

May 1, 2018

VIA SEF & DCO COMMISSION PORTALS

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

**Re: Commission Regulation 40.6(a) – Rule Certification
LedgerX LLC Submission No. 18-12
Confidential Treatment Requested by LedgerX LLC as to Appendix C**

Dear Mr. Kirkpatrick:

LedgerX LLC (“LedgerX”) hereby notifies the Commodity Futures Trading Commission (the “Commission”), pursuant to Section 5c(c) of the Commodity Exchange Act (the “CEA”) and Commission Regulation 40.6(a), that it is certifying the attached changes and amendments to its Rulebook and Operations Manual. The attached changes and amendments will become effective no earlier than May 15, 2018.

A concise explanation and analysis of the changes and amendments and their compliance with applicable provisions of the CEA, including the Core Principles, and the Commission’s Regulations, is attached hereto as Appendix A. A marked copy of the changes and amendments to the Rulebook is designated as Appendix B. A marked copy of the changes and amendments to the Operations Manual is designated as Appendix C.

LedgerX certifies that the changes and amendments comply with the CEA and Commission Regulations thereunder. LedgerX additionally certifies that it has concurrently posted a copy of this submission letter and the non-confidential attachments hereto on LedgerX’s website at <https://ledgerx.com/>. LedgerX is not aware of any or substantive opposing views to the changes and amendments.

* * * *



Please contact the undersigned at (917) 935-6727 or alex@ledgerx.com if you have any questions or you would otherwise like to discuss this further.

Sincerely,

A handwritten signature in black ink, reading 'Alex C. Levine', enclosed in a thin black rectangular border.

Alex C. Levine
Chief Compliance Officer & Head of Legal
LedgerX LLC



Appendix A

| Rule/Section | Explanations | Core Principle or other CEA Provision, Commission Regulation and/or Commission Staff Letter |
|---|--|--|
| Various Sections and Rules Throughout Rulebook and Operations Manual: --See Rulebook Redline at pp. 59, 61, 63-64, 112, 115, 118, and 121. --Operations Manual Redline at pp. 2, 27-30, and 46. | LedgerX is implementing 24-hour trading on its exchange for approved products. As a result, various rules and sections in the Rulebook and Operations Manual have been modified to reflect these expanded trading hours. Additionally, instances where order cancelations or other actions were based upon the daily close of the exchange have been modified to comport with operational practices that will exist once 24-hour trading goes into effect. | DCO Core Principles C, D, & I and SEF Core Principles 2, 4, & 14 – This change enhances fair and open access to the LedgerX exchange by allowing authorized participants to trade approved products and have such trades processed and cleared any time on a 24-hour basis, which aligns with the fact that bitcoin can be transferred or utilized at any time on the blockchain. LedgerX has constructed appropriate technological and operational infrastructure to ensure proper risk management and systems safeguards are in place to institute these expanded trading hours. |

Appendix B

[SEE RULEBOOK REDLINE]



LedgerX LLC

Rules

version 2.21

~~February 12~~ May 15, 2018

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Rules of LedgerX LLC

Introduction

The Commodity Exchange Act requires that LedgerX LLC comply with the core principles set forth in the Commodity Exchange Act, as amended, and the regulations, rules and orders of the Commodity Futures Trading Commission, and establish, monitor and enforce its Rules relating to its business as a Swap Execution Facility and Derivatives Clearing Organization. The following Rules of LedgerX LLC pertain to the trading and clearing of Exchange Contracts on LedgerX LLC and the rights and Obligations of Participants in connection with such activity.

CHAPTER 1 Definitions

Rule 1.1 Definitions

As used in these Rules, the following terms have the following respective meanings:

Affiliate: A Person who, directly or indirectly, controls, is controlled by, or is under common control with another Person.

Appeals Committee: A committee of the Board composed of Directors pursuant to Rule 2.11, and that acts in an adjudicative role and fulfills various adjudicative responsibilities and duties as described in Chapter 9.

Applicable Law: With respect to any Person, any statute, law, regulation, rule or ordinance of any government, governmental or self-regulatory authority applicable to such Person, including without limitation the CEA and CFTC Regulations and any laws and regulations relating to economic or trade sanctions.

As soon as technologically practicable: As soon as possible, taking into consideration the prevalence, implementation and use of technology by comparable market participants.

Authorized Representative: With respect to any Participant that is an entity, an officer of such entity who is responsible for supervising all activities of the Participant, its Authorized User(s) and its employees relating to Transactions, and for providing information regarding the Participant to the Exchange upon request of the Exchange.

Authorized User: A natural person who is either employed by or is an agent of a Participant and who is authorized by the Participant to trade on the Exchange on behalf

of the Participant, and in the case of FCM Participants, intermediate Orders and clear Transactions on behalf of Cleared Swaps Customers, provided that the Participant maintains supervisory authority over such individual's trading activities, but Authorized Users shall not include (i) employees or agents of Cleared Swaps Customers or (ii) Cleared Swap Customers that are natural persons.

Board: The Board of Directors of the Exchange.

Bitcoin: A Digital Currency.

Business Day: Any day on which the Exchange is open for trading.

CEA: The Commodity Exchange Act, as amended.

CFTC Regulations: The regulations of the CFTC, as in effect from time to time, including any Commission-issued orders or interpretive or no-action letters.

Chief Compliance Officer: The individual appointed by the Board to serve as the Exchange's chief compliance officer.

Chief Executive Officer: The individual appointed by the Board to serve as the Exchange's chief executive officer.

Chief Risk Officer: The individual appointed by the Board to serve as the Exchange's chief risk officer.

Cleared Swaps Customer: As defined in §22.1 of CFTC Regulations.

Cleared Swaps Customer Account: As defined in §22.1 of CFTC Regulations and, for purposes of these Rules, shall include an account established and maintained for a Cleared Swaps Customer by the Exchange on the Exchange's books and records to which a financial asset is or may be credited in accordance with these Rules and such other procedures as the Exchange may implement from time to time.

Collateral Account: With respect to: (1) Participants, including an FCM Participant's Cleared Swaps Proprietary Accounts, each Participant's and FCM Participant's Participant Account and an account opened and maintained by the Exchange at a Settlement Bank (a) to which a Participant or FCM Participant transfers funds and (b) from which the Exchange is authorized to debit fees and margin or option premium, and debit or credit settlement payments, as applicable; and (2) FCM Participants, each FCM Participant's Cleared Swaps Customer Account and an account opened and maintained by the Exchange at a Settlement Bank (a) to which an FCM Participant transfers Cleared

Swaps Customer Collateral and (b) from which the Exchange is authorized to debit fees and margin or option premium, and debit or credit settlement payments, as applicable.

Cleared Swaps Customer Collateral: As defined in §22.1 of CFTC Regulations.

Cleared Swaps Proprietary Account: As defined in §22.1 of CFTC Regulations.

Clearing Privileges: Any right granted by the Exchange to a Participant to clear Exchange Contracts.

Commission or CFTC: The U.S. Commodity Futures Trading Commission.

Compliance Department: The department, reporting to the Chief Compliance Officer, that is responsible for compliance, investigations and disciplinary proceedings.

Critical Security Parameters or CSPs: Exchange-assigned private authentication tokens such as automated passwords and cryptographic keys used to access the Platform together with the User ID for security purposes.

Customer: (i) A Participant that has authorized an Executing Participant to execute Orders on behalf of such Participant on or subject to the Rules of the Exchange, provided that such Participant shall not be deemed to be a Customer with respect to the clearing or settlement of its Transactions or its margin or option premium associated with such Transaction; (ii) a Cleared Swaps Customer; or (iii) both an Executing Participant's Customer and a Cleared Swaps Customer, in each case as the context requires.

Customer ID: The identifying code an FCM Participant assigns to a Cleared Swaps Customer and includes in each Cleared Swaps Customer Order to identify the individual customer on whose behalf the FCM Participant is exercising Trading Privileges and/or Clearing Privileges.

Customer Type Indicator Code or CTI: A symbol that indicates the buying and selling customer types, as required by CFTC Regulation 1.35(g).

Derivatives Clearing Organization or DCO: As set forth in Section 1a(15) of the CEA and registered with the Commission pursuant to Section 5b of the CEA and in accordance with the provisions of Part 39 of CFTC Regulations.

Designated Contract Market: A board of trade designated by the CFTC as a contract market under Section 5 of the CEA and in accordance with the provisions of Part 38 of CFTC Regulations.

Digital Currency: A medium of exchange stored and transferred electronically, including, but not limited to, Bitcoin.

Director: A member of the Board.

Disciplinary Action: Any inquiry, investigation, disciplinary proceeding, appeal from a disciplinary proceeding, summary imposition of fines, summary suspension or other summary action.

Disciplinary Panel: A panel appointed by the Regulatory Oversight Committee pursuant to Rule 2.11 to act in an adjudicative role and fulfill various adjudicative responsibilities and duties as described in Chapter 9.

Discretionary Order: As defined in Rule 8.10.

Eligible Contract Participant or ECP: As set forth in Section 1a(18) of the CEA and as further defined in CFTC Regulation 1.3(m).

Emergency: Any occurrence or circumstance which, in the opinion of the Board, the Chief Executive Officer, the Chief Compliance Officer, or a designee duly authorized to issue such an opinion, requires immediate action, and which threatens, or may threaten, such things as the fair and orderly trading in, the liquidation, settlement, delivery, or the integrity of, any Exchange Contract, or the timely collection and payment of funds in connection with clearing and settlement by the Exchange, including without limitation:

- a any circumstance that may materially affect the performance of any Exchange Contract, including without limitation failure of the payment system, the bankruptcy or insolvency of any Participant, or any actual, attempted or threatened theft or forgery of, or other interference with, the Underlying or delivery or transfer thereof;
- b any action taken by any United States or foreign regulatory, self-regulatory, judicial, arbitral, or governmental (whether national, state or municipal) or quasi-governmental authority, or any agency, department, instrumentality, or subdivision thereof; or other Person exercising, or entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power; or any other entity registered with the Commission, board of trade, market or facility which may have a direct impact on trading on the Exchange or clearing and settlement of any Exchange Contract;

- c any actual, attempted or threatened corner, squeeze, congestion, or undue concentration of positions in any Exchange Contract;
- d any other circumstance that may have a severe, adverse effect upon the functioning of the Exchange; or
- e any manipulative or attempted manipulative activity.

Emergency Action: An action deemed to be necessary or appropriate to respond to an Emergency and taken pursuant to Rule 2.12.

Emergency Rules: Procedures or rules adopted in response to an Emergency pursuant to Rule 2.12.

Exchange: The LedgerX LLC Swap Execution Facility and Derivatives Clearing Organization.

Exchange Contract: Any derivative contract, including an option contract or swap agreement, based on one or more Underlying and listed for trading on the Exchange or subject to the Rules.

Exchange Contract Specifications: The terms and conditions of an Exchange Contract as initially published in the Rules and posted on the Website and thereafter as published in the Rules, posted on the Website and sent in Participant Notices.

Exchange Official: A Director, Officer, committee member, or such other individual as the Board may designate from time to time.

Exchange Personnel: An Exchange employee, consultant of the Exchange, contractor of the Exchange or agent of the Exchange.

Exchange Pre-Trade Telecommunication Systems: The Exchange's designated telecommunications systems (e.g., telephone and instant messaging) used for pre-trade communications permitted in accordance with these Rules, access to which is provided to Participants by the Exchange.

Exchange Representative: Any Exchange Official, Exchange employee, consultant of the Exchange, contractor of the Exchange or agent of the Exchange.

Executing Participant: A Participant that has executed a Participant Application and Agreement and is authorized to enter into Orders and Transactions for its own account and is authorized to execute Orders as agent for other Participants and is registered with

the Commission as a futures commission merchant, introducing broker, commodity pool operator or commodity trading advisor, or is exempt from registration as such.

FCM Participant: A Participant that is registered with the Commission as a Futures Commission Merchant and as a swap firm and to whom the Exchange has granted Trading Privileges and Clearing Privileges with respect to its Cleared Swaps Proprietary Account and Cleared Swaps Customers.

Futures Commission Merchant or FCM: As defined in Section 1a(28) of the CEA and in CFTC Regulation 1.3(p).

Independent Software Vendor or ISV: A Person that makes available to Participants a system or platform offering smart order routing, front-end trading applications, aggregation, or a combination of the foregoing, but that does not provide Participants the ability to effect Swaps on such system or platform.

LedgerPrime: As defined in Rule 2.5.

Legal Entity Identifier or LEI: The identifying code that is required of each counterparty to any swap subject to the CFTC's jurisdiction and that is used in all recordkeeping and all swap data reporting pursuant to Part 45 of CFTC Regulations, including any predecessor identifiers and including the Global Markets Entity Identifier or GMEI, which is the current identifier required by the CFTC until the establishment of a global Legal Entity Identifier system. LEIs must be renewed on an annual basis.

Life Cycle Event: Any event that would result in either a change to a primary economic term of a Swap or to any primary economic terms data previously reported to a Swap Data Repository in connection with a Swap. Examples of such events include, without limitation, a counterparty change resulting from an assignment or novation; a partial or full termination of the Swap; a change to the end date for the Swap; a change in the cash flows or rates originally reported; availability of a LEI for a Swap counterparty previously identified by name or by some other identifier; or a corporate action affecting a security or securities on which the swap is based (e.g., a merger, dividend, stock split, or bankruptcy). Life Cycle Event data means all of the data elements necessary to fully report any Life Cycle Event.

Liquidity Provider: As defined in Chapter 4.

Liquidity Provider Agreement: An agreement between the Exchange and a Liquidity Provider that must be executed for a Participant to act as a Liquidity Provider.

Market Participant Director: A Director who has been found by the Board to be an authorized representative of a Participant and suitable to be a Director pursuant to Section 5b(c)(2)(Q) of the CEA.

Matching Engine: The set of algorithms through which Orders are matched.

Material Relationship: As set forth in Rule 2.2F.

NFA: The National Futures Association.

Nominating Committee: The committee of the Board constituted in accordance with Rule 2.10.

Notice of Charges: As set forth in Rule 9.4.

Novation: The process by which a party to a Swap transfers all of its rights, liabilities, duties and obligations under the Swap to a new legal party other than the counterparty to the Swap. The transferee accepts all of the transferor's rights, liabilities, duties and obligations under the swap. A Novation is valid as long as the transferor and the remaining party to the Swap are given notice, and the transferor, transferee and remaining party to the Swap consent to the transfer.

Obligation: Any Rule, order or procedure issued by the Exchange, including a Participant Notice or other requirement implemented by the Exchange under the Rules (including each term and condition of an Exchange Contract), as well as any contractual obligations between, on the one hand, a Person, and on the other hand, the Exchange, and any Order or Transaction entered into by a Participant or its Authorized User.

OFAC: The Office of Foreign Assets Control of the U.S. Department of the Treasury.

Officer: An individual as set forth in Rule 2.3.

Operating Agreement: The Limited Liability Company Operating Agreement of the Exchange, as it may be modified from time to time.

Order: Either a bid or an offer for an Exchange Contract entered on the Platform or subject to the Rules.

Participant: A Person that has executed the Participant Application and Agreement and is authorized to enter into Orders and Transactions for its own account. As used in the

Rules, the term Participant includes an FCM Participant, an Executing Participant and a Liquidity Provider unless the context requires otherwise. A Participant must be an ECP to be eligible to transact Swaps on the Exchange's Swap Execution Facility.

Participant Account: An account established and maintained for a Participant by the Exchange on its books and records to which a financial asset is or may be credited in accordance with these Rules and such other procedures as the Exchange may implement from time to time.

Participant Application and Agreement: An application submitted by an applicant for Participant status and an agreement between the Exchange and a Participant that must be executed for a Participant to gain access to the Exchange for the entry and execution of Orders and/or clearance of Transactions.

Participant Committee: The committee of the Board constituted in accordance with Rule 2.9.

Participant Notice: A communication sent by or on behalf of the Exchange to all Participants in accordance with Rule 2.17.

Participant Portal: The vehicle through which Participants send and receive messages to or from the Exchange and other Participants, update account and contact information, and submit deposit and withdrawal notifications.

Permitted Transaction: Any transaction involving a Swap that is not subject to the trade execution requirement in Section 2(h)(8) of the CEA.

Person: As defined in Section 1a(38) of the CEA and in CFTC Regulation 1.3(u).

Platform: The electronic trading facility operated by the Exchange to provide Participants with the ability to execute Orders and Transactions from the interaction of multiple bids and multiple offers within a pre-determined, non-discretionary automated trade matching and execution algorithm.

