Definitions (“Commodity Definitions”)</p>
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Commodity
ISDA OTC Base Product:	Index
ISDA OTC Transaction type:	Swap
ISDA OTC Settlement type:	Cash
Further Limitations:	None
Terms:	
Trade Date:	As agreed by the parties.
Effective Date:	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention.
Effective Date Business Days:	None, unless specified by the parties.
Effective Date Business Day Convention:	None, unless specified by the parties from among the Available Business Day Conventions.
Termination Date:	As specified by the parties.
Termination Date Business Days:	None, unless specified by the parties.
Termination Date Business Day Convention:	None, unless specified by the parties from among the Available Business Day Conventions.
Commodity:	As specified by the parties from among the Available Commodity Indices.
Total Notional Quantity:	The sum of the Notional Quantities per Calculation Period.
Notional Quantity per Calculation Period:	As specified by the parties on a per-Calculation-Period Basis.
Calculation Periods:	As specified by the parties.
Calculation Period Business Days:	None, unless specified by the parties.
Calculation Period Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.

Payment Dates:	In relation to each Calculation Period, as specified by the parties, each such day being subject to adjustment in accordance with the Payment Date Business Day Convention.
Payment Date Business Days:	The Business Days specified for the relevant Commodity, plus any additional Business Days specified by the parties from among the Available Business Days.
Payment Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Fixed Amount:	
Fixed Price Payer:	As specified by the parties.
Fixed Price or Fixed Amount:	As specified by the parties, expressed as a rate or overall.
Floating Amount:	
Floating Price Payer:	As specified by the parties.
Floating Price:	In relation to each Calculation Period, the level of the specified Available Commodity Index at the end of the such Calculation Period less the level of the specified Available Commodity Index at the start of the such Calculation Period, the result of which is divided by the level of the specified Available Commodity Index at the start of the such Calculation Period.
Market Disruption:	
Market Disruption Events:	Unless otherwise specified by the parties, per the Commodity Definitions.
Additional Market Disruption Events:	As specified by the parties.
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the Commodity Definitions.
Disruption Fallbacks:	Unless otherwise specified by the parties, per the Commodity Definitions.
Fallback Reference Price:	None, unless specified by the parties.
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the Commodity Definitions.
Calculation Agent:	As agreed by the parties.

Commodity Index Swap Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY
EUR	Euro	EUTA
GBP	Sterling	GBLO

Commodity Index Swap Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

Commodity Index Swap Available Commodity Indices

Abbr	Name
BCOM	BCOM ER
BCOMF1	BCOM F1 ER
BCOMF2	BCOM F2 ER
BCOMF3	BCOM F3 ER
BCOMF4	BCOM F4 ER
BCOMF5	BCOM F5 ER
BCOMF6	BCOM F6 ER
BCOMAG	BCOM Agriculture ER
BCOMEN	BCOM Energy ER
BCOMGR	BCOM Grains ER
BCOMIN	BCOM Industrial Metals ER
BCOMLI	BCOM Livestock ER
BCOMPE	BCOM Petroleum ER
BCOMPR	BCOM Precious Metals ER
BCOMSO	BCOM Softs ER
BCOMXAG	BCOM ex-Agriculture ER
BCOMXAL	BCOM ex-Agriculture and Livestock ER
BCOMXE	BCOM ex-Energy ER
BCOMXGR	BCOM ex-Grains ER
BCOMXIM	BCOM ex-Industrial Metals ER
BCOMXLI	BCOM ex-Livestock ER
BCOMXPE	BCOM ex-Petroleum ER
BCOMXPM	BCOM ex-Precious Metals ER
BCOMXSO	BCOM ex-Softs ER
BCOMAL	BCOM Aluminum ER
BCOMCO	BCOM Brent Crude ER
BCOMCC	BCOM Cocoa ER
BCOMKC	BCOM Coffee ER
BCOMHG	BCOM Copper ER
BCOMCN	BCOM Corn ER
BCOMCT	BCOM Cotton ER
BCOMFC	BCOM Feeder Cattle ER
BCOMGO	BCOM Gas Oil ER
BCOMGC	BCOM Gold ER
BCOMHO	BCOM Heating Oil ER
BCOMPB	BCOM Lead ER
BCOMLH	BCOM Lean Hogs ER
BCOMLC	BCOM Live Cattle ER
BCOMNG	BCOM Natural Gas ER
BCOMNI	BCOM Nickel ER