Position Limit: The maximum number of positions, either net long or net short, in one Series or a combination of various Series with the same Underlying that may be held or controlled by a Participant as prescribed by the Exchange or the Commission.

Proprietary Information: As set forth in Rule 11.3A.

Public Director: A Director who has been found by the Board to have no Material Relationship with the Exchange in accordance with Rule 2.2F.

Public dissemination and publicly disseminate: To publish and make available Swap transaction and pricing data in a non-discriminatory manner, through the Internet or other electronic data feed that is widely published (in a manner that is freely available and readily accessible to the public) and in machine-readable electronic format.

Regulatory Agency: Any government body, including the Commission, and any organization, whether domestic or foreign, granted authority under statutory or regulatory provisions to regulate its own activities and the activities of its members, and includes LedgerX LLC, any other clearing organization or contract market, and the NFA.

Regulatory Data: Trade data and related information or other market or proprietary data that a Participant submits to the Exchange for the purpose of fulfilling regulatory obligations.

Regulatory Oversight Committee: The committee of the Board constituted in accordance with Rule 2.7.

Required Swap Continuation Data: As set forth in CFTC Regulation 45.1.

Required Swap Creation Data: As set forth in CFTC Regulation 45.1.

Required Transaction: Any transaction involving a Swap that is subject to the trade execution requirement in Section 2(h)(8) of the CEA.

Regulatory Swap Data: Includes (i) Swap Transaction and Pricing Data, (ii) Required Swap Creation Data and (iii) Required Swap Continuation Data.

Reporting Counterparty: As set forth in Part 45 of CFTC Regulations and means the Participant that is designated as the Reporting Counterparty pursuant to Rule 5.1.

Respondent: Any Person subject to a Disciplinary Action and such Person's legal counsel or representative.

Risk Management Committee: The committee appointed by the Board and constituted in accordance with Rule 2.8.

Rules: These rules of the Exchange, as in effect and as may be amended from time to time.

Self-Regulatory Organization: As set forth in CFTC Regulation 1.3(ee) and includes a DCO.

Series: All Exchange Contracts having identical terms, including Settlement Date and the value or range of values of an Underlying or category of asset class.

Settlement Bank: A depository approved by the Exchange as an acceptable location for depositing Participant funds or Cleared Swaps Customer Collateral, as applicable.

Settlement Bank Business Day: A day a Settlement Bank is open for business.

Settlement Date: A Business Day on which: (1) a Participant properly tenders to the Exchange an exercise notice, resulting in the delivery of the Underlying and payment on the next Settlement Bank Business Day following the exercise; or (2) the Exchange automatically closes out and settles a Participant's Exchange Contracts that offset one another. An Exchange Contract that is an option and that has not been exercised on or before the last trading day will expire with no value.

Swap: An Exchange Contract that is a swap as defined in Section 1a(47) of the CEA and as further defined by CFTC Regulation 1.3(xxx), and shall include Exchange Contracts that are options as set forth in the Exchange Contract Specifications.

Swap Data Repository or SDR: As set forth in Section 1a(48) of the CEA and registered with the Commission pursuant to Section 21 of the CEA and in accordance with Part 49 of CFTC Regulations.

Swap Execution Facility or SEF: As set forth in Section 1a(50) of the CEA and registered with the Commission pursuant to Section 5h of the CEA and in accordance with the provisions of Part 37 of CFTC Regulations.

Swap Transaction and Pricing Data: Any data required to be reported under Part 43 of CFTC Regulations.

Trading Hours: The hours during which Orders may be entered on the Exchange or subject to the Rules, as set forth in Rule 5.6, and as may be revised from time to time, by the Exchange as disclosed on the Website and through Participant Notices.

Trading Privilege: Any right granted by the Exchange to a Participant to transmit Orders for an Exchange Contract.

Transaction: Any purchase or sale of any Exchange Contract made on the Exchange or pursuant to the Rules.

UCC: The Uniform Commercial Code as in effect in the State of New York.

Underlying: The index, rate, risk, measure, instrument, differential, indicator, value, contingency, commodity, occurrence, or extent of an occurrence that shall determine the amount payable or deliverable under an Exchange Contract.

Unique Swap Identifier or USI: The unique swap identifier, which shall be created, transmitted, and used for each swap executed on LedgerX as provided in CFTC Regulation 45.5.

User ID: The unique identifier registered with the Exchange that the Exchange assigns to an Authorized User, and which is included on each Order to enable the Exchange to identify the Person entering such Orders, and, with respect to an Order entered by an Executing Participant on behalf of a Customer, the Customer.

Website: The Exchange home page or a website to which the Exchange home page has a link.

Rule 1.2 Rules of Construction

For purposes of these Rules, the following rules of construction shall apply:

1. Words conveying a singular number include the plural number, where the context permits, and vice versa.
2. References to any Regulatory Agency include any successor Regulatory Agency.
3. If, for any reason, a Rule is found or determined to be invalid or unenforceable by a court of law, the Commission or another governmental or quasi-governmental agency with supervisory authority, such Rule shall be considered severed from the Rules and all other Rules shall remain in full force and effect.
4. All references to time are to the local time in New York, New York unless expressly provided otherwise.
5. All terms defined in the UCC and not otherwise defined herein shall have the respective meanings accorded to them therein.
6. In the event of a conflict between these Rules and a non-disclosure agreement between the Exchange or an Affiliate of the Exchange and a Participant or Customer, these Rules shall govern.

7. In the event of a conflict between these Rules and the CEA or CFTC Regulations, the applicable provision of the CEA and/or CFTC Regulation shall govern.

CHAPTER 2 Exchange Governance

Rule 2.1 Ownership

The Exchange is a Delaware limited liability company. The management and operation of the Exchange is governed by the Operating Agreement and the Rules. Participant status does not confer any equity interest or voting right in the Exchange.

Rule 2.2 Board

- A. The Board shall, subject to applicable provisions in the Operating Agreement:
 1. Be the governing body of the Exchange;
 2. Be constituted, and shall constitute its committees or subcommittees, to permit consideration of the views of market participants;
 3. Have charge and control of all property of the Exchange;
 4. Provide, acquire and maintain adequate Exchange offices and facilities;
 5. Fix, determine and levy all Participant or other fees when necessary;
 6. Determine the Exchange Contracts and the Exchange Contract Specifications;
 7. Adopt, amend or repeal any Rules, with the input of Officers and committees or subcommittees;
 8. Have the power to act in Emergencies as detailed in Rule 2.12; and
 9. Have the power to call for review, and to affirm, modify, suspend or overrule, any and all decisions and actions of the Officers, committees or subcommittees related to the day-to-day business operations of the Exchange.
- B. Any authority or discretion by the Rules vested in any Officer or delegated to any committee or subcommittee shall not be construed to deprive the Board of such

authority or discretion and, in the event of a conflict, the determination of the matter by the Board shall prevail.

- C. A majority of the Directors serving on the Board, including at least one Public Director, shall constitute a quorum for the transaction of business of the Board. At all times when the Board is conducting business at a meeting of the Board, a quorum of the Board must be present at such meeting, and the Board may act only by the decision of a majority of the Directors constituting a quorum of the Board by vote at a meeting, by unanimous written consent without a meeting, or as otherwise set forth in the Operating Agreement.
- D. The Board shall comprise the number of Directors set forth in the Operating Agreement, which shall include Public Directors and Market Participant Directors in at least the number or percentage required under the CEA or CFTC Regulations, but in any event, (i) no less than two Directors shall be Public Directors and (ii) no less than two Directors shall be Market Participant Directors. Each Director (including Public Directors and Market Participant Directors) shall be appointed in accordance with the Operating Agreement, and shall serve until his or her successor is duly appointed, or until his or her earlier resignation or removal, with or without cause.
- E. Each Director is entitled to indemnification pursuant to the Operating Agreement with respect to matters relating to the Exchange.
- F. To qualify as a Public Director, an individual must be found, by the Board and on the record, to have no Material Relationship, as defined below, with the Exchange. The Board must make such finding at the time the Public Director is elected and as often as necessary in light of all circumstances relevant to such Public Director, but in no case less than annually. A Material Relationship is one that reasonably could affect the independent judgment or decision-making of the Director. The Board need not consider previous service as a Director of the Exchange to constitute a Material Relationship. A Director shall be considered to have a Material Relationship with the Exchange if any of the following circumstances exist or have existed within the past year:

1. such Director is or was an Officer or an employee of the Exchange, or an officer or an employee of an Affiliate of the Exchange; such Director is or was a Participant; or
 2. such Director is or was a director, an officer, or an employee of a Participant.
- G. If any of the immediate family of a Director, i.e., spouse, parents, children, and siblings, in each case, whether by blood, marriage, or adoption, or any person residing in the home of the Director or that of his or her immediate family have a Material Relationship as defined above, then that Material Relationship is deemed to apply to such Director.
- H. The Board shall have procedures, as may be adopted by the Board from time to time, to remove a Director where the conduct of such Director is likely to be prejudicial to the sound and prudent management of the Exchange.
- I. The Board shall review its performance and that of its individual Directors annually and shall consider periodically using external facilitators for such review.

Rule 2.3 Officers

- A. The Board shall appoint a Chief Executive Officer, Chief Compliance Officer, Chief Risk Officer and such other officers of the Exchange as it may deem necessary or appropriate from time to time.
- B. The Chief Compliance Officer must:
1. have the background and skills appropriate for fulfilling the responsibilities of the position;
 2. be an individual who would not be disqualified from registration under Section 8a(2) or 8a(3) of the CEA;
 3. report to the Board or, in the event that the Board delegates its authority to the Chief Executive Officer, to the Chief Executive Officer; and
 4. fulfill his or her duties as required pursuant to CFTC Regulations, including, but not limited to, the preparation and submission of an annual compliance report as described in CFTC Regulation 39.10(c)(3), and

assist the Regulatory Oversight Committee in its preparation of an annual report.

- C. Any Officer may also be a director, officer, partner or employee of the Exchange or of any of its Affiliates, subject to disclosure and resolution of conflicts of interest. Notwithstanding the foregoing, the Chief Compliance Officer and the Chief Risk Officer must be two different individuals.
- D. The Officers shall have such powers and duties in the management of the Exchange as the Board may prescribe from time to time, subject to any limitations set forth in the Operating Agreement.
- E. Each Officer is entitled to indemnification pursuant to the Operating Agreement with respect to matters relating to the Exchange.

Rule 2.4 Eligibility and Fitness

- A. An individual may not serve as a Director or Officer, or serve on a committee or subcommittee established by the Board or hold a 10 percent or more ownership interest in the Exchange, if the individual:
 - 1. within the prior three years has been found, by a final decision of a court of competent jurisdiction, an administrative law judge, the CFTC, or any Self-Regulatory Organization, to have committed a disciplinary offense;
 - 2. within the prior three years has entered into a settlement agreement in which any of the findings or, in the absence of such findings, any of the acts charged included a disciplinary offense;
 - 3. is currently suspended from trading on a Designated Contract Market or a Swap Execution Facility, is suspended or expelled from membership in a Self-Regulatory Organization, is serving any sentence of probation, or owes any portion of a fine or penalty imposed pursuant to either:
 - a a finding by final decision of a court of competent jurisdiction, an administrative law judge, the CFTC or any Self-Regulatory Organization that such person committed a disciplinary offense; or

- b a settlement agreement in which any of the findings or, in the absence of such findings, any of the acts charged included a disciplinary offense;
- 4. is currently subject to an agreement with the CFTC or Self-Regulatory Organization not to apply for registration with the CFTC or for membership in the Self-Regulatory Organization;
- 5. is currently, or within the past three years has been, subject to a revocation or suspension of registration by the CFTC, or has been convicted within the past three years of any of the felonies listed in Section 8a(2)(D)(ii) through (iv) of the CEA;
- 6. is currently subject to a denial, suspension or disqualification from serving on a disciplinary panel, arbitration panel or governing board of any self-regulatory organization as that term is defined in Section 3(a)(26) of the Securities Exchange Act of 1934; or
- 7. is subject to a statutory disqualification pursuant to Section 8a(2) of the CEA.

For purposes of this Rule 2.4A, the terms “disciplinary offense,” “final decision” and “settlement agreement” have the meaning given those terms in CFTC Regulation 1.63(a).

- B. Any Director, Officer, member of a committee established by the Board and any individual nominated to serve in any such role, shall immediately notify the Chief Executive Officer if such individual is subject to one or more of the criteria in Rule 2.4A. Prior to nomination to the Board, each individual shall certify he or she is not disqualified pursuant to Rule 2.4A. Upon appointment, each Director, Officer, and member of a committee shall provide to the Exchange, where applicable, changes in registration information within 30 days and certification of compliance accordingly. The Exchange shall verify information supporting Board compliance with eligibility criteria.
- C. To serve as a Director, an individual must possess the ability to contribute to the effective oversight and management of the Exchange, taking into account the needs of the Exchange and such factors as the individual’s experience,

perspective, skills and knowledge of the industry in which the Exchange operates.

- D. A Director or Officer must meet any qualifications set forth from time to time in the Operating Agreement.
- E. An individual may not serve on any Disciplinary Panel, arbitration panel, or the Appeals Committee during any proceeding affecting or concerning such individual, to be determined in a reasonable manner by the Exchange's General Counsel.

Rule 2.5 LedgerPrime

- A. The Exchange's parent company has established LedgerPrime LLC ("LedgerPrime"), a wholly-owned subsidiary of the Exchange's parent company, to make markets in Exchange products (collectively, the "LedgerPrime Contracts") cleared by the Exchange and to engage in hedging activities through various offsetting transactions. Position and counterparty limits, as well as parameters on LedgerPrime hedging, will be established by the Exchange.
- B. LedgerPrime does not receive any preferential pricing from the Exchange and does not have an inherent advantage over any other Participant with respect to latency or Order execution speed.
- C. LedgerPrime traders are subject to the same access criteria and must abide by the same rules as all other Participants.

Rule 2.6 Committees and Subcommittees

- A. The Board may create, appoint Directors to serve on, and delegate powers to, committees and subcommittees. There shall be a Regulatory Oversight Committee, a Risk Management Committee, a Participant Committee, a Nominating Committee, a Disciplinary Panel, and an Appeals Committee. The Board shall designate the chairperson of each such committee, except that the chairperson of the Board shall designate the chairperson of the Appeals Committee and the Regulatory Oversight Committee shall designate the chairperson of the Disciplinary Panel.

- B. Each committee and subcommittee shall assist in the supervision, management and control of the affairs of the Exchange within its particular area of responsibility, subject to the Operating Agreement and the authority of the Board.
- C. Subject to the authority of the Board, each committee and subcommittee shall determine the manner and form in which its proceedings shall be conducted. A majority of the members serving on a committee or subcommittee, including at least one Public Director, shall constitute a quorum for the transaction of business of a committee or subcommittee. Each committee and subcommittee may act only by the decision of a quorum, by vote at a meeting or by unanimous written consent without a meeting. The Board has the authority to overrule the decisions of any committee or subcommittee.

Rule 2.7 Regulatory Oversight Committee

- A. The Regulatory Oversight Committee shall be a standing committee of the Board consisting of only Public Directors, as appointed from time to time. No less than two Public Directors shall serve on the Regulatory Oversight Committee.
- B. Each member of the Regulatory Oversight Committee shall serve for a term of one calendar year from the date of his or her appointment or for the remainder of his or her term as a Public Director, and until the due appointment of his or her successor, or until his or her earlier resignation or removal, with or without cause, as a member of the Regulatory Oversight Committee or as a Public Director. A member of the Regulatory Oversight Committee may serve for multiple terms.
- C. The Regulatory Oversight Committee shall oversee the Exchange's regulatory program on behalf of the Board. The Board shall delegate sufficient authority, dedicate sufficient resources, and allow sufficient time for the Regulatory Oversight Committee to fulfill its mandate. The Regulatory Oversight Committee shall make such recommendations to the Board that will, in its judgment, best promote the interests of the Exchange. The Regulatory Oversight Committee shall also have such other powers and perform such other duties as set forth in the Rules and as the Board may delegate to it from time to time.
- D. The Regulatory Oversight Committee shall appoint individuals to the Disciplinary Panel in accordance with these Rules, Applicable Law and the composition requirements of the Disciplinary Panel. The Committee shall appoint at least one

person who would not be disqualified from serving as a Public Director, and who shall serve as the Chairperson of the Disciplinary Panel.

- E. The Regulatory Oversight Committee shall prepare an annual report that assesses the Exchange's self-regulatory program for the Board and the CFTC. The annual report sets forth the regulatory program's expenses, describes its staffing and structure, catalogues disciplinary actions taken during the year, and reviews the performance of the Disciplinary Panel. Such report may be prepared in conjunction with the Chief Compliance Officer's annual compliance report as required pursuant to CFTC Regulation 39.10(c)(3).
- F. Without limiting the generality of the foregoing, the Regulatory Oversight Committee shall have the authority to:
1. monitor the regulatory program of the Exchange for sufficiency, effectiveness, and independence;
 2. oversee all facets of the regulatory program, including trade practice and market surveillance; audits, examinations, and other regulatory responsibilities with respect to Participants (including ensuring compliance with financial integrity, financial reporting, sales practice, recordkeeping, and other requirements); and the conduct of investigations;
 3. review the size and allocation of the regulatory budget and resources; and the number, hiring, termination, and compensation of regulatory personnel;
 4. supervise the Chief Compliance Officer of the Exchange, who will report directly to the Regulatory Oversight Committee and to the Board or, if the Board delegates such authority, to the Chief Executive Officer;
 5. recommend changes that would ensure fair, vigorous, and effective regulation; and
 6. review all regulatory proposals prior to implementation and advise the Board as to whether and how such changes may impact regulation.

Rule 2.8 Risk Management Committee

- A. The Risk Management Committee shall be a standing committee consisting of no fewer than one Public Director, one Market Participant Director, and one Exchange Officer. The Risk Management Committee also may allow the participation of other market participants.
- B. Each member of the Risk Management Committee shall serve for a term of one calendar year from the date of his or her appointment or for the remainder of his or her term as a Public Director, as applicable, and until the due appointment of his or her successor, or until his or her earlier resignation or removal, with or without cause, as a member of the Risk Management Committee or as a Public Director. A member of the Risk Management Committee may serve for multiple terms.
- C. The Risk Management Committee shall oversee the Exchange's risk management program. The Board shall delegate sufficient authority, dedicate sufficient resources, and allow sufficient time for the Risk Management Committee to fulfill its mandate. The Risk Management Committee shall make such recommendations to the Board that will, in its judgment, best promote the interests of the Exchange. The Risk Management Committee shall also have such other powers and perform such other duties as set forth in the Rules and as the Board may delegate to it from time to time.

Rule 2.9 Participant Committee

- A. The Participant Committee shall be a standing committee of the Board consisting of at least 35 percent Public Directors, as appointed from time to time. No less than two Public Directors shall serve on the Participant Committee.
- B. Each member of the Participant Committee shall serve for a term of one calendar year from the date of his or her appointment or for the remainder of his or her term as a Public Director, as applicable, and until the due appointment of his or her successor, or until his or her earlier resignation or removal, with or without cause, as a member of the Participant Committee or as a Public Director. A member of the Participant Committee may serve for multiple terms.

- C. The Participant Committee shall determine the standards and requirements for initial and continuing membership or participation eligibility; review appeals of Exchange staff denials of Participant, Executing Participant and Liquidity Provider applications; and approve measures that would result in different categories or classes of Exchange membership. In reviewing staff denials, the Participant Committee shall not uphold any such Exchange staff denial if the relevant application satisfies the standards and requirements that the Participant Committee sets forth. The Participant Committee shall not, and shall not permit the Exchange to, restrict access or impose burdens on access in a discriminatory manner, within each category or class of Participants or between similarly situated categories or classes of Participants.

Rule 2.10 Nominating Committee

- A. The Nominating Committee shall be a standing committee of the Board consisting of at least 51 percent Public Directors, as appointed from time to time. No less than two Public Directors shall serve on the Nominating Committee.
- B. Each member of the Nominating Committee shall serve for a term of one calendar year from the date of his or her appointment or for the remainder of his or her term as a Public Director, as applicable, and until the due appointment of his or her successor, or until his or her earlier resignation or removal, with or without cause, as a member of the Nominating Committee or as a Public Director. A member of the Nominating Committee may serve for multiple terms.
- C. The Nominating Committee shall identify individuals qualified to serve on the Board, consistent with criteria approved by the Board, and with the composition requirements set forth in the Rules or Operating Agreement. The Nominating Committee shall administer a process for the nomination of individuals to the Board. The Board shall delegate sufficient authority, dedicate sufficient resources, and allow sufficient time for the Nominating Committee to fulfill its mandate. The Nominating Committee shall make such recommendations to the Board that will, in its judgment, best promote the interests of the Exchange. The Nominating Committee shall also have such other powers and perform such other duties as set forth in the Rules and as the Board may delegate to it from time to time.

Rule 2.11 Disciplinary Panel and Appeals Committee

- A. The Disciplinary Panel shall be:
1. a standing committee consisting of at least three members, including at least one person who would not be disqualified from serving as a Public Director who will serve as the chairperson, as appointed from time to time. At least one member of the Disciplinary Panel must be a Participant or an employee of a Participant. The Board may establish more than one Disciplinary Panel. The Regulatory Oversight Committee will appoint individuals for membership on the Disciplinary Panel. Each Disciplinary Panel shall include members with sufficient differing experience and Participant interests so as to ensure fairness and to prevent special treatment or preference for any Person.
 2. responsible for conducting hearings, rendering decisions, and imposing sanctions with respect to any Disciplinary Action. The Disciplinary Panel shall also have such other powers and perform such other duties as set forth in the Rules and as the Board may determine from time to time.
- B. Each member of the Disciplinary Panel shall serve for a term of two calendar years from the date of his or her appointment, and until the due appointment of his or her successor, or until his or her earlier resignation or removal, with or without cause, as a member of the Disciplinary Panel. A member of the Disciplinary Panel may serve for multiple terms.
- C. The Appeals Committee shall be:
1. a standing committee consisting of at least three members of the Board. The members of the Appeals Committee and its Chairperson shall be appointed by the Chairperson of the Board, provided that, at all times the Appeals Committee shall include at least one Public Director who shall serve as the Chairperson of the Appeals Committee.
 2. responsible for conducting hearings of appeals of decisions of the Disciplinary Panel, rendering decisions of such appeals, and imposing sanctions with respect to such appeals. The Appeals Committee shall

also have such other powers and perform such other duties as set forth in these Rules and as the Board may determine from time to time.

- D. Each member of the Appeals Committee shall serve for a term of one calendar year from the date of his or her appointment or for the remainder of his or her term as a Public Director, as applicable, and until the due appointment of his or her successor, or until his or her earlier resignation or removal, with or without cause, as a member of the Appeals Committee or as a Public Director. A member of the Appeals Committee may serve for multiple terms.

Rule 2.12 Emergency Rules

- A. During an Emergency, the Exchange may implement temporary emergency procedures and rules pursuant to Rule 2.12D, subject to the applicable provisions of the CEA and CFTC Regulations.
- B. The Chief Executive Officer or his or her designee and the Chief Compliance Officer or his or her designee, acting in conjunction or, if it is not possible to act in conjunction, acting alone, are authorized to determine whether an Emergency exists and whether Emergency Rules or Emergency Actions are warranted. Emergency Rules may require or authorize the Exchange, the Board, any committee of the Board or any Officer to take Emergency Actions, including, but not limited to, the following actions:
 - 1. suspend or curtail trading in, or limit trading to liquidation, for any Exchange Contract;
 - 2. extend or shorten the last trading date for any Exchange Contract;
 - 3. provide alternative settlement mechanisms for any Exchange Contract (including by altering the settlement terms or conditions or fixing the settlement price) or suspend the transfer of the Underlying;
 - 4. order the transfer or liquidation of open positions in any Exchange Contract; provided that if an Exchange Contract is fungible with a contract on another platform in addition to the Exchange, the liquidation or transfer of open interest in such Exchange Contract will be ordered only as directed, or agreed to, by CFTC staff or the CFTC;

5. extend, shorten or change the Trading Hours or the expiration date of any Exchange Contract;
 6. require Participants to meet special margin requirements;
 7. order the transfer of Exchange Contracts and the associated margin or alter any Exchange Contract's settlement terms or conditions; or
 8. impose or modify position limits, price limits, and intraday market restrictions.
- C. Before taking an Emergency Action, the effects of such Emergency Action on markets underlying the Exchange Contract(s) affected by such Emergency Action, on markets that are linked or referenced to such Exchange Contracts and similar markets on other trading venues, or any potential conflicts of interest shall be considered and documented as required under Rule 2.12F.
- D. Before any Emergency Rule may be adopted and enforced, the Regulatory Oversight Committee shall approve the implementation of such Emergency Rule at a duly convened meeting. If the Chief Executive Officer, or his or her designee, or if the Chief Executive Officer or his or her designee is unavailable, the Chief Compliance Officer, or his or her designee, determines that Emergency Rules must be implemented with respect to an Emergency before a meeting of the Regulatory Oversight Committee can reasonably be convened, then the Chief Executive Officer, or his or her designee, or if the Chief Executive Officer or his or her designee is unavailable, the Chief Compliance Officer, or his or her designee, shall have the authority, without Board or committee action, to implement any Emergency Rules with respect to such Emergency that he or she deems necessary or appropriate to respond to such Emergency. In such circumstances, the Chief Executive Officer, or his or her designee, or if the Chief Executive Officer or his or her designee is unavailable, the Chief Compliance Officer, or his or her designee, must convene a meeting of the Regulatory Oversight Committee to ratify the actions taken by the Chief Executive Officer, or his or her designee, or the Chief Compliance Officer, or his or her designee, as soon as practicable. Whenever the Exchange implements an Emergency Rule or takes an Emergency Action, a duly authorized representative of the Exchange, where possible, will inform Participants through a Participant Notice.

- E. The Exchange will use reasonable efforts to notify the CFTC and the Board prior to implementing, modifying or terminating an Emergency Rule. If such prior notification is not possible or practicable, the Exchange will notify the CFTC and the Board as soon as possible or reasonably practicable, but in any event no longer than 24 hours after implementing, modifying or terminating an Emergency Rule.
- F. Upon taking any Emergency Action, the Exchange will document the decision-making process related to such Emergency Action, including the process for minimizing conflicts of interest, the extent to which the Exchange considered the effect of its Emergency Action on the Underlying markets and on markets that are linked or referenced to the contract market and similar markets on other trading venues, and reasons for using emergency authority under this Rule 2.12. Such documentation will be maintained in accordance with Rule 2.14.
- G. The Chief Executive Officer, or his or her designee, or if the Chief Executive Officer or his or her designee is unavailable, the Chief Compliance Officer, or his or her designee, may determine that an Emergency has been reduced sufficiently to allow the Exchange to resume normal functioning, in which case any Emergency Actions responding to such Emergency will be terminated and a duly authorized representative of the Exchange will inform Participants through a Participant Notice.
- H. Participants must promptly notify the Exchange of any circumstance that may give rise to a declaration of an Emergency.

Rule 2.13 Conflicts of Interest

- A. Named Party in Interest Conflict
 - 1. No Director or member of a Disciplinary Panel shall participate in Board, any committee, or Disciplinary Panel deliberations or voting in any matter involving a named party in interest where such Director or Disciplinary Panel member:
 - a is the named party in interest in the matter;
 - b is an employer, employee or fellow employee of a named party in interest;

- c is associated with a named party in interest through a “broker association” as defined in CFTC Regulation 156.1;
- d has any other significant, ongoing business relationship with a named party in interest, excluding relationships limited to Exchange Contracts; or
- e has a family relationship (i.e., the Director’s or Disciplinary Panel member’s spouse, parents, children, and siblings, in each case, whether by blood, marriage, or adoption, or any person residing in the home of the Director or Disciplinary Panel member or that of his or her immediate family) with a named party in interest.

2. Prior to consideration of any matter involving a named party in interest, each Director of the deliberating body or Disciplinary Panel member shall disclose to the Chief Compliance Officer whether such Director or Disciplinary Panel member has one of the relationships listed above with a named party in interest.

3. The Chief Compliance Officer shall determine whether any Director of the relevant deliberating body or Disciplinary Panel member is subject to a conflicts restriction under this Rule 2.13A. Such determination shall be based upon a review of the following information:

- a information provided by such Director or Disciplinary Panel member pursuant to clause (2) above; and
- b any other source of information that is held by and reasonably available to the Exchange.

B. Financial Interest in a Significant Action Conflict

1. No Director or Disciplinary Panel member shall participate in the Board’s, any committee’s or Disciplinary Panel’s deliberations or voting on any significant action if such Director or Disciplinary Panel member knowingly has a direct and substantial financial interest in the result of the vote based upon either Exchange or non-Exchange positions that could reasonably be expected to be affected by the action.

2. Prior to consideration of any significant action, each Director of the deliberating body or Disciplinary Panel member who does not choose to abstain from deliberations and voting shall disclose to the Chief Compliance Officer any information that may be relevant to a determination of whether such Director has a direct and substantial financial interest in the result of the vote.
3. The Chief Compliance Officer shall determine whether any Director of the relevant deliberating body or Disciplinary Panel member who does not choose to abstain from deliberations and voting is subject to a conflicts restriction under this Rule 2.13B. Such determination shall be based upon a review of the following information:
 - a the most recent large trader reports and clearing records available to the Exchange;
 - b gross positions held at the Exchange in the Director's or Disciplinary Panel member's personal accounts or "controlled accounts," as defined in CFTC Regulation 1.3(j);
 - c gross positions held at the Exchange in proprietary accounts, as defined in CFTC Regulation 1.17(b)(3), at the Director's or Disciplinary Panel member's affiliated firm;
 - d gross positions held at the Exchange in accounts in which the Director or Disciplinary Panel member is a principal, as defined in CFTC Regulation 3.1(a);
 - e net positions held at the Exchange in "customer" accounts, as defined in CFTC Regulation 1.17(b)(2), at the Director's or Disciplinary Panel member's affiliated firm;
 - f any other types of positions, whether maintained at the Exchange or elsewhere, held in the Director's or Disciplinary Panel member's personal accounts or the proprietary accounts of the Director's or Disciplinary Panel member's affiliated firm that the Chief Compliance Officer reasonably expects could be affected by the significant action;

4. any determination made in accordance with Rule 2.13A.3 or Rule 2.13B.4 above.

Rule 2.14 Recordkeeping

- A. The Exchange shall keep, or cause to be kept, complete and accurate books and records of accounts and activities of the Exchange, including all books, records and other documentation required to be maintained pursuant to the CEA and CFTC Regulations.
- B. The Exchange shall retain all such books and records in accordance with the CEA and CFTC Regulations.
- C. The Exchange will provide information required to be maintained or provided pursuant to the CEA and CFTC Regulations to the Commission, the U.S. Securities and Exchange Commission, the U.S. Department of Justice or any representative of a prudential regulator as authorized by the Commission, upon request, in each case in the form and manner required under these Rules, and/or the CEA and CFTC Regulations.

Rule 2.15 Information-Sharing Agreements

- A. The Exchange may enter into information-sharing agreements or other arrangements or procedures to coordinate surveillance with other markets on which financial instruments related to the Exchange Contracts trade. As part of any information-sharing agreements or other arrangements or procedures adopted pursuant to this Rule, the Exchange may:
 1. provide market surveillance reports to other markets;
 2. share information and documents concerning current and former Participants or Authorized Users with other markets;
 3. share information and documents concerning ongoing and completed investigations with other markets; or
 4. require its current or former Participants or Authorized Users to provide information and documents to the Exchange at the request of other markets with which the Exchange has an information-sharing agreement or other arrangements or procedures.

- B. The Exchange may enter into any information-sharing agreements or other arrangements or procedures, including an information-sharing agreement or other arrangement or procedure similar to that described above in paragraph (A), with any Person or body (including but not limited to a Regulatory Agency or Swap Data Repository) if the Exchange considers such agreement, arrangement or procedures to be in furtherance of the Exchange's purpose or duties under these Rules or Applicable Law.
- C. The Exchange may provide information to a duly authorized foreign governmental authority, as directed by the CFTC, in accordance with an information-sharing agreement or other arrangements or procedures executed with such foreign governmental authority or the CFTC.