Abbr	Name
BCOMOJ	BCOM Orange Juice ER
BCOMPL	BCOM Platinum ER
BCOMSI	BCOM Silver ER
BCOMSM	BCOM Soybean Meal ER
BCOMBO	BCOM Soybean Oil ER
BCOMSY	BCOM Soybeans ER
BCOMSB	BCOM Sugar ER
BCOMSN	BCOM Tin ER
BCOMRB	BCOM Unleaded Gas ER
BCOMWH	BCOM Wheat ER
BCOMKW	BCOM Kansas Wheat ER
BCOMCL	BCOM WTI Crude Oil ER
BCOMZS	BCOM Zinc ER
BCOMAU	BCOM AUD ER
BCOMEU	BCOM EUR ER
BCOMGB	BCOM GBP ER
BCOMCH	BCOM CHF ER
BCOMJY	BCOM JPY ER
BCOMALC	BCOM Aluminum Capped ER
BCOMKCC	BCOM Coffee Capped ER
BCOMHGC	BCOM Copper Capped ER
BCOMCLC	BCOM WTI Crude Oil Capped ER
BCOMCNC	BCOM Corn Capped ER
BCOMLCC	BCOM Cattle Capped ER
BCOMCTC	BCOM Cotton Capped ER
BCOMGCC	BCOM Gold Capped ER
BCOMLHC	BCOM Lean Hogs Capped ER
BCOMHOC	BCOM Heating Oil Capped ER
BCOMKWC	BCOM Kansas Wheat Capped ER
BCOMRS	BCOM Roll Select
SPGCBO	S&P GSCI Soybean Oil
SPGCBR	S&P GSCI Brent Crude
SPGCCI	S&P GSCI
SPGCCL	S&P GSCI Crude Oil
SPGCGC	S&P GSCI Gold
SPGCIN	S&P GSCI Industrial Metals
SPGCNG	S&P GSCI Natural Gas
SPGCSB	S&P GSCI Sugar
SPGCSI	S&P GSCI Silver
SG3MCI	S&P GSCI 3 Month Forward

Commodity Index Swap Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective Date	Latest Effective Date	Earliest Termination Date	Latest Termination Date
N/A	N/A	N/A	N/A	N/A

Commodity Index Swap Notional Quantities per Calculation Period

Currency	Minimum	Increment	Maximum	Default
USD	10,000,000	1,000,000	N/A	N/A

EXHIBIT C

EXPLANATION AND ANALYSIS OF THE CONTRACTS' COMPLIANCE WITH APPLICABLE CORE PRINCIPLES AND COMMISSION REGULATIONS

As required by Commodity Futures Trading Commission ("Commission") Regulation 40.2(a), the following analysis, in narrative form, demonstrates that Commodity Index Swaps (the "Contracts") are consistent with the requirements of the Commodity Exchange Act, as amended (the "Act"), and the Commission regulations and guidance thereunder (in particular, Appendix B to Part 37 and Appendix C to Part 38).

Appendix B to Part 37

CORE PRINCIPLE 3 OF SECTION 5H OF THE ACT—SWAPS NOT READILY SUSCEPTIBLE TO MANIPULATION; CORE PRINCIPLE 4 OF SECTION 5H OF THE ACT—MONITORING OF TRADING AND TRADE PROCESSING

The swap execution facility shall permit trading only in swaps that are not readily susceptible to manipulation.

(a) Guidance.

(1) In general, a swap contract is an agreement to exchange a series of cash flows over a period of time based on some reference price, which could be a single price, such as an absolute level or a differential, or a price index calculated based on multiple observations. Moreover, such a reference price may be reported by the swap execution facility itself or by an independent third party. When listing a swap for trading, a swap execution facility shall ensure a swap's compliance with Core Principle 3, paying special attention to the reference price used to determine the cash flow exchanges. Specifically, Core Principle 3 requires that the reference price used by a swap not be readily susceptible to manipulation. As a result, when identifying a reference price, a swap execution facility should either: Calculate its own reference price using suitable and well-established acceptable methods or carefully select a reliable third-party index.