Rule 2.16 Recordkeeping and Reporting Requirements

- A. In the event the Board rejects a recommendation or supersedes an action of the Regulatory Oversight Committee, the Risk Management Committee or the Chief Compliance Officer, the Exchange shall maintain documentation detailing: (1) the recommendation or action of the Regulatory Oversight Committee, the Risk Management Committee or the Chief Compliance Officer, as the case may be; (2) the rationale for such recommendation or action; (3) the rationale of the Board for rejecting such recommendation or superseding such action; and (4) the course of action that the Board decided to take contrary to such recommendation or action.
- B. In the event that the Risk Management Committee rejects a recommendation or supersedes an action of any of its subcommittees, the Exchange shall maintain documentation detailing (1) the recommendation or action of the subcommittee; (2) the rationale for such recommendation or action; (3) the rationale of the Risk Management Committee for rejecting such recommendation or superseding such action; and (4) the course of action that the Risk Management Committee decided to take contrary to such recommendation or action.
- C. In accordance with Rule 6.7, the Exchange shall report all Transactions of Swaps subject to reporting by the Exchange pursuant to applicable CFTC Regulations to a Swap Data Repository selected by the Exchange for such purpose within the time limits set forth in CFTC Regulations. Parties to a Transaction where

reporting is required shall be responsible for any of their own reporting obligations. Participants shall include with any Order sufficient information to enable the Exchange to report all Required Swap Creation Data pursuant to Part 45 of CFTC Regulations, including but not limited to the information prescribed under Rule 5.2B.10 (to the extent such information is not pre-populated by the Platform). Participants may provide certain data to the Exchange in the Participant Application and Agreement, such as whether the Participant is a U.S. person, swap dealer, major swap participant, or financial entity as defined in the Participant Application and Agreement. Participants must inform the Exchange immediately of any change in status that would affect data to be reported to a Swap Data Repository in accordance with Rule 6.7.

- D. The Exchange shall record and report to the CFTC all data required to be reported to the CFTC under Part 16 of CFTC Regulations, in the form and manner required by CFTC Regulations.
- E. The Exchange shall submit to the CFTC within thirty days after each Board election a list of the Board's Directors, the Participant interests they represent, and how the composition of the Board meets the requirements of CFTC Regulation 1.64(b) and the Exchange's Rules and procedures.

Rule 2.17 Public Information

- A. Accurate, complete and current copies of these Rules and Exchange Contract Specifications shall be published on the Website.
- B. The Exchange shall make public on a daily basis information on settlement prices, volume, open interest, and opening and closing ranges for actively traded Exchange Contracts.
- C. Except as provided herein, the Exchange shall publish on its Website a Participant Notice with respect to each addition to, modification of, or clarification of, the Rules, the Matching Engine, and any Exchange Contract Specification prior to the earlier of:
 - 1. the effective date thereof; and
 - 2. the filing of such change with the Commission.

- D. If confidential treatment is sought with respect to any information the Exchange submits to a Regulatory Agency, only the public version of such filing shall be disclosed pursuant to Rule 2.17C.
- E. Any Participant Notice shall be deemed to have been made to all Participants and any other such Person as may be required by sending such Participant Notice to the email address on file with the Exchange and by posting the Participant Notice on the Website.

CHAPTER 3 Participants

Rule 3.1 Jurisdiction, Applicability of Rules

ANY PERSON, INCLUDING A PARTICIPANT OR AN AUTHORIZED USER, DIRECTLY OR INDIRECTLY INITIATING, EXECUTING, AND/OR CLEARING A TRANSACTION ON THE EXCHANGE OR SUBJECT TO THESE RULES, AND ANY PERSON FOR WHOSE BENEFIT SUCH A TRANSACTION HAS BEEN INITIATED OR EXECUTED, OR CLEARED, INCLUDING CUSTOMERS AND CLEARED SWAPS CUSTOMERS, AND AN AUTHORIZED REPRESENTATIVE AND, FOR THE AVOIDANCE OF DOUBT, AN FCM PARTICIPANT, EXECUTING PARTICIPANT AND A LIQUIDITY PROVIDER, AND ANY EMPLOYEE OR AGENT OF A PARTICIPANT, AND ANY OTHER PERSON ACCESSING THE PLATFORM: (i) AGREES TO BE BOUND BY AND COMPLY WITH THESE RULES, THE OBLIGATIONS AND APPLICABLE LAW, IN EACH CASE TO THE EXTENT APPLICABLE TO SUCH PERSON; (ii) EXPRESSLY CONSENTS AND SUBMITS TO THE JURISDICTION OF THE EXCHANGE WITH RESPECT TO ANY AND ALL MATTERS ARISING FROM, RELATED TO, OR IN CONNECTION WITH, THE STATUS, ACTIONS OR OMISSIONS OF SUCH PERSON; AND (iii) AGREES TO ASSIST THE EXCHANGE IN COMPLYING WITH THE EXCHANGE'S LEGAL AND REGULATORY OBLIGATIONS, COOPERATE WITH THE EXCHANGE, THE CFTC AND ANY REGULATORY AGENCY WITH JURISDICTION OVER THE EXCHANGE IN ANY INQUIRY, INVESTIGATION, AUDIT, EXAMINATION OR PROCEEDING. ANY AMENDMENTS TO OR THE REPEAL OF A RULE, OR THE ADOPTION OF A NEW RULE, SHALL, UPON THE EFFECTIVE DATE OF SUCH AMENDMENT, REPEAL OR ADOPTION, AS APPLICABLE, BE BINDING ON ALL PERSONS SUBJECT TO THE JURISDICTION OF THE EXCHANGE, REGARDLESS OF WHEN SUCH PERSON BECAME SUBJECT TO THE EXCHANGE'S JURISDICTION, AND ON ALL EXCHANGE CONTRACTS AS APPLICABLE.

Rule 3.2 Participants – Applications, Agreements, Eligibility Criteria, Classifications and Privileges

- A. Each Participant shall have the right to access electronically the Platform, including the right to place Orders for each of its Cleared Swaps Proprietary Accounts, provided that such Participant is eligible for and has applied and received Trading Privileges and Clearing Privileges. In order to become a Participant, an applicant must:
1. complete and submit the Exchange Participant Application and Agreement, User Agreement, and application fee, as may be established by the Exchange from time to time;
 2. if an applicant is an entity, be validly organized, and in good standing, in the United States (or, if such entity is validly organized, and in good standing, in a country outside of the United States, it must be wholly owned and/or managed by a natural person who is a resident of the United States or by an entity that is validly organized, and in good standing, in the United States), and must not be subject to any economic or trade sanctions programs administered by OFAC or other relevant U.S. or non-U.S. authority; and must not be listed on OFAC's List of Specially-Designated Nationals and Blocked Persons;
 3. if an applicant is a natural person, be a resident of the United States;
 4. be an Eligible Contract Participant in order to gain impartial access to the Exchange's Swap Execution Facility and any SEF services;
 5. not be prohibited from using the services of the Exchange for any reason whatsoever;
 6. have a good reputation and business integrity and maintain adequate financial resources and credit;
 7. not have filed for bankruptcy;
 8. designate at least one Authorized User (or in the case of a natural person Participant, such Person shall be deemed to be the Authorized User);

9. if an applicant is an entity, designate at least two Authorized Representatives (or in the case of a natural person Participant, such Person shall be deemed to be the sole Authorized Representative) who are responsible for supervising all activities of the Participant, its Authorized User(s) and its employees relating to Transactions, for making withdrawal requests and for providing any information the Exchange may request regarding such Participant; *provided*, that upon request the Exchange may permit an entity applicant to designate a single Authorized Representative in the Chief Compliance Officer's sole discretion; and
 10. meet any other criteria and provide the Exchange with any other information the Exchange may request regarding the Participant.
- B. Each FCM Participant shall have the right to access electronically the Platform, including the right to place Orders for each of its Cleared Swaps Proprietary Accounts or Customer Accounts, provided that such FCM Participant is eligible for and has applied and received Trading Privileges and Clearing Privileges. The Exchange does not currently have any FCM Participants or other Participants that may execute intermediated trades. In order to become an FCM Participant, an FCM applicant must:
1. satisfy the conditions in Rule 3.2A;
 2. be validly organized and in good standing, in the United States;
 3. have sufficient operational capabilities and resources to support the Platform and Underlying transfer requirements, including sufficient: (a) policies and procedures, (b) understanding of and support for the Exchange Contracts and transfers of the Underlying, (c) asset security and cyber security procedures and (d) AML controls;
 4. have sufficient ability, appropriate accounts and technical support to clear the Underlying, including maintenance of the requisite Collateral Accounts at all times;
 5. submit to the Exchange a letter confirming that the applicant will maintain all Customer funds deposited with it in connection with trading any Exchange Contract in appropriately labeled and segregated Cleared

Swaps Customer Accounts separated from funds of both the FCM Participant and Customers, as required by Commission regulations;

6. except as provided below in this Rule 3.2.B, confirm that each of its Customers represents that each such Customer is an ECP; and
7. meet any other criteria or complete any additional applications that the Exchange may request.

Notwithstanding Rule 3.2.B.6 above, to the extent that an FCM Participant intends to clear through LedgerX one or more Swaps executed on or pursuant to the rules of a Designated Contract Market on behalf of a Customer, such Customer is not required to be an ECP solely with respect to any such Swaps.

- C. Prior to becoming an FCM Participant, FCM applicants must submit to the Exchange: (i) a guarantee agreement on a form prescribed by the Exchange defining the FCM Participant's obligation to financially guarantee the applicant's Orders and Transactions and those of the applicant's Customers, signed by the FCM Participant; and (ii) an agreement authorizing the Exchange to unilaterally debit any Collateral Accounts in accordance with these Rules, Exchange policies and procedures and in amounts solely determined by the Exchange.
- D. The Exchange may in its sole discretion approve, deny, or condition any FCM Participant application as the Exchange deems necessary or appropriate.
- E. If an FCM Participant application is approved by the Exchange, the applicant will be a FCM Participant of the Exchange with Trading Privileges and Clearing Privileges with respect to its Cleared Swaps Proprietary Account and Cleared Swaps Customers.
- F. To be eligible to become an Executing Participant, an applicant must:
 1. satisfy the conditions in Rule 3.2A;
 2. complete the Executing Participant representation of the Participant Application and Agreement;
 3. agree to confirm that each of its Customers represents that each such Customer is an ECP; and

4. be registered as a futures commission merchant, introducing broker or commodity trading advisor, or be exempt from registration as such.
- G. Submission of a Participant Application and Agreement to the Exchange constitutes the applicant's agreement to be bound by the Rules and the published policies of the Exchange.
- H. No person affiliated, within the meaning of Section 5b(c)(2)(O) of the CEA, with a director of the Exchange or a Participant (for purposes of this Rule, an "affiliate") shall meet criteria for refusal to register a person under Section 8a(2) of the CEA; unless the Risk Management Committee finds that there are special circumstances warranting the waiver of such disqualification with respect to the affiliate.
1. With respect to affiliates, the Board shall be entitled to rely on a representation from the relevant director or Participant that, to the best of such person's knowledge, none of its affiliates is subject to disqualification pursuant to the Exchange's fitness standards and that such person will notify the Exchange if at any time such director or Participant becomes aware that any such affiliate fails to meet the fitness standards.
 2. Section 5b(c)(2)(O)(ii)(IV) of the CEA requires each DCO to establish Fitness Standards for persons with direct access to the settlement or clearing activities of the DCO ("Access Persons"). The only persons with such access are Participants.
- I. Applicants for Participant status of the Exchange may withdraw their applications at any time without prejudice or without losing their right to apply at a future time.
- J. Exchange staff may, in its sole discretion, approve, deny, or condition any Participant application as Exchange staff deems necessary or appropriate.
1. In the event that Exchange staff decides to decline or condition an application for admission as a Participant, or to terminate a Person's status as Participant, Exchange staff shall notify such Person thereof in a written notice sent to the address provided by the Person in the Participant Application and Agreement or maintained in the Exchange's

registry of Participants. Such Person may, within 28 Business Days, request in writing that the Participant Committee reconsider the determination.

2. Within 28 Business Days of receiving a request for reconsideration, the Participant Committee shall confirm, reverse or modify the denial, condition or terminate the Participant status of such Person, and shall promptly notify such Person accordingly in writing. The Participant Committee may, in its sole discretion, schedule a hearing (in person or by teleconference), request additional information from such Person or establish any other process that it believes is necessary or appropriate to consider the request for reconsideration.
 3. The Participant Committee's decision is the final action of the Exchange and is not subject to appeal within the Exchange.
- K. Upon approval by the Exchange of an applicant's Participant Application and Agreement, the applicant will be deemed to be a Participant, and shall continue to comply with all applicable eligibility criteria in this Rule or as the Exchange may require, and shall have the following privileges, which the Exchange may revoke, amend, or expand in accordance with, or by amending, these Rules:
1. Trading Privileges and Clearing Privileges;
 2. To intermediate the execution of Customer Transactions on the Exchange, if approved as an Executing Participant;
 3. To intermediate Orders and clear Transactions on behalf of Cleared Swaps Customers, if approved as an FCM Participant; and
 4. To distribute Exchange data to its Customers pursuant to any data distribution agreement with the Exchange.
- L. The Exchange will apply Participant access criteria in a fair and non-discriminatory manner that is not anti-competitive.

Rule 3.3 Participant Obligations

- A. Each Participant and any Authorized User(s) thereof, must comply with these Rules, applicable provisions of the CEA and relevant CFTC Regulations. Each

Participant and any Authorized User(s) thereof also must cooperate promptly and fully with the Exchange, its agents, and the CFTC in any investigation, call for information, inquiry, audit, examination, or proceeding. Such cooperation shall include providing the Exchange with access to information on the activities of such Participant and/or its Authorized User(s) in any referenced market that provides the underlying prices for any Exchange market. If any Participant or Authorized User thereof fails to satisfy any Obligation, the Exchange may revoke or suspend the Participant's privileges in full or in part. Each Participant also may be subject to civil or criminal prosecution.

- B. Each Participant consents to allow the Exchange to provide all information the Exchange has about the Participant, including the Participant's and Cleared Swaps Customers' trading activity, to the CFTC or any other Regulatory Agency, law enforcement authority, or judicial tribunal, including (as may be required by information-sharing agreements or other arrangements or procedures or other contractual, regulatory, or legal provisions) foreign regulatory or self-regulatory bodies, law enforcement authorities, or judicial tribunals without notice to the Participant.
- C. Each Participant consents to the Exchange providing information related to Know Your Customer or Anti-Money Laundering to Settlement Banks or potential Settlement Banks.
- D. Each Participant must establish and maintain cyber security policies and procedures to protect each such Participant's systems, including, but not limited to, any API.
- E. Each Participant must represent to the Exchange that each such Participant has established and maintains an account to hold Underlying and will adhere to the Exchange's collateral transfer procedures. Each Participant agrees to provide and accept collateral when required to do so by the Exchange.
- F. Each Participant and Cleared Swaps Customer, upon a request of the Exchange or any Regulatory Agency, must promptly respond to any requests for information, including by providing any necessary information for the Exchange to perform any of the functions described in CEA Section 5h.

- G. Each Participant and Cleared Swaps Customer must prepare, maintain, keep current and retain those books and records for the life of each Swap, including records of the instrument used as a reference price, underlying commodities and related derivatives market for five years following the termination of such Swap, and any other books and records required by these Rules, the CEA and the CFTC's Regulations for the time period required by these Rules, the CEA and the CFTC's Regulations. Such books and records shall be readily accessible for inspection and promptly provided to the Exchange, its designated Self-Regulatory Organization, the CFTC, the U.S. Securities and Exchange Commission or the U.S. Department of Justice, upon request, in each case in the form and manner required under these Rules, and/or the CEA and CFTC Regulations.
- H. Each Participant must immediately notify the Exchange in writing upon becoming aware:
1. that the Participant, any of the Participant's officers or any of the Participant's Authorized Users has had trading or clearing privileges suspended, access to, or membership or clearing membership in any Regulatory Agency denied;
 2. that the Participant, any of the Participant's officers or any of the Participant's Authorized Users has been convicted of, pled guilty or no contest to, or entered a plea agreement to any felony in any domestic, foreign or military court, or with the CFTC, as applicable;
 3. that the Participant, any of the Participant's officers or any of the Participant's Authorized Users has been convicted of, plead guilty or no contest to, or entered a plea agreement to a misdemeanor in any domestic, foreign or military court, or with the CFTC, as applicable, which involves:
 - a embezzlement, theft, extortion, fraud, fraudulent conversion, forgery, counterfeiting, false pretenses, bribery, gambling, racketeering, or misappropriation of funds, securities or properties;or

- b any Transaction in or advice concerning swaps, futures, options on futures or securities;
 - 4. that the Participant, any of the Participant's officers or any of the Participant's Authorized Users has been subject to, or associated with a firm that was subject to, regulatory proceedings before any Regulatory Agency;
 - 5. of any other material change in any information contained in the Participant's application, including any failure to continue to meet the requirements to be an Eligible Contract Participant or any change in status as a swap dealer, major swap participant or financial entity;
 - 6. of becoming the subject of a bankruptcy petition, receivership proceeding, or the equivalent, or being unable to meet any financial obligation as it becomes due;
 - 7. of information that concerns any financial or business developments that may materially affect the Participant's ability to continue to comply with applicable participation requirements;
 - 8. as applicable to FCM Participants and Executing Participants, of becoming subject to early warning reporting under CFTC Regulation 1.12; or
 - 9. as applicable to FCM Participants, of any failure to segregate or maintain adequate Cleared Swaps Customer Collateral as required by the CFTC and CFTC Regulations.
- I. Each Participant must diligently supervise all activities of the Participant's employees and/or agents, including all Authorized Users and Authorized Representatives, relating to Orders, Transactions and communications with the Exchange. Any violation of these Rules by any employee, Authorized Representative or Authorized User of a Participant may constitute a violation of the Rules by such Participant.
 - J. Each Participant must inform the Exchange of: (i) its LEI, if applicable, (ii) any change to its email address within 24 hours after such change; (iii) any changes to the regulatory registration information of the Participant's Authorized Users

within two Settlement Bank Business Days of such change; and (iv) other information provided in the Participant Application and Agreement within five days after any such change.

- K. Each FCM Participant also must:
1. Comply with the financial and reporting requirements set forth by the Commission and the NFA, including the requirements contained in Commission Regulations 1.10 and 1.17.
 2. Require Cleared Swaps Customers to maintain and provide to the FCM Participant or the Exchange upon request by the FCM Participant or the Exchange information identifying any individual who has entered orders on behalf of such Cleared Swaps Customer's Account, including, but not limited to, the individual's name, taxpayer or other identification number, affiliation to the Cleared Swaps Customer, address and contact information.
 3. At all times maintain the financial resources at or in excess of the amount prescribed by the Exchange from time to time.
 4. Maintain a Cleared Swaps Customer Account that holds Cleared Swaps Customer Collateral with the Exchange and may maintain a Cleared Swaps Proprietary Account that holds the FCM Participant's proprietary funds with the Exchange.
 5. Maintain a separately identifiable Customer ID for each Cleared Swaps Customer and provide such Customer ID with every Order submitted on the Platform on behalf of a Cleared Swaps Customer.
 6. Include in the FCM Participant's Cleared Swaps Customer Account separate Customer IDs for each Cleared Swaps Customer based on the Customer ID that the FCM Participant transmits with each Order.
 7. Make an initial deposit of funds in an amount determined by the FCM Participant, subject to the Exchange requiring a greater amount, constituting the FCM Participant's residual interest therein, into a Cleared Swaps Customer Account for excess collateral with the Exchange.

8. Submit statements of financial condition at such times and in such manner as shall be prescribed from time to time.
9. Use due diligence in receiving and handling Orders from Cleared Swaps Customers, submitting such Orders on the Platform on behalf of such Cleared Swaps Customers, responding to inquiries from Cleared Swaps Customers about their Orders and reporting back to Cleared Swaps Customers the execution of such Orders.
10. Maintain policies and procedures acceptable to the Exchange that:
 - a with respect to each Cleared Swaps Customer who is an individual, restricts access to any system through which such individual Cleared Swaps Customer submits Orders to the FCM Participant for transmission to the Exchange to that individual Customer; and
 - b with respect to each Cleared Swaps Customer who is not an individual: (1) restricts access to any system through which the Cleared Swaps Customer's Orders may be submitted to the FCM Participant for transmission to the Exchange to such individuals authorized to enter Orders on behalf of such Cleared Swaps Customer; (2) requires each Cleared Swaps Customer who is not an individual to have and maintain an LEI, which shall be provided to the Exchange with each order message submitted by such Person; (3) identifies each individual authorized to enter Orders on behalf of such Cleared Swaps Customer by a distinct Customer ID, which shall be provided to the FCM Participant and the Exchange with each order message submitted by such Person; and (4) requires the customer to maintain and provide to the FCM Participant or the Exchange upon request by the FCM Participant or the Exchange information identifying any individual who has entered Orders on behalf of such Customer's account, including but not limited to the individual's name, taxpayer or other identification number, affiliation to the Customer, address and contact information.

11. Prior to an FCM Participant accepting any Orders from a Cleared Swaps Customer for submission to the Exchange:
 - a an FCM Participant must first have provided such Cleared Swaps Customer with the Exchange Risk Disclosure Statement;
 - b the Exchange will require certification by the FCM Participant to the Exchange that its system has the capacity to block Cleared Swaps Customer Collateral such that the Cleared Swaps Customer's Collateral Account maintains sufficient funds to cover the Cleared Swaps Customer's maximum loss under the Exchange Contract before the FCM Participant enters the Order and that the FCM Participant demonstrate that capacity to the Exchange. In addition, on an annual basis or as otherwise required by the Exchange, each FCM Participant must represent to the Exchange that the portion of the FCM Participant's system that blocks Cleared Swaps Customer Collateral has not been changed in any material respect or, if the system has been changed, the FCM Participant must identify any such changes and recertify the system's capacity to block Cleared Swaps Customer Collateral. Finally, each FCM Participant agrees to submit to any compliance review by the Exchange of its systems in this regard.

12. With respect to the Associated Persons or employees of a FCM Participant:
 - a Each FCM Participant shall be responsible for diligently supervising the FCM Participant's Associated Persons' or employees' compliance with all Exchange Rules.
 - b Each FCM Participant must maintain a complete and accurate list of all Associated Persons or employees of the FCM Participant. Such list shall be promptly provided to the Exchange upon request.
 - c Associated Persons or employees must comply with Exchange Rules.

- d Each Associated Person or employee shall be bound by Exchange Rules to the same extent as if such person were a Participant.
 - e Each FCM Participant shall be responsible for the acts or omissions of the FCM Participant's Associated Persons or employees, and may be liable for any fines imposed upon such Associated Persons or employees by the Exchange. Any violation of an Exchange rule by any such Associated Persons or employee may be considered a violation by the FCM Participant.
13. Make and file reports in accordance with CFTC Regulations in a manner and form and at such times as may be prescribed by the Commission.
 14. Make and file reports with the Exchange at such times, in such manner and form, and containing such information as the Exchange may prescribe from time to time.
 15. Invest Cleared Swaps Customer Collateral only in accordance with CFTC Regulations 22.2(e)(1) and 1.25, to the extent an FCM Participant invests Cleared Swaps Customer Collateral.
 16. Prepare, maintain and keep current those books and records required by the rules of the Exchange, the CEA and CFTC Regulations. Such books and records shall be open to inspection and promptly provided to the Exchange, its Designated Self-Regulatory Organization ("DSRO"), the Commission and/or the U.S. Department of Justice and/or the U.S. Securities and Exchange Commission, upon request.
- L. An Executing Participant must also:
1. Adhere to CFTC Regulations concerning applicable financial resources and financial reporting requirements, including, but not limited to, the requirements under CFTC Regulations 1.10 and 1.17, as applicable.
 2. Provide a Customer ID for every Order submitted to the Exchange.
 3. Use due diligence in receiving and handling Orders from Customers, submitting such Orders on the Platform on behalf of such Customers,

responding to inquiries from Customers about their Orders and reporting back to Customers the execution of such Orders.

4. Maintain policies and procedures acceptable to the Exchange that:
 - a identify each Authorized User whom the Executing Participant has authorized to transmit Customer Orders by a unique User ID as provided pursuant to Rule 5.1, which User ID shall be submitted to the Exchange with each Order submitted by such Authorized User;
 - b permit access only to Authorized Users with permission to enter Customer Orders on behalf of the Executing Participant;
 - c require each Customer who is not an individual, with respect to Swaps, to have and maintain a Legal Entity Identifier deemed acceptable under CFTC Regulations, which shall be provided to the Exchange with each order message submitted by such Person, as applicable; and
 - d require the Customer to maintain and provide, upon request, to the Executing Participant or the Exchange information identifying any individual who has entered Orders on behalf of such Customer's account, including, but not limited to, the individual's name, taxpayer or other identification number, affiliation to the Customer, address and contact information.

Rule 3.4 Cleared Swaps Customer Account Requirements for FCM Participants

- A. FCM Participants must comply with the requirements set forth in Part 22 of CFTC Regulations. This includes, but is not limited to, the following:
 1. Maintaining sufficient funds at all times in Cleared Swaps Customer Accounts.
 2. Computing, recording and reporting completely and accurately the balances in the Statement of Segregation Requirements and Cleared Swaps Customer Collateral Held in Cleared Swaps Customer Accounts.

3. Obtaining satisfactory Cleared Swaps Customer account acknowledgment letters and identifying Cleared Swaps Customer accounts as such.
 4. Preparing complete and materially accurate daily Cleared Swaps Customer amount computations in a timely manner.
- B. All FCM Participants must submit a daily Cleared Swaps Customer Account statement through Exchange-approved electronic transmissions by 12:00 noon on the following Settlement Bank Business Day.
 - C. FCM Participants must provide the Exchange's Compliance Department with access to Cleared Swaps Customer Account information in a form and manner prescribed by the Compliance Department.
 - D. All FCM Participants must provide written notice to the Compliance Department of a failure to maintain sufficient funds in Cleared Swaps Customer Accounts. The Compliance Department must receive immediate written notification when an FCM Participant knows or should have known of such failure.
 - E. Exchange staff may prescribe additional Cleared Swaps Customer Account requirements.

Rule 3.5 Customer Collateral Accounts Maintained With the Exchange

All Cleared Swaps Customer Collateral deposited with the Exchange on behalf of Cleared Swaps Customers shall be held in accordance with Part 22 of the CFTC Regulations in an account identified as a Cleared Swaps Customer Account. Such Cleared Swaps Customer Collateral shall be segregated by the Exchange and treated as belonging to such Cleared Swaps Customers of the FCM Participant. Pursuant to this rule, an FCM Participant shall satisfy the Cleared Swaps Customer Account acknowledgment letter requirement of Rule 3.4A.3 for Cleared Swaps Customer held at the Exchange.

Rule 3.6 Dues, Fees and Expenses Payable by Participants

- A. Participants are not required to pay dues.
- B. Participants may be charged fees in connection with Trading Privileges and Clearing Privileges in such amounts as may be revised from time to time. Fees

and any revisions to such fees will be provided on the Website and in Participant Notices.

- C. Participants may be charged fees for settlement of Exchange Contracts at expiration in an amount to be reflected from time to time on the Website and in Participant Notices.
- D. The Exchange or a Settlement Bank may also deduct from a Collateral Account fees or expenses incurred in connection with a Participant's trading or account activity, such as fees for wire transfers or check processing via electronic check, or storage or other fees or expenses related to Trading Privileges or Clearing Privileges. All such fees shall be charged in an amount to be reflected from time to time on the Website and in Participant Notices.
- E. If the Exchange determines in the future to impose dues or additional fees, the Exchange shall notify the Participant of any dues or additional fees that will be imposed at least 10 days before they take effect.

Rule 3.7 Recording of Communications

The Exchange may record conversations and retain copies of electronic communications between Exchange Officials, on one hand, and Participants, their Authorized Users, Authorized Representatives or other agents, on the other hand. Any such recordings may be retained by the Exchange in such manner and for such periods of time as the Exchange may deem necessary or appropriate. The Exchange shall retain such records for the retention periods necessary to comply with CFTC Regulation 1.35 or such longer period as the Exchange deems appropriate.

Rule 3.8 Independent Software Vendors

- A. A person seeking to act as an Independent Software Vendor must satisfy the Exchange's technological integrity requirements, complete the necessary ISV application and access documentation, agree to abide by these Rules and Applicable Law, consent to the jurisdiction of the Exchange, and agree to not adversely affect the Exchange's ability to comply with Applicable Law. Access to the Exchange by an ISV shall be provided pursuant to criteria that are impartial, transparent and applied in a fair and non-discriminatory manner. Persons seeking access to the Exchange through an ISV must themselves be Participants

to have such access. ISVs shall be subject to fees as reflected from time to time on the Website and in Participant Notices.

- B. Each ISV must immediately notify the Exchange in writing upon becoming aware:
1. that the ISV or any of the ISV's officers has been convicted of, pled guilty or no contest to, or entered a plea agreement to any felony in any domestic, foreign or military court, or with the CFTC, as applicable;
 2. that the ISV or any of the ISV's officers has been convicted of, plead guilty or no contest to, or entered a plea agreement to a misdemeanor in any domestic, foreign or military court, or with the CFTC, as applicable, which involves:
 - a embezzlement, theft, extortion, fraud, fraudulent conversion, forgery, counterfeiting, false pretenses, bribery, gambling, racketeering, or misappropriation of funds, securities or properties; or
 - b any Transaction in or advice concerning swaps, futures, options on futures or securities;
 3. that the ISV or any of the ISV's officers has been subject to, or associated with a firm that was subject to, regulatory proceedings before any Regulatory Agency;
 4. of any other material change in any information contained in the ISV's application;
 5. of becoming the subject of a bankruptcy petition, receivership proceeding, or the equivalent, or being unable to meet any financial obligation as it becomes due; and
 6. of information that concerns any financial or business developments that may materially affect the ISV's ability to continue to comply with applicable Exchange requirements.
- C. Each ISV must inform the Exchange of: (i) any change to its email address within 24 hours after such change; and (ii) other information provided in its application for ISV status within five days after any such change.

Rule 3.9 Participant Accounts and Cleared Swaps Customer Accounts

- A. The Exchange shall establish and maintain a Participant Account for each Participant and the Exchange undertakes to treat the Participant for whom such Participant Account is maintained as entitled to exercise the rights that comprise each financial asset which is credited to such Participant Account. However, the Exchange shall have complete and absolute discretion as to whether any particular financial asset is accepted by it for credit to any Participant Account.
- B. The Exchange shall establish and maintain a Cleared Swaps Customer Account for each FCM Participant's Cleared Swaps Customers and the Exchange undertakes to treat the FCM Participant for whom such Cleared Swaps Customer Account is maintained as entitled to exercise the rights that comprise each financial asset which is credited to such Cleared Swaps Customer Account. However, the Exchange shall have complete and absolute discretion as to whether any particular financial asset is accepted by it for credit to any Cleared Swaps Customer Account.
- C. With respect to any Digital Currency, including, but not limited to, Bitcoin, which is or may be credited to any Participant Account, the following terms and conditions shall apply:
 - 1. For purposes of creating a "security entitlement" as such term is defined in Section 8-102(a)(17) of the UCC, the Exchange and the Participant agree that: (1) the Digital Currency and any Digital Currency wallet maintained by the Exchange shall be treated as a "financial asset" as such term is defined in Section 8-102(a)(9) of the UCC; and (2) each Participant shall be treated as an "entitlement holder" as such term is defined in Section 8-102(a)(7) of the UCC.
 - 2. Each Participant acknowledges that the Exchange is a "securities intermediary" as such term is defined in Section 8-102(a)(14) of the UCC.
 - 3. Any Digital Currency which a Participant desires be credited to such Participant's Participant Account shall be transferred to a Digital Currency wallet designated by the Exchange and upon such transfer the Exchange shall indicate by book entry that such Digital Currency has been credited to such Participant Account.

- D. With respect to any Digital Currency, including, but not limited to, Bitcoin, which is or may be credited to any Cleared Swaps Customer Account, the following terms and conditions shall apply:
1. For purposes of creating a “security entitlement” as such term is defined in Section 8-102(a)(17) of the UCC, the Exchange and the Cleared Swaps Customer and the relevant FCM Participant all agree that: (1) the Digital Currency shall be treated as a “financial asset” as such term is defined in Section 8-102(a)(9) of the UCC; and (2) each FCM Participant shall be treated as an “entitlement holder” as such term is defined in Section 8-102(a)(7) of the UCC.
 2. Each Cleared Swaps Customer and each FCM Participant acknowledges that the Exchange is a “securities intermediary” as such term is defined in Section 8-102(a)(14) of the UCC.
 3. Any Digital Currency which an FCM Participant desires be credited to any of such FCM Participant’s Cleared Swaps Customer Accounts shall be transferred to a Digital Currency wallet designated by the Exchange and upon such transfer the Exchange shall indicate by book entry that such Digital Currency has been credited to any of such Cleared Swaps Customer Accounts.
- E. The Exchange shall have only such duties and obligations with respect to each Participant Account and Cleared Swaps Customer Account as are set forth in Article 8 of the UCC or otherwise mandated by Applicable Law. Each Participant, including each FCM Participant, and each Cleared Swaps Customer acknowledges and agrees that the Exchange is not a fiduciary for any Participant, including any FCM Participant, or Cleared Swaps Customer.