(2) The importance of the reference price's suitability for a given swap is similar to that of the final settlement price for a cash-settled futures contract. If the final settlement price is manipulated, then the futures contract does not serve its intended price discovery and risk management functions. Similarly, inappropriate reference prices cause the cash flows between the buyer and seller to differ from the proper amounts, thus benefitting one party and disadvantaging the other. Thus, careful consideration should be given to the potential for manipulation or distortion of the reference price.

The Contracts, commodity index swaps, are cash-settled agreements between two counterparties to exchange a fixed price for a floating price based on a specified commodity index at one or more specified dates. The fixed leg is thus determined at the start of a Contract and remains unchanged throughout the life of the swap. The floating leg, however, is based on the level of the relevant commodity index during the calculation period.

The Contracts are not susceptible to manipulation for a number of reasons. First, all of the essential terms of the Contracts, other than the floating price, are agreed to at the Effective Date of the Contract. Second, the floating price is based on a publically available and well-known commodity benchmark index maintained by a third party. The relevant commodity index is based on comprehensive, well-established and transparent rules that govern, among other things, the selection of the futures contracts included in the

index, the rebalancing of the index, the calculation procedures and timing of the pricing of the index. In addition, the relevant commodity index is comprised of futures contracts on physical commodities which makes the market for the commodity index itself deep and liquid. Finally, tpSEF Inc. (“tpSEF”) has established rules and an enforcement infrastructure to prevent manipulation. tpSEF staff conduct real-time market surveillance and the National Futures Association (“NFA”) provides regulatory services on a T+1 basis. NFA’s services include comprehensive trade practice and market surveillance services (the scope of which can be found in the Regulatory Services Agreement between NFA and tpSEF submitted to the Commission as part of tpSEF’s swap execution facility application) (note that the foregoing also demonstrates compliance with Core Principle 4).

(3) For swaps that are settled by physical delivery or by cash settlement refer to the guidance in Appendix C to Part 38 of this chapter—Demonstration of Compliance that a Contract is not Readily Susceptible to Manipulation, section b(2) and section c(4), respectively.

Please see below.

Appendix C to Part 38 - Demonstration of Compliance That a Contract Is Not Readily Susceptible to Manipulation

(c) Futures Contracts Settled by Cash Settlement. (1) Cash settlement is a method of settling certain futures or option contracts whereby, at contract expiration, the contract is settled by cash payment in lieu of physical delivery of the commodity or instrument underlying the contract. An acceptable specification of the cash settlement price for commodity futures and option contracts would include rules that fully describe the essential economic characteristics of the underlying commodity (e.g., grade, quality, weight, class, growth, issuer, maturity, source, rating, description of the underlying index and index's calculation methodology, etc.), as well as how the final settlement price is calculated. In addition, the rules should clearly specify the trading months and hours of trading, the last trading day, contract size, minimum price change (tick size) and any limitations on price movements (e.g., price limits or trading halts).

Essential Economic Characteristics of the Contract Terms

The terms and conditions of the Contracts match the terms of commodity index swaps that are commonly offered in the market and are listed in Exhibit B.

Calculation of Cash Settlement Price

The cash settlement price will be calculated in the following manner:

The floating amount payer will pay any appreciation in the level of the index (expressed as a percentage) times the notional quantity per calculation period.

The floating amount receiver will pay any depreciation in the level of the index (expressed as a percentage) times the notional quantity per calculation period plus the product of a fixed rate times the notional quantity per calculation period.