Rule 3.10 Withdrawal of Participant

- A. To withdraw from the Exchange, a Participant must notify the Exchange of its withdrawal. Such withdrawal shall be accepted immediately upon receipt of such notice by the Exchange and shall be effective upon such Participant’s fulfillment of its obligations under paragraph (C) below, or at such other time as the Exchange may determine in its reasonable discretion is desirable for the efficient operation of the Exchange.

- B. When the Exchange accepts the withdrawal of a Participant, all rights and privileges of such Participant terminate (including, without limitation, the Trading Privileges and Clearing Privileges) except as set forth in paragraph (C) below. The accepted withdrawal of a Participant shall not affect the rights of the Exchange under these Rules or relieve the former Participant of such Participant's obligations under the Exchange Rules before such withdrawal. Notwithstanding the accepted withdrawal of a Participant, the withdrawn Participant remains subject to the LedgerX Rules, the Obligations and the jurisdiction of the Exchange for acts done and omissions made while a Participant, must comply with paragraphs (C) and (D) below, must cooperate in any Disciplinary Action under Chapter 9 as if the withdrawn Participant were still a Participant, and must comply with requests for information from the Exchange regarding activities and obligations while a Participant for at least five years following its withdrawal.
- C. A Participant that has delivered a withdrawal notice pursuant to paragraph (A) above shall be subject to the following requirements, obligations and provisions:
1. it must use all reasonable endeavors to close out or transfer all open positions in its Participant Account and each of its Cleared Swaps Customer Accounts, as applicable, within 30 days after the Participant has delivered a withdrawal notice pursuant to paragraph (A) (the "wind-down period");
 2. after delivering a withdrawal notice pursuant to paragraph (A), it shall only be entitled to submit transactions for clearing which it can demonstrate have the overall effect of reducing open positions;
 3. if it has any open positions with the Exchange (whether in the Participant Account or any Cleared Swaps Customer Account) after the wind-down period, the Participant shall be subject to the Exchange exercising rights under Rule 7.2G to liquidate or transfer the open positions of the Participant.
- D. Any withdrawal notice delivered by a Participant pursuant to paragraph (A) above shall be irrevocable by the Participant and membership may only be reinstated pursuant to a new application for membership following the close-out or transfer

of all open Exchange Contracts in its Participant Account and each of its Cleared Swaps Customer Accounts, as applicable.

CHAPTER 4 Liquidity Providers

Rule 4.1 Application and Agreement

- A. Only Participants in good standing may become Liquidity Providers on the Exchange.
- B. To be considered for Liquidity Provider status, a Participant shall complete and execute a Liquidity Provider Agreement.
- C. The designation of any Liquidity Provider may be suspended, terminated or restricted by the Exchange at any time and for any reason.

Rule 4.2 Appointment

- A. The Exchange may appoint one or more Liquidity Providers for certain Exchange Contracts.
- B. In making such appointments, the Exchange shall consider:
 - 1. the financial resources available to the applicant;
 - 2. the applicant's trading activity in relevant swaps, futures, options on futures or related cash markets; and
 - 3. the applicant's business reputation and experience in market making in options and other derivative products.
- C. The Exchange, in its sole discretion, may appoint a Participant as a Liquidity Provider for certain Series and may appoint multiple Liquidity Providers for certain Series.
- D. No appointment of a Liquidity Provider shall be made without the Liquidity Provider's consent to such appointment.
- E. The Exchange shall periodically conduct an evaluation of all Liquidity Providers to determine whether they have fulfilled performance standards relating to, among other things, quality of the markets; trading activity; competitive market making; observance of ethical standards; business reputation; and administrative and financial soundness. If the Liquidity Provider fails to meet minimum

performance standards, the Exchange may, among other actions, suspend, terminate or restrict the Liquidity Provider's appointment.

Rule 4.3 Benefits

Liquidity Providers may receive reduced trading fees or other incentives in accordance with any Liquidity Provider program in place at the Exchange for fulfilling the Obligations of a Liquidity Provider as disclosed in the applicable Liquidity Provider Agreement.

Rule 4.4 Obligations

Transactions of Liquidity Providers should constitute a course of dealing reasonably calculated to contribute to the maintenance of a fair and orderly market, and Liquidity Providers shall not enter Orders or enter into Transactions that are inconsistent with such a course of dealing.

Ordinarily, Liquidity Providers shall be obligated to do the following:

- A. comply with all other terms of the applicable Liquidity Provider Agreement; and
- B. make good-faith efforts to enter on the Platform current binding bid and offer quotes, with a bid/offer spread as specified in the applicable Liquidity Provider Agreement, as necessary to ensure liquidity.

CHAPTER 5 Method for Trading Exchange Contracts

Rule 5.1 User IDs

- A. Each Authorized User must have a unique User ID and a CSP.
- B. Each Order entered must contain a User ID that identifies the Participant's Authorized User that entered the Order.
- C. Each Order entered by an FCM Participant or Executing Participant on behalf of a Customer must contain: (1) such Customer's User ID or Customer ID; and (2) the User ID of the FCM Participant's or Executing Participant's Authorized User that entered the Order.
- D. For Transactions in Swaps, (1) the Reporting Counterparty shall be established pursuant to CFTC Regulation 45.8, as may be amended from time to time; and (2) if each Participant has equal reporting status under CFTC Regulation 45.8,

the Exchange shall designate the seller of a Swap as the Participant that is the Reporting Counterparty.

- E. No Person may use a User ID to place any Order except as permitted by these Rules, nor may any Person knowingly permit or assist with the unauthorized use of a User ID. Each Participant and Authorized User shall ensure that no User ID is used by any Person not authorized by these Rules. Each Participant shall establish and maintain policies and procedures to ensure the proper use and protection of User IDs. An Authorized User is prohibited from using another Person's User ID, unless the Authorized User is entering the Order of a Customer in accordance with the Rules.
- F. With respect to Customers of Executing Participants, each such Customer must provide the User ID of any of its Authorized Users to an Executing Participant to allow the Executing Participant to enter Orders on behalf of such Customer.
- G. Each Participant shall be solely responsible for controlling and monitoring the use of all User IDs and CSPs issued to its Authorized Users.
- H. Each Participant shall notify the Exchange of the need to terminate any User IDs or the status of any of its Authorized Users.
- I. Each Participant shall keep confidential and secure all User IDs, except as permitted pursuant to these Rules, as well as all CSPs and any account numbers and passwords related to the Platform and shall notify the Exchange promptly upon becoming aware of:
 - 1. any unauthorized disclosure or use of any User ID or CSP and of any other compromise to a User ID or CSP that would reasonably cause the Exchange to deactivate the User ID or CSP;
 - 2. any loss of any User ID or CSP; and
 - 3. any unauthorized access to the Exchange by any Person using a User ID and/or CSP assigned to such Participant.
- J. Each trading system that automates the generation and routing of Orders to the Exchange must have a User ID.

Rule 5.2 Order Entry and Audit Trail

- A. Each Participant and Authorized User shall enter Orders on the Platform, and the Exchange shall maintain an electronic record of these entries. Each Participant shall be responsible for any and all Orders entered using User IDs assigned to the Participant or its Authorized User by the Exchange. Trading on the Exchange central limit order book is anonymous.
- B. Each Participant's Authorized User entering Orders on the Platform must input for each Order the following information (to the extent that such information is not provided at account creation or by the Platform):
1. the Authorized User's User ID;
 2. for an Authorized User of an FCM Participant or Executing Participant entering an order on behalf of a Customer, the User ID of the Authorized User and the Customer ID, where applicable, for whom such Authorized User enters an Order;
 3. the Series;
 4. Order type;
 5. Customer Type Indicator Code;
 6. buy or sell, and for options, put, call and strike;
 7. price;
 8. quantity;
 9. such additional information as may be prescribed from time to time by the Exchange; and
 10. for each Order to buy or sell a Swap, the Authorized User shall include with each such Order the following information (to the extent that such information is not provided at account creation or by the Platform):
 - a the Legal Entity Identifier of the Participant on whose behalf the Order is placed;

- b a yes/no indication of whether the Participant is a swap dealer, as defined in Section 1a(49) of the CEA and CFTC Regulations, with respect to the Swap for which the Order is submitted;
 - c a yes/no indication of whether the Participant or Authorized User is a major swap participant, as defined in Section 1a(33) of the CEA and CFTC Regulations, with respect to the Swap for which the Order is submitted;
 - d a yes/no indication of whether the Participant is a financial entity, as defined in Section 2(h)(7)(C) of the CEA;
 - e a yes/no indication of whether the Participant or Customer is a U.S. person, as defined in the CFTC's July 26, 2013 Cross-Border Guidance, as may be amended from time to time; and
 - f if the Swap will be allocated: (i) an indication that the Swap will be allocated; (ii) the LEI of the agent; (iii) an indication of whether the Swap is a post-allocation swap; and (iv) if the Swap is a post-allocation swap, the unique swap identifier of the original transaction between the reporting counterparty and the agent.
- C. In the event that an FCM Participant or Executing Participant or Authorized User of an FCM Participant or Executing Participant receives an Order from a Customer that cannot be immediately entered on the Platform, the Executing Participant or Authorized User of the Executing Participant must prepare a written Order ticket and include the account designation, date, an electronic timestamp reflecting the time of receipt and other information required pursuant to section (B) above. The FCM Participant or Executing Participant must enter the Order on the Platform when the Order becomes executable.
- D. Audit Trail Requirements
1. Participants that provide connectivity to the Exchange are responsible for maintaining, or causing to be maintained, an Order routing or front-end audit trail for all electronic Orders, including Order entry, modification, cancellation and responses to such messages, entered on the Platform through any gateway to the Platform. The audit trail must contain all

Order receipt, Order entry, Order modification, and response or receipt times to the highest level of precision achievable by the operating system, in accordance with CFTC requirements for electronic Orders and no more than one second for non-electronic Orders. The times captured must not be able to be modified by the Person entering the Order.

2. Participants, including Authorized Users and any Person having Trading Privileges, must maintain audit trail information as required by the CEA and CFTC Regulations, including, but not limited to, CFTC Regulations 1.31 and 1.35 if applicable, and must be able to produce this data in a standard format upon request from the Regulatory Oversight Committee, Compliance Department or other relevant department of the Exchange.
3. FCM Participants must maintain a complete record of all of Cleared Swaps Customer Orders to trade Exchange Contracts received by the FCM Participant, and any other Transaction records, communications or data received by the FCM Participant regarding its Cleared Swaps Customer Accounts.
4. The audit trail must capture required fields, which include but are not limited to the following: all fields relating to Order entry, including the ID of an Exchange Contract, quantity, Order type, buy/sell indicator, User ID(s), Customer Type Indicator Code, timestamps, and, where applicable, stop/trigger price, type of action and action status code, and applicable information contained in paragraph (B) of this Rule 5.2.
5. For Orders that are executed, the audit trail must record the execution time of the Exchange Contract and all fill information.
6. The Compliance Department staff shall require, at least on an annual basis, its Participants to verify compliance with these audit trail and record-keeping requirements. Participants also may be subject to periodic audit trail spot checks, depending upon any indicators that any Participant is failing to adhere to Exchange Rules pertaining to audit trail requirements, Participant obligations or any other failures to provide information to the Exchange upon request. The findings of such Exchange reviews will be documented and maintained as part of the

books and records of the Exchange. The reviews shall include, but not be limited to, the following:

- a review of random samples of audit trail data;
- b review of the process by which identifications are assigned to records and users and how the records are maintained; and
- c review of account numbers and customer indicators in trade records to test for accuracy and improper use.

E. CTI Codes. Each Participant must identify each Transaction on the record of transactions submitted to the Exchange with the correct CTI Code. The CTI Codes are as follows:

CTI 1: Electronic Trading and Privately Negotiated – Applies to Transactions initiated and executed by a Participant for its Cleared Swaps Proprietary Account, for an account controlled by a Participant, or for an account in which the Participant has an ownership or financial interest.

CTI 2: Electronic Trading and Privately Negotiated – Applies to Transactions initiated and executed by a Participant trading for a clearing member's house account.

CTI 3: Electronic Trading and Privately Negotiated – Applies to Orders entered by a Participant or Authorized User for another Participant or an account controlled by such other Participant.

CTI 4: Electronic Trading and Privately Negotiated – Applies to Transactions initiated and executed by a Participant trading for any other type of Customer.

F. A Swap will not be void or voidable due to: (1) a violation by the Exchange of the provisions of section 5h of the CEA; (2) any CFTC proceeding to alter or supplement a rule, term or condition under section 8a(7) of the CEA or to declare an emergency under section 8a(9) of the CEA; or (3) any other proceeding the effect of which is to: (i) alter or supplement a specific term or condition or trading rule or procedures, or (ii) require a swap execution facility to adopt a specific term or condition, trading rule or procedure, or to take or refrain from taking a specific action.

Rule 5.3 Order Type

- A. The following types of Orders may be entered on the Platform with respect to any Exchange Contract.
1. Market Order. An Order entered on the Platform to buy or sell immediately and executed at the best price currently available on the Platform.
 2. Limit Order. An Order to buy or sell an Exchange Contract at a specified price or better. A Limit Order must be entered on the Platform with a defined limit price. A Limit Order will be executed when it is entered, to the extent that there are resting contra-Orders, with any balance of such Limit Order to remain as a resting Order until such Limit Order is executed or cancelled. Unless cancelled by the Participant or upon a market close, an exchange restart, or other disruption to normal operating conditions, All Limit Orders shall be normally cancelled by the Exchange 30 days after being placed at the conclusion of Trading Hours on each Business Day.
 3. Sweep, Cross and Print ("SCP") Order. An Order to cross a pre-negotiated trade available only for Permitted Transactions. An SCP Order must be entered on the Platform with the Order size, limit price, buy or sell indication, and committed counterparty. One side of the SCP Order is entered on the Platform and matched with and executed against Orders in the central limit order book that are better than the pre-negotiated price, to the extent there are any such Orders. When the pre-negotiated price is the best bid (i.e., there are no contra-Orders at the best bid in the central limit order book), in the case of a sell SCP Order, or the best ask (i.e., there are no contra-Orders at the best ask in the central limit order book), in the case of a buy SCP Order, the remaining balance of the SCP Order shall be executed against the committed counterparty's side of the SCP Order. The agreed-upon terms of any SCP Order must be submitted to the Platform by one Participant within five minutes of the conclusion of any pre-negotiation. The counterparty to the transaction must then approve the terms before the SCP Order is executed.

4. Quote. A Limit Order as defined in this Rule 5.3A that is entered on the Platform by a Liquidity Provider.
- B. The Exchange's central limit order book matches orders on the basis of a price and time priority algorithm.
- C. The Exchange does not accept indications of interest or indicative quotes.
- D. Other types of Orders as may be approved by the Exchange from time to time as disclosed in a Participant Notice and on the Website.

Rule 5.4 Trading Contracts on Behalf of Cleared Swaps Customers

- A. Individuals or entities that have not been approved and authorized as Participants of the Exchange may trade Exchange Contracts only as Customers of an FCM Participant, and all Customer Orders must be transmitted to the Exchange by each Customer's FCM Participant. Each FCM Participant shall maintain a secure connection to the Exchange and comply with all technical and other requirements established by the Exchange for this purpose.
- B. Upon submission of a Cleared Swaps Customer Order, the Exchange will conduct a review of the FCM Participant's Cleared Swaps Customer Collateral Account to ensure that the FCM Participant's Cleared Swaps Customer can fully collateralize the Order prior to entering into any Transaction. If the FCM Participant's Cleared Swaps Customer Collateral Account does not have the necessary funds for the Order, the Exchange will not accept the Cleared Swaps Customer's Order.

Rule 5.5 Execution Methods

- A. The Exchange facilitates the execution of Orders through a central limit order book on the Platform, including SCP Orders as set forth in Rule 5.3. The Exchange does not facilitate the execution of block trades as defined in CFTC Regulation 43.2.
- B. A written record of all of the terms of each Transaction entered into on the Exchange or pursuant to the Rules will be available immediately upon execution through the Participant Portal. Such record shall legally supersede any previous agreement and serve as a confirmation of each such Transaction. The Exchange will send confirmation messages to Participants upon execution of a Transaction via the API and/or Portal, if such Participants are online at the time.

However, please note that if any applicable Participant is not online at the time of execution, such Participant will see the confirmation(s) when it next logs on to the Platform.