(2) Cash settled contracts may be susceptible to manipulation or price distortion. In evaluating the susceptibility of a cash-settled contract to manipulation, a designated contract market should consider the size and liquidity of the cash market that underlies the listed contract in a manner that

follows the determination of deliverable supply as noted above in (b)(1). In particular, situations susceptible to manipulation include those in which the volume of cash market transactions and/or the number of participants contacted in determining the cash-settlement price are very low. Cash-settled contracts may create an incentive to manipulate or artificially influence the data from which the cash-settlement price is derived or to exert undue influence on the cash-settlement price's computation in order to profit on a futures position in that commodity. The utility of a cash-settled contract for risk management and price discovery would be significantly impaired if the cash settlement price is not a reliable or robust indicator of the value of the underlying commodity or instrument. Accordingly, careful consideration should be given to the potential for manipulation or distortion of the cash settlement price, as well as the reliability of that price as an indicator of cash market values. Appropriate consideration also should be given to the commercial acceptability, public availability, and timeliness of the price series that is used to calculate the cash settlement price. Documentation demonstrating that the settlement price index is a reliable indicator of market values and conditions and is commonly used as a reference index by industry/market agents should be provided. Such documentation may take on various forms, including carefully documented interview results with knowledgeable agents.

The Contracts operate in a liquid market with numerous participants. Also, the cash settlement price is not easily susceptible to manipulation or distortion since, as to the index-based component, the composition of the index is announced by the index sponsor, and, in the case of the fixed rate leg, the method of determining the price is based on factors that are fixed at the start of a Contract (*i.e.*, payment frequency, day count conventions, fixed interest rate, floating reset dates) and the applicable reference rate. Each of the available indices is widely accepted by market participants and data is readily accessible through numerous news outlets.

(3) Where an independent, private-sector third party calculates the cash settlement price series, a designated contract market should consider the need for a licensing agreement that will ensure the designated contract market's rights to the use of the price series to settle the listed contract.

(i) Where an independent, private-sector third party calculates the cash settlement price series, the designated contract market should verify that the third party utilizes business practices that minimize the opportunity or incentive to manipulate the cash-settlement price series. Such safeguards may include lock-downs, prohibitions against derivatives trading by employees, or public dissemination of the names of sources and the price quotes they provide. Because a cash-settled contract may create an incentive to manipulate or artificially influence the underlying market from which the cash-settlement price is derived or to exert undue influence on the cash-settlement computation in order to profit on a futures position in that commodity, a designated contract market should, whenever practicable, enter into an information-sharing agreement with the third-party provider which would enable the designated contract market to better detect and prevent manipulative behavior.

As described above, the cash settlement price is calculated through a cash settlement method that is not easily susceptible to manipulation.

(ii) Where a designated contract market itself generates the cash settlement price series, the designated contract market should establish calculation procedures that safeguard against potential attempts to artificially influence the price. For example, if the cash settlement price is derived by the designated contract market based on a survey of cash market sources, the designated contract market should maintain a list of such entities which all should be reputable sources with knowledge

of the cash market. In addition, the sample of sources polled should be representative of the cash market, and the poll should be conducted at a time when trading in the cash market is active.

Please see above regarding the calculation of the cash settlement price.

(iii) The cash-settlement calculation should involve computational procedures that eliminate or reduce the impact of potentially unrepresentative data.

(iv) The cash settlement price should be an accurate and reliable indicator of prices in the underlying cash market. The cash settlement price also should be acceptable to commercial users of the commodity contract. The registered entity should fully document that the settlement price is accurate, reliable, highly regarded by industry/market agents, and fully reflects the economic and commercial conditions of the relevant designated contract market.

Please see above regarding the calculation of the cash settlement price.

(v) To the extent possible, the cash settlement price should be based on cash price series that are publicly available and available on a timely basis for purposes of calculating the cash settlement price at the expiration of a commodity contract. A designated contract market should make the final cash settlement price and any other supporting information that is appropriate for release to the public, available to the public when cash settlement is accomplished by the derivatives clearing organization. If the cash settlement price is based on cash prices that are obtained from non-public sources (e.g., cash market surveys conducted by the designated contract market or by third parties on behalf of the designated contract market), a designated contract market should make available to the public as soon as possible after a contract month's expiration the final cash settlement price as well as any other supporting information that is appropriate or feasible to make available to the public.

The various index levels are readily available via a number of sources.

(4) Contract terms and conditions requirements for futures contracts settled by cash settlement.

(i) An acceptable specification of the terms and conditions of a cash-settled commodity contract will also set forth the trading months, last trading day, contract size, minimum price change (tick size) and daily price limits, if any.

Please see Exhibit B for the Contracts' terms and conditions.

(A) *Commodity Characteristics*: The terms and conditions of a commodity contract should describe the commodity underlying the contract.

The terms and conditions of the Contract specifically list the commodities on which counterparties can choose to base the Contract.

(B) *Contract Size and Trading Unit*: An acceptable specification of the trading unit would be a contract size that is consistent with customary transactions in the cash market. A designated

contract market may opt to set the contract size smaller than that of standard cash market transactions.

The size of each Contract is consistent with customary transaction sizes in the market.

(C) *Cash Settlement Procedure:* The cash settlement price should be reliable, acceptable, publicly available, and reported in a timely manner as described in paragraphs (c)(3)(iv) and (c)(3)(v) of this appendix C.

The cash settlement procedure and an explanation of how, in the context of these Contracts, it is not readily susceptible to manipulation, is described above.

(D) *Pricing Basis and Minimum Price Fluctuation (Minimum Tick):* The minimum price increment (tick) should be set a level that is equal to, or less than, the minimum price increment commonly observed in cash market transactions for the underlying commodity. Specifying a futures' minimum tick that is greater than the minimum price increment in the cash market can undermine the risk management utility of the futures contract by preventing hedgers from efficiently establishing and liquidating futures positions that are used to hedge anticipated cash market transactions or cash market positions.

As agreed between counterparties.

(E) *Maximum Price Fluctuation Limits:* Designated contract markets may adopt price limits to: (1) Reduce or constrain price movements in a trading day that may not be reflective of true market conditions but might be caused by traders overreacting to news; (2) Allow additional time for the collection of margins in times of large price movements; and (3) Provide a "cooling-off" period for futures market participants to respond to bona fide changes in market supply and demand fundamentals that would lead to large cash and futures price changes. If price-limit provisions are adopted, the limits should be set at levels that are not overly restrictive in relation to price movements in the cash market for the commodity underlying the futures contract. For broad-based stock index futures contracts, rules should be adopted that coordinate with New York Stock Exchange ("NYSE") declared Circuit Breaker Trading Halts (or other market coordinated Circuit Breaker mechanism) and would recommence trading in the futures contract only after trading in the majority of the stocks underlying the index has recommenced.

As agreed between counterparties.

(F) *Last Trading Day:* Specification of the last trading day for expiring contracts should be established such that it occurs before publication of the underlying third-party price index or determination of the final settlement price. If the designated contract market chooses to allow trading to occur through the determination of the final settlement price, then the designated contract market should show that futures trading would not distort the final settlement price calculation.

The last trading day will be the last day of the calculation period, which is set by the individual counterparties.

(G) *Trading Months:* Trading months should be established based on the risk management needs of commercial entities as well as the availability of price and other data needed to calculate the cash

settlement price in the specified months. Specification of the last trading day should take into consideration whether the volume of transactions underlying the cash settlement price would be unduly limited by occurrence of holidays or traditional holiday periods in the cash market. Moreover, a contract should not be listed past the date for which the designated contract market has access to use a proprietary price index for cash settlement.

Payments are settled in accordance with the payment frequency of the particular Contract, which is a flexible term.

(H) *Speculative Limits*: Specific rules and policies for speculative position limits are set forth in part 150 and/or part 151, as applicable, of the Commission's regulations.

None required by Parts 150 or 151.

(I) *Reportable Levels*: Refer to § 15.03 of the Commission's regulations.

tpSEF will adhere to the applicable reporting levels set forth in § 15.03 of the Commission's regulations.

(J) *Trading Hours*: Should be set by the designated contract market to delineate each trading day.

Each Contract is traded twenty-three hours a day from Sunday to Friday. The Contracts are not traded between 5:30 p.m. and 6:30 p.m. Eastern Time.