Rule 5.6 Trading Hours

- A. The Trading Hours of the Exchange are 24 hours a day, seven days a week, 365 days per year.¹ The Trading Hours applicable to any given type of Exchange Contract will be as specified in Chapter 12 of these Rules with any modifications posted on the Website and sent by Participant Notice.

CHAPTER 6 Clearing and Delivery

Rule 6.1 Clearance and Substitution

- A. Upon submission of an Order, the Exchange will conduct a review of the Participant's Collateral Account to ensure that the Participant can fully collateralize the Order prior to entering into any Transaction. If the Participant's Collateral Account does not have the necessary funds and/or collateral for the Order, the Exchange will not accept the Order.
- B. Upon the successful matching of Orders, the Exchange's Derivatives Clearing Organization shall immediately, through the process of Novation, be substituted as and assume the position of seller to the Participant buying and buyer to the Participant selling the relevant Exchange Contract. Upon such substitution, the buying and selling Participants shall be released from their Obligations to each other, and such Participants shall be deemed to have bought the Exchange Contract from or sold the Exchange Contract to the Exchange's DCO, as the case may be, and the Exchange's DCO shall have all the rights and be subject to all the liabilities of such Participants with respect to such Transactions. Such substitution shall be effective in law for all purposes. The Participants of the Swap are deemed to consent to the Novation by entering the applicable Orders on the Exchange Platform and the Exchange DCO consents to the Novation by accepting the Orders on the Exchange Platform.
- C. Swaps with the same terms and conditions, as defined by the Exchange Contract Specifications, submitted to the Exchange's Derivatives Clearing Organization for

¹ Or, 366 days per year for leap years.

clearing, are economically equivalent within the Exchange's Derivatives Clearing Organization and may be offset with each other within the Exchange's Derivatives Clearing Organization.

- D. Upon acceptance of a Swap by the Exchange's Derivatives Clearing Organization for clearing:
 - 1. The original Swap is extinguished;
 - 2. The original Swap is replaced by an equal and opposite Swap between the Exchange's DCO and each Participant; and
 - 3. All terms of a cleared Swap must conform to the Exchange Contract Specifications.
- E. If a Swap is rejected for clearing by the Exchange's Derivatives Clearing Organization for any reason, such Swap is void ab initio.

Rule 6.2 Settlement of Exchange Contracts

- A. The Exchange shall maintain, on its system, a record of each Participant's account balances and Exchange Contracts.
- B. On the Settlement Date, the Exchange will notify all Participants of the final amount payable.
- C. With respect to an Exchange Contract that is physically settled, the Exchange shall transfer the Underlying to the Participant Account on the Exchange's books and records of the Participant that exercised its Exchange Contract that is an option on the next Business Day after the Settlement Date. For an expired Exchange Contract that is an option, the Exchange will transfer the Underlying to the Participant Account on the Exchange's books and records of the Participant that initially posted the Underlying in its capacity as the option call writer.
- D. After the notice period on the last trading day of an expiring Series of Exchange Contracts that are options, the Exchange will delete all such Exchange Contracts that have not been exercised from each Participant's Participant Account. An Exchange Contract that is an option and that has not been exercised on or before the last trading day will expire with no value in accordance with the Contract Specifications.

Rule 6.3 Deposit Procedures

- A. A Participant must submit a deposit notification through the Participant Portal before the Participant may deposit funds or any Underlying with the Exchange. A Participant must deposit funds or Underlying on the same day as the Participant submits to the Exchange a deposit notification to the Exchange.
- B. Deposits occur, and funds and Underlying are available for use with respect to Trading Privileges and Clearing Privileges, no later than the next Settlement Bank Business Day after a Participant submits a deposit notification and deposits funds or Underlying with the Exchange in accordance with Rule 6.3A ~~if the Participant has taken such actions during Trading Hours. For deposit notifications submitted and funds or Underlying transferred outside of Trading Hours, deposits occur, and funds and Underlying are available for use with respect to Trading Privileges and Clearing Privileges, no later than the second Settlement Bank Business Day after the Participant follows the procedures in Rule 6.3A.~~
- C. Participants are responsible for all transfers of funds from their Exchange-approved accounts to the Collateral Account or transfers of any Underlying to the Exchange for credit to the relevant Participant Account.
- D. In the event a Participant deposits funds or Underlying to the Exchange without submitting a deposit notification, the Participant agrees to: (1) cooperate with the Exchange to resolve any issues that may arise; and (2) agree that the Exchange will send the funds or Underlying back to the account or address from which it was transferred within two (2) Settlement Bank Business Days if there has been no resolution.

Rule 6.4 Withdrawal Procedures

- A. Only an Authorized Representative may submit a withdrawal notification through the Participant Portal before the Exchange transfers funds or Underlying to a Participant or a Cleared Swaps Customer. Upon receipt of a withdrawal notification, the Exchange no longer permits funds or Underlying in the amount listed in the withdrawal notification to be used for Trading Privileges and Clearing Privileges.

- B. Participants are responsible for providing accurate account numbers or wallet addresses, as the case may be, to allow the Exchange to effect transfers to the Participants or Cleared Swaps Customers.
- C. Withdrawals occur, and funds and Underlying are available, no later than the next Settlement Bank Business Day after a Participant has submitted a withdrawal notification if the Participant submits a withdrawal notification during Trading Hours. ~~For withdrawal notifications submitted outside of Trading Hours, withdrawals occur no later than the second Settlement Bank Business Day after the Participant submits a withdrawal notification.~~
- D. With respect to withdrawals of Bitcoin collateral, the Exchange shall deliver to the Participant a cryptographically signed Bitcoin transaction, which shall include the two signatures, the LedgerX “from” address, the Participant “to” address and the appropriate Bitcoin withdrawal amount.
- E. If a Participant fails to adhere to the withdrawal procedures set forth herein or in the Exchange Contract Specifications, as applicable, the Exchange will take reasonable measures to effect the withdrawal; however, if unable to effect the withdrawal, the Participant’s collateral may become the sole property of the Exchange, to the extent permitted by Applicable Law. The Exchange may apply the collateral (including any Underlying held in such Participant’s Participant Account) against the Participant’s Obligations.

Rule 6.5 Deliveries

A Participant that is required to make or accept delivery under an Exchange Contract (either for itself or on behalf of a Cleared Swaps Customer) agrees that it is required to provide full collateralization prior to entering any such Transaction or exercising any Exchange Contract so as to allow the Exchange to complete all necessary delivery requirements as set forth in the Rules. Deliveries will occur on the Exchange’s books and records unless otherwise specified in the Exchange Contract Specifications. Any failure to deposit funds or collateral in accordance with Rule 6.3 or withdraw funds or collateral in accordance with Rule 6.4 may be deemed a default of an Obligation and an act detrimental to the interest or welfare of the Exchange.

Rule 6.6 Reconciliation

The Exchange shall reconcile the positions and cash and collateral balances of each Participant at the end of each Settlement Bank Business Day. The Exchange shall make available to each Participant the positions and cash and collateral balances of each such Participant and any Cleared Swaps Customers of the Participant. All Participants shall be responsible for reconciling their records of their positions and cash and collateral balances with the records of positions and cash and collateral balances that the Exchange makes available to Participants.

Rule 6.7 Swap Data Reporting

- A. The Exchange shall report Regulatory Swap Data for Swaps to a single Swap Data Repository for purposes of complying with the CEA and applicable CFTC Regulations governing the regulatory reporting of swaps. The Exchange shall report all data fields as required by Appendix A to Part 43 of CFTC Regulations and Appendix 1 to Part 45 of CFTC Regulations, as applicable, including, but not limited to, Swap counterparties, Exchange Contract type, option method, option premium, LEIs, User IDs, buyer, seller, USIs, unique product identifiers, underlying asset description, the Swap price or yield, quantity, maturity or expiration date, the size, settlement method, execution timestamp, timestamp of submission to the SDR, the CTI Code, Participant Accounts, and whether a Participant is a swap dealer, major swap participant or a financial entity. The Exchange shall identify each counterparty to any Transaction in all recordkeeping and all Regulatory Swap Data reporting using a single LEI as prescribed under CFTC Regulation 45.6. As soon as technologically practicable after execution, the Exchange also shall transmit to both Swap counterparties and the LedgerX DCO, the USI for the Swap created pursuant to CFTC Regulation 45.5 and the identity of the SDR. For Swaps involving allocation, the Exchange will transmit the USI to the Reporting Counterparty and the agent as required by CFTC Regulation 45.5(d)(1).
- B. The Exchange shall from time to time designate a Swap Data Repository in respect of one or more Swaps and shall notify Participants of such designation. Currently, the Exchange reports all Regulatory Swap Data for all Swaps to ICE Trade Vault.

- C. Participants that become aware of an error or omission in Regulatory Swap Data for a Transaction shall promptly submit corrected data to the Exchange. Participant shall not submit or agree to submit a cancellation or correction in order to gain or extend a delay in public dissemination of accurate Swap Transaction and Pricing Data or to otherwise evade the reporting requirements of Part 43 of CFTC Regulations. LedgerX will report any errors or omissions in Regulatory Swap Data to the same SDR to which it originally submitted the Data, as soon as technologically practicable after discovery of any such error or omission.
- D. The Exchange sends the Regulatory Swap Data as set forth in Rule 6.7A to the Swap Data Repository as soon as technologically practicable after a trade has been executed on the Platform, or pursuant to the Exchange Rules. Following the transmittal of the Data to the Swap Data Repository, the Exchange will make available the Swap Transaction and Pricing Data to all Participants accessing the Platform. However, due to transmission and posting timing of the Swap Data Repository, Participants should be aware that the Swap Transaction and Pricing Data may be available on the Exchange Platform prior to being publicly disseminated by the Swap Data Repository.

CHAPTER 7 Margin

Rule 7.1 Full Collateralization of Exchange Contracts Required

Each Participant, on behalf of itself or Cleared Swaps Customers, shall deposit funds or the applicable amount of the Underlying required to fully collateralize Orders pursuant to Exchange Contract Specifications, including payment of premiums, payment in exchange for delivery or to fulfill delivery obligations, as applicable, prior to submission of such Orders to the Exchange. If an Exchange Contract is an option, a Participant shall not be permitted to exercise such option if the Participant has not already deposited sufficient collateral to fully collateralize the Underlying or funds necessary to complete delivery or payment of the option, as applicable. Collateral transfers made by a Participant to the Exchange or by the Exchange to a Participant are irrevocable and unconditional when effected.

Rule 7.2 Collateral

- A. Subject to the terms and conditions of Exchange-approved margin collateral, the Exchange will accept from Participants the following as margin collateral: (1)

cash; (2) the Underlying; and (3) any other form of collateral deemed acceptable by the Risk Management Committee upon the Risk Management Committee's approval of such collateral as communicated through Participant Notices and on the Website. The Exchange will value margin collateral as it deems appropriate.

- B. Except as otherwise provided herein, Collateral must be and remain unencumbered. Each Participant posting collateral hereby grants to the Exchange a continuing first priority security interest in, lien on, right of setoff against and collateral assignment of all of such Participant's right, title and interest in and to any property and collateral deposited with the Exchange by the Participant, whether now owned or existing or hereafter acquired or arising, including without limitation the following: (i) such Participant's Participant Account and all securities entitlements held therein and all funds held in a Collateral Account; (ii) all Digital Currencies that, in each case, are held in or otherwise credited to a virtual "wallet" or other account maintained by the Exchange; (iii) such virtual "wallet" or other account; and (iv) all proceeds of the foregoing. A Participant shall execute any documents required by the Exchange to create, perfect and enforce such lien.
- C. Each Participant hereby agrees that with respect to any Digital Currency and any other financial asset which is or may be credited to the Participant's Participant Account, the Exchange shall have control pursuant to Section 9-106(a) and 8-106(e) of the UCC and a perfected security interest pursuant to Section 9-314(a) of the UCC.
- D. A Participant must transfer the collateral to the Exchange or to a Collateral Account and the Exchange will hold collateral transferred to the Exchange on behalf of the Participant. The Exchange will credit to the Participant the collateral that such Participant deposits. Collateral shall be held by the Exchange until a Participant submits a withdrawal notification unless otherwise stipulated by these Rules.
- E. The Exchange will not be responsible for any diminution in value of collateral that a Participant deposits with the Exchange. Any fluctuation in markets is the risk of each Participant. Any interest earned on Participant collateral may be retained by the Settlement Bank or the Exchange.

- F. The Exchange has the right to liquidate a Person's Exchange Contracts or non-cash collateral to the extent necessary to close or transfer Exchange Contracts, fulfill obligations to the Exchange or other Participants, and/or to return collateral in the event that (1) the Person ceases to be a Participant; (2) the Exchange suspends or terminates the Person's Trading Privileges or Clearing Privileges; or (3) the Exchange determines in its sole discretion that it is necessary to take such measures.

Rule 7.3 Segregation of Participant Funds

The Exchange shall separately account for and segregate from the Exchange's proprietary funds all Participant funds used to purchase, margin, guarantee, secure or settle Exchange Contracts, and all money accruing to such Participant as the result of Exchange Contracts so carried in a Collateral Account. The Exchange shall maintain a proprietary account that will be credited with fees or other payments owed to the Exchange that are debited from the Collateral Account as a result of Participant trades and settlements of Exchange Contracts. The Exchange shall maintain a record of each Participant's account balances and Exchange Contracts. The Exchange shall not hold, use or dispose of Participant funds except as belonging to Participants.

Rule 7.4 Concentration Limits

The Exchange may apply appropriate limitations or charges on the concentration of assets posted as collateral, as necessary, in order to ensure its ability to liquidate such assets quickly with minimal adverse price effects, and may evaluate the appropriateness of any such concentration limits or charges, on a periodic basis. In the event that the Exchange determines in its sole discretion that the Participant's deposit is in material excess of the amount necessary to collateralize the Participant's Exchange Contracts, the Exchange shall have the right to (1) transfer non-cash collateral, including Digital Currencies, back to a Participant, and Participant agrees to accept such transfer, or (2) take other action the Exchange deems to be necessary to safeguard the collateral. The Exchange shall be entitled to charge fees related to holding non-cash collateral in material excess of the amount necessary to collateralize a Participant's Exchange Contracts.

CHAPTER 8 Business Conduct and Trading Practices

Rule 8.1 Scope

This Chapter 8 applies to all Transactions except as may be provided herein. Participants and, where applicable, Authorized Users, shall adhere to and comply fully with this Chapter 8.

Rule 8.2 Procedures

- A. With respect to trading on the Platform, the Exchange may adopt procedures relating to Transactions and trading on the Platform, including, without limitation, procedures to:
1. determine the daily settlement price of an Exchange Contract;
 2. disseminate the prices of bids and offers on, and trades in, Exchange Contracts;
 3. record, and account for, Exchange Contracts and activity on the Exchange;
 4. perform market surveillance and regulation on matters affecting Exchange Contracts and activity on the Exchange;
 5. establish limits on the number and/or size of Orders that may be submitted by a Participant on the Platform;
 6. establish limits on the number of Exchange Contracts that may be held by a Participant; and
 7. establish a limit on the maximum daily price fluctuations for any Exchange Contract and provide for any related restriction or suspension of trading in the Exchange Contract.
- B. The Exchange may, in its discretion and at any time, amend any procedures adopted pursuant to Rule 8.2A, and will publish the amendments in a Participant Notice and on the Website.

Rule 8.3 Prohibited Trading Activity; Prohibitions on Fictitious Transactions, Fraudulent Activity and Manipulation

No Person shall engage in any of the following activities in connection with or related to any Exchange activity:

- A. any fraudulent act or scheme to defraud, deceive, trick or mislead;
- B. trading ahead of a Customer or front-running;
- C. fraudulent trading;
- D. trading against a Customer Order or entering into a cross-trade, except as permitted by Rule 8.11;
- E. accommodation trading;
- F. fictitious Transactions;
- G. pre-arranged or non-competitive Transactions (except for Transactions specifically authorized under these Rules);
- H. cornering, or attempted cornering, of any Exchange Contract;
- I. violations of bids or offers;
- J. spoofing;
- K. any manipulation proscribed under CEA Section 9(a)(2) or CFTC Regulations 180.1(a) or 180.2, whether attempted or completed;
- L. demonstrating intentional or reckless disregard for the orderly execution of Transactions during the closing period;
- M. making fictitious or trifling bids or offers, offering to enter into an Exchange Contract at a price variation less than the minimum price fluctuation permitted for such Exchange Contract under the Rules, or knowingly making any bid or offer for the purpose of making a market price that does not reflect the true state of the market; or
- N. other conduct that constitutes a disruptive trading practice or is otherwise prohibited under CEA Section 4c(a)(5) or applicable CFTC Regulations.