EXHIBIT D

**Terms and Conditions
 (Marked Against May 23, 2019 Version)**

Summary:	This covers commodity index swaps (each, a “Commodity Index Swap”).
Limitations on Available Selections and Default Settings:	<p>The terms under which a Commodity Index Swap may be traded are shown below and in the attached tables.</p> <p>For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.</p> <p>In many cases there are normal “vanilla” terms on which the parties will transact. These are shown as “Default” and will apply unless the parties vary them.</p>
Incorporated Standards:	<p>This contract description incorporates by reference the following industry standard documentation and standards:</p> <p>2005 ISDA Commodity Derivatives Definitions (“Commodity Definitions”)</p>
Product Type/ISDA OTC Taxonomy:	
ISDA OTC Asset Class:	Commodity
ISDA OTC Base Product:	Index
ISDA OTC Transaction type:	Swap
ISDA OTC Settlement type:	Cash
Further Limitations:	None
Terms:	
Trade Date:	As agreed by the parties.
Effective Date:	The date specified by the parties, adjusted in accordance with any applicable Business Day Convention.
Effective Date Business Days:	None, unless specified by the parties.
Effective Date Business Day Convention:	None, unless specified by the parties from among the Available Business Day Conventions.
Termination Date:	As specified by the parties.
Termination Date Business Days:	None, unless specified by the parties.
Termination Date Business Day Convention:	None, unless specified by the parties from among the Available Business Day Conventions.
Commodity:	As specified by the parties from among the Available Commodity Indices.
Total Notional Quantity:	The sum of the Notional Quantities per Calculation Period.
Notional Quantity per Calculation Period:	As specified by the parties on a per-Calculation-Period Basis.
Calculation Periods:	As specified by the parties.
Calculation Period Business Days:	None, unless specified by the parties.
Calculation Period Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.

Payment Dates:	In relation to each Calculation Period, as specified by the parties, each such day being subject to adjustment in accordance with the Payment Date Business Day Convention.
Payment Date Business Days:	The Business Days specified for the relevant Commodity, plus any additional Business Days specified by the parties from among the Available Business Days.
Payment Date Business Day Convention:	As specified by the parties from among the Available Business Day Conventions.
Fixed Amount:	
Fixed Price Payer:	As specified by the parties.
Fixed Price or Fixed Amount:	As specified by the parties, expressed as a rate or overall.
Floating Amount:	
Floating Price Payer:	As specified by the parties.
Floating Price:	In relation to each Calculation Period, the level of the specified Available Commodity Index at the end of the such Calculation Period less the level of the specified Available Commodity Index at the start of the such Calculation Period, the result of which is divided by the level of the specified Available Commodity Index at the start of the such Calculation Period.
Market Disruption:	
Market Disruption Events:	Unless otherwise specified by the parties, per the Commodity Definitions.
Additional Market Disruption Events:	As specified by the parties.
Consequences of Market Disruption Events:	Unless otherwise specified by the parties, per the Commodity Definitions.
Disruption Fallbacks:	Unless otherwise specified by the parties, per the Commodity Definitions.
Fallback Reference Price:	None, unless specified by the parties.
Maximum Days of Disruption:	Unless otherwise specified by the parties, per the Commodity Definitions.
Calculation Agent:	As agreed by the parties.

Commodity Index Swap Available Currencies and Required Business Days

Three Letter Currency Code (ISDA/ISO)	Currency Name (ISDA)	Basic Business Day Locations For Currency (FpML Codes)
USD	United States Dollars	USNY
EUR	Euro	EUTA
GBP	Sterling	GBLO

Commodity Index Swap Available Business Day Conventions

ISDA Name
Following
Modified/Modified Following
Nearest
Preceding

Commodity Index Swap Available Commodity Indices

Abbr	Name
BCOM	BCOM ER
BCOMBO	BCOM Soybean Oil ER
BCOMCL	BCOM WTI Crude Oil ER
BCOMCO	BCOM Brent Crude ER
BCOMF1	BCOM F1 ER
BCOMF2	BCOM F2 ER
BCOMF3	BCOM F3 ER
BCOMF4	BCOM F4 ER
BCOMF5	BCOM F5 ER
BCOMF6	BCOM F6 ER
BCOMGC BCOMAG	BCOM Gold Agriculture ER
BCOMHO BCOME	BCOM Heating Oil Energy ER
BCOMGR	BCOM Grains ER
BCOMIN	BCOM Industrial Metals ER
BCOMLI	BCOM Livestock ER
BCOMPE	BCOM Petroleum ER
BCOMPR	BCOM Precious Metals ER
BCOMSO	BCOM Softs ER
BCOMXAG	BCOM ex-Agriculture ER
BCOMXAL	BCOM ex-Agriculture and Livestock ER
BCOMXE	BCOM ex-Energy ER
BCOMXGR	BCOM ex-Grains ER
BCOMXIM	BCOM ex-Industrial Metals ER
BCOMXLI	BCOM ex-Livestock ER
BCOMXPE	BCOM ex-Petroleum ER
BCOMXPM	BCOM ex-Precious Metals ER
BCOMXSO	BCOM ex-Softs ER
BCOMAL	BCOM Aluminum ER
BCOMCO	BCOM Brent Crude ER
BCOMCC	BCOM Cocoa ER
BCOMKC	BCOM Coffee ER
BCOMHG	BCOM Copper ER
BCOMCN	BCOM Corn ER
BCOMCT	BCOM Cotton ER
BCOMFC	BCOM Feeder Cattle ER
BCOMGO	BCOM Gas Oil ER
BCOMGC	BCOM Gold ER
BCOMHO	BCOM Heating Oil ER

Abbr	Name
BCOMPB	BCOM Lead ER
BCOMLH	BCOM Lean Hogs ER
BCOMLC	BCOM Live Cattle ER
BCOMNG	BCOM Natural Gas ER
BCOMRS BCOMN I	BCOM Roll Select Nickel ER
BCOMSB BCOMO J	BCOM Sugar Orange Juice ER
BCOMPL	BCOM Platinum ER
BCOMSI	BCOM Silver ER
BCOMSM	BCOM Soybean Meal ER
BCOMBO	BCOM Soybean Oil ER
BCOMSY	BCOM Soybeans ER
BCOMSB	BCOM Sugar ER
BCOMSN	BCOM Tin ER
BCOMRB	BCOM Unleaded Gas ER
BCOMWH	BCOM Wheat ER
BCOMKW	BCOM Kansas Wheat ER
BCOMCL	BCOM WTI Crude Oil ER
BCOMZS	BCOM Zinc ER
BCOMAU	BCOM AUD ER
BCOMEU	BCOM EUR ER
BCOMGB	BCOM GBP ER
BCOMCH	BCOM CHF ER
BCOMJY	BCOM JPY ER
BCOMALC	BCOM Aluminum Capped ER
BCOMKCC	BCOM Coffee Capped ER
BCOMHGC	BCOM Copper Capped ER
BCOMCLC	BCOM WTI Crude Oil Capped ER
BCOMCNC	BCOM Corn Capped ER
BCOMLCC	BCOM Cattle Capped ER
BCOMCTC	BCOM Cotton Capped ER
BCOMGCC	BCOM Gold Capped ER
BCOMLHC	BCOM Lean Hogs Capped ER
BCOMHOC	BCOM Heating Oil Capped ER
BCOMKWC	BCOM Kansas Wheat Capped ER
BCOMRS	BCOM Roll Select
SPGCBO	S&P GSCI Soybean Oil
SPGCBR	S&P GSCI Brent Crude
SPGCC	S&P GSCI
SPGCCL	S&P GSCI Crude Oil
SPGCGC	S&P GSCI Gold

Mr. Christopher J. Kirkpatrick

June 11, 2019

Page 19

Abbr	Name
SPGCIN	S&P GSCI Industrial Metals
SPGCNG	S&P GSCI Natural Gas
SPGCSB	S&P GSCI Sugar
SPGCSI	S&P GSCI Silver
SG3MCI	S&P GSCI 3 Month Forward

Commodity Index Swap Earliest and Latest Effective and Termination Dates

Currency	Earliest Effective Date	Latest Effective Date	Earliest Termination Date	Latest Termination Date
N/A	N/A	N/A	N/A	N/A

Commodity Index Swap Notional Quantities per Calculation Period

Currency	Minimum	Increment	Maximum	Default
USD	10,000,000	1,000,000	N/A	N/A