Rule 8.4 Prohibition on Money Passing, Pre-Arranged, Pre-Negotiated and Non-Competitive Trades

- A. No Person may enter Orders for the purpose of entering into Transactions without a net change in either party's open positions but a resulting profit to one party and a loss to the other party, commonly known as a "money pass".

- B. No Person shall pre-arrange or pre-negotiate any purchase or sale or non-competitively execute any Transaction, except to effect an SCP Order. And pre-execution communications related thereto should take place on the Exchange Pre-Trade Telecommunication Systems.

Rule 8.5 Acts Detrimental to the Welfare or Reputation of the Exchange Prohibited

No Participant, Authorized Representative, Authorized User or ISV shall engage in any Exchange activity that tends to impair the welfare, reputation, integrity or good name of the Exchange.

Rule 8.6 Misuse of the Platform

Misuse of the Platform is strictly prohibited. It shall be deemed an act detrimental to the Exchange to permit unauthorized use of the Platform, to assist any Person in obtaining unauthorized access to the Platform, to trade on the Platform without an agreement, to alter the equipment associated with the Platform (except with the Exchange's consent), to interfere with the operation of the Platform, to intercept or interfere with information provided thereby, or in any way to use the Platform in a manner contrary to these Rules.

Rule 8.7 Supervision; Information Sharing

- A. A Participant shall be responsible for establishing, maintaining and administering reasonable supervisory procedures to ensure that its Authorized Users comply with these Rules and Applicable Law, and such Participant may be held accountable for the actions of such Authorized Users with respect to the Exchange.
- B. Participants and Authorized Users shall cooperate fully with the Exchange or a Regulatory Agency in any investigation, call for information, inquiry, audit, examination or proceeding.
- C. Participants and Authorized Users shall ensure that any information disclosed to the Exchange is accurate, complete and consistent. No existing or prospective Participant or Authorized User shall make any false statements or misrepresentations in any application, report or other communication to the Exchange.

Rule 8.8 Business Conduct

- A. Conducting trading activities in an honorable and principled manner consistent with these Rules is the essence of ethical conduct with respect to the Exchange. Participants, Authorized Users and other Persons subject to the Exchange's jurisdiction shall act with ethical integrity with regard to their Exchange activity, and shall adhere to the following ethical standards:
1. A Participant, Authorized User and any other Person subject to the Exchange's jurisdiction shall abstain from engaging in conduct that is a violation of these Rules or Applicable Law, and will conduct its business in accordance with Applicable Law, and in good faith, with a commitment to honest dealing.
 2. No Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall engage in any fraudulent act or engage in any scheme to defraud, deceive, trick or mislead in connection with or related to any Exchange activity.
 3. No Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall knowingly enter, or cause to be entered, bids or offers on the Platform other than in good faith for the purpose of executing bona fide Transactions.

Rule 8.9 Trading Practices

- A. No Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall knowingly effect or induce the purchase or sale of any Exchange Contract for the purpose of creating or inducing a false, misleading, or artificial appearance of activity in such Exchange Contract, or for the purpose of unduly or improperly influencing the market price of such Exchange Contract or for the purpose of making a price which does not reflect the true state of the market in such Exchange Contract. No such Participant, Authorized User or other Person shall arrange and execute simultaneous offsetting buy and sell Orders in an Exchange Contract with the intent to artificially affect reported revenues, trading volumes or prices.

- B. No Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall attempt to manipulate, or manipulate the market, in any Exchange Contract or Underlying. No such Participant, Authorized User or other Person shall directly or indirectly participate in or have any interest in the profit of a manipulative operation or knowingly manage or finance a manipulative operation. This includes any pool, syndicate, or joint account, whether in corporate form or otherwise, organized or used intentionally for the purposes of unfairly influencing the market price of any Exchange Contract.
- C. Orders entered on the Platform for the purpose of upsetting the equilibrium of the market in any Exchange Contract or creating a condition in which prices do not or will not reflect fair market values are prohibited, and any Person who makes or assists in entering any such Order with knowledge of the purpose thereof or who, with such knowledge, in any way assists in carrying out any plan or scheme for the entering of any such Order, will be deemed to have engaged in an act detrimental to the Exchange.
- D. No Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall engage in any trading, practice, or conduct that constitutes a disruptive or a manipulative trading practice, as defined by the CEA, CFTC Regulations or in any interpretive guidance issued by the Commission.
- E. No Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall make any knowing misstatement of a material fact to the Exchange, any Exchange Official, or any Board committee.
- F. No Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall knowingly disseminate false or misleading reports regarding Transactions, the Exchange or one or more markets in any Exchange Contract.
- G. Abusive trading practices are prohibited on the Platform. No Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall place or accept buy and sell Orders in the same product and expiration month, and for options, the same strike, when they know or reasonably should know that the purpose of the Orders is to avoid taking a bona fide market position exposed to market risk (transactions commonly known or referred to as "wash sales"). Buy and sell Orders that are entered with the intent to negate market risk or price

competition shall be deemed to violate the prohibition on wash sales. Additionally, no Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall knowingly execute or accommodate the execution of such Orders by direct or indirect means.

- H. No Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall disclose an Order to buy or sell, except to an Exchange Representative or official of the CFTC or as necessary to efficiently execute the Order, nor shall any such Participant, Authorized User or other Person solicit or induce another Person to disclose Order information. No Participant, Authorized User or other Person shall take action or direct another to take action based on non-public Order information, however acquired, except as permitted by Rule 8.4B. The mere statement of opinions or indications of the price at which a market may open or resume trading does not constitute a violation of this Rule.

Rule 8.10 Customer Order Priority

- A. No Participant, Authorized User or other Person subject to the Exchange's jurisdiction shall knowingly enter an Order on the Platform for its own account, an account in which it has a direct or indirect financial interest, or an account over which it has discretionary trading authority (a "Discretionary Order"), including, without limitation, an Order allowing discretion as to time and price, when such Person is in possession of a Customer Order that can be but has not been entered on the Platform.
- B. For purposes of this Rule 8.10, a Person shall not be deemed to knowingly buy or sell an Exchange Contract or execute a Discretionary Order if:
 - 1. such Person is a corporate or other legal entity consisting of more than one individual trader;
 - 2. such Person has in place appropriate "firewall" or separation of function policies and procedures; and
 - 3. the Person or Authorized User buying or selling the Exchange Contract or executing the Discretionary Order in question has no direct knowledge of the Order to buy or sell the same Exchange Contract for any other Person

at the same price or at the market price or of the Customer Order for the same Exchange Contract, as the case may be.

- C. Nothing in this Rule 8.10 limits the ability of an “eligible account manager” to bunch Orders in accordance with CFTC Regulation 1.35(b)(5).

Rule 8.11 Trading Against Customer Orders

- A. No Person in possession of a Customer Order shall knowingly take, directly or indirectly, the opposite side of such Order for its own account, an account in which it has a direct or indirect financial interest, or an account over which it has discretionary trading authority.
- B. The foregoing restriction does not prohibit permissible pre-execution discussions conducted in accordance with Rule 8.4.

Rule 8.12 Prohibition on Withholding of Customer Orders

No Executing Participant or FCM Participant shall withhold or withdraw from the market any Customer Order, or any part of an Order, for the benefit of any Person other than the Customer.

Rule 8.13 Execution Priority

- A. Executable Customer Orders must be entered on the Platform immediately upon receipt. An FCM Participant or Executing Participant that receives a Customer Order that is not immediately entered on the Platform must create a non-erasable record of the Order, including the Order instructions, account designation, date, time of receipt and any other information that may be required by the Exchange.
- B. Customer Orders received by an FCM Participant or Executing Participant shall be entered on the Platform in the sequence received. Customer Orders that cannot be immediately entered on the Platform must be entered when the Orders become executable in the sequence in which the Orders were received.
- C. Non-discretionary Customer Orders received by an FCM Participant or Executing Participant shall be entered on the Platform in the sequence in which they were received. Non-discretionary Customer Orders that cannot be immediately entered on the Platform must be entered when the Orders become executable in the sequence in which the Orders were received.

Rule 8.14 Crossing Orders

Independently initiated Orders on opposite sides of the market for different beneficial account owners that are immediately executable against each other may be entered without delay. Orders must not involve pre-execution communications, except as permitted by Rule 8.4B.

Rule 8.15 Position Limits

- A. To reduce the potential threat of market manipulation or congestion, LedgerX shall adopt for each of its Exchange Contracts, as is necessary and appropriate, position limitations or position accountability levels for speculators. The Exchange may establish position limits for one or more Exchange Contracts at a level not higher than any limit set by the CFTC for any Exchange Contract. The position limit levels shall be set forth in a Position Limit and Position Accountability Level Table as may be amended from time to time by the Exchange in a Participant Notice and on the Website. The Exchange may grant exemptions from position limits in accordance with CFTC Regulations.
- B. A Participant seeking an exemption from position limits, including position limits established pursuant to a previously approved exemption, must file the required application with the Exchange in the form and manner as the Exchange may require from time to time and receive approval before exceeding such position limits. Notwithstanding the foregoing, a Participant who establishes an exemption-eligible position in excess of position limits and files the required application with the Exchange shall not be in violation of this Rule, provided the filing occurs within one Settlement Bank Business Day after assuming the position. In the event that the positions in excess of the position limits are not deemed to be exemption-eligible, the applicant and the Executing Participant, if any, will be in violation of speculative position limits for the period of time in which the excess positions remained open.
- C. A Participant who owns or controls aggregate positions in an Exchange Contract in excess of the reportable levels set forth in the Position Limit and Position Accountability Level Table or where such Person otherwise holds substantial positions in Exchange Contracts shall:

1. keep records, including records of such Participant's activity in the Underlying and related derivative markets, and make such records available, upon request, to the Exchange;
 2. provide to the Exchange, in a timely manner upon request by the Exchange and in a form and manner acceptable to the Exchange, information relating to the positions owned or controlled by such Participant, including but not limited to the nature and size of the position, the trading strategy employed with respect to the position, and hedging information, if applicable;
 3. be deemed to have consented, when so ordered by the Exchange, in its sole discretion, not to further increase the positions, to comply with any prospective limit which exceeds the size of the position owned or controlled, or to liquidate any open position which exceeds position limits; and
 4. liquidate Exchange Contracts, if applicable, in an orderly manner.
- D. This Rule 8.15 shall not limit the jurisdiction of the Exchange to take action that it determines necessary or appropriate in respect of any positions on the Exchange, including but not limited to the Exchange taking steps to liquidate such Exchange Contracts on behalf and at the expense of such Participant to the extent necessary to eliminate such excess.

Rule 8.16 Position Accountability Levels

- A. The Exchange shall establish position accountability levels for Exchange Contracts not subject to position limits pursuant to Rule 8.15. The position accountability levels shall be set forth in a Position Limit and Position Accountability Level Table as may be amended from time to time by the Exchange in a Participant Notice and on the Website.
- B. A Participant that owns or controls aggregate positions in an Exchange Contract in excess of the reportable levels set forth in the Position Limit and Position Accountability Level Table or where such Participant otherwise holds substantial positions in Exchange Contracts shall:

1. keep records, including records of such Person's activity in the Underlying and related derivative markets, and make such records available, upon request, to the Exchange;
 2. provide to the Exchange, in a timely manner upon request by the Exchange and in a form and manner acceptable to the Exchange, information relating to the positions owned or controlled by such Person, including but not limited to the nature and size of the position, the trading strategy employed with respect to the position, and hedging information, if applicable;
 3. be deemed to have consented, when so ordered by the Exchange, in its sole discretion, not to further increase the positions, to comply with any prospective limit which exceeds the size of the position owned or controlled, or to liquidate any open position which exceeds position accountability levels; and
 4. liquidate Exchange Contracts, if applicable, in an orderly manner.
- C. This Rule shall not limit the jurisdiction of the Exchange to take action that it determines necessary or appropriate in respect of any positions on the Exchange, including but not limited to the Exchange taking steps to liquidate such Exchange Contracts on behalf and at the expense of such Participant to the extent necessary to eliminate such excess.

Rule 8.17 Aggregation of Positions

- A. For purposes of Rule 8.15 and Rule 8.16, all positions in Exchange Contracts must be aggregated as required by CFTC Regulations. Aggregation of positions shall apply to:
1. All positions in accounts for which a Person by power of attorney or otherwise directly or indirectly owns the positions or controls the trading of the positions. Position limits shall apply to positions held by two or more Persons acting pursuant to an expressed or implied agreement or understanding, in the same as if the positions were held by, or the trading of the positions was done by, a single Person.

2. Any Person holding positions in more than one account, or holding accounts or positions in which the Person by power of attorney or otherwise directly or indirectly has a ten percent or greater ownership or equity interest, must aggregate all such accounts or positions unless such Person is exempted from aggregating such positions by CFTC Regulations.
- B. Any Participant seeking an exemption from aggregation of positions must (1) satisfy the exemptive requirements in CFTC Regulations; and (2) apply for an Exchange-approved exemption in the form and manner as may be prescribed by the Exchange from time to time.

Rule 8.18 Large Trader Reporting

- A. Each Participant shall submit to the Exchange (i) a daily report of all positions that exceed the reportable position levels set forth on the Website and (ii) a copy of the CFTC Form 102 (Identification of Special Accounts, Volume Threshold Accounts and Consolidated Accounts and which shall include a Series S filing made pursuant to CFTC Regulation 20.5) filed by the Participant or Executing Participant with the CFTC for such Participant's or Executing Participant's Customers' reportable accounts. The Form 102 shall be submitted to the Exchange no later than the Settlement Bank Business Day following the date on which the account becomes reportable.
- B. Positions in Exchange Contracts at or above the reportable level set forth on the Website trigger reportable status. For a Participant in reportable status, all positions, regardless of size, in relevant Exchange Contracts must be reported to the Exchange, in addition to any regulatory obligations a Participant may have separate and apart from these Rules.
- C. All large trader reports shall be submitted in the form and manner specified by the Exchange. The Exchange may require that more than one large trader report be submitted daily. The Regulatory Oversight Committee may require certain Participants to provide reports on a lesser number of positions than otherwise required by the Exchange.

Rule 8.19 Compliance

Each Participant shall have a compliance program commensurate with the size and scope of its trading activities on the Exchange and designed to ensure appropriate, timely and ongoing review of trading practices and compliance with the Rules. Each Participant shall act in accordance with these practices for compliance and monitoring with regard to its Exchange activity:

- A. Provide for proper training of personnel on the provisions of the Rules;
- B. Maintain internal policies and procedures to promote compliance with the Rules;
- C. Promptly disclose to the Exchange the details of any violations of the Rules involving a Participant's activities on the Exchange, including its own activities or those of another Participant, and a Participant shall promptly disclose to the Exchange the details of any disciplinary sanctions, fines or other related determinations made by a Regulatory Agency or another market on which such Participant trades, or provision of market information to the Exchange or any of its Affiliates;
- D. Provide an environment that encourages employees to engage in safe and confidential discussions and to disclose to senior management any trading practices that might violate the Rules;
- E. Require any consultant, contractor and subcontractor to disclose all financial affiliations and conflicts of interest. Ensure that consultants, contractors or subcontractors do not cause any disclosure of information in violation of the Rules, including this code of conduct, and that confidentiality agreements are in effect where appropriate; and
- F. Establish clear lines of accountability for trading practices, including provisions relating to the responsibilities of corporate officers, with appropriate oversight by the board of directors or other senior corporate management committee.

CHAPTER 9 Discipline and Enforcement

Rule 9.1 General

- A. Market Monitoring

1. The Exchange shall record and store a record of all data entered into the Platform, including the Participant's and Authorized User's identity, information on Transactions and any other information required and in accordance with the Exchange's policies.
 2. The Exchange shall conduct market surveillance and trade practice surveillance by monitoring and reviewing data entered into the Platform using programs designed to alert the Exchange of potentially unusual or violative trading activity.
 3. The Exchange, through the Compliance Department, shall initiate a review of unusual or violative trading activity and, where appropriate, investigate such activity. The Compliance Department will also conduct investigations when Compliance Department staff at any time has reason to believe that inappropriate activity of any sort is taking place on the Exchange, Platform or Website.
- B. All Persons within the Exchange's jurisdiction are subject to this Chapter 9 if they are alleged to have violated, to have aided and abetted a violation, to be violating, or to be about to violate, any Rule or any provision of Applicable Law for which the Exchange possesses disciplinary jurisdiction.
- C. Compliance Department
1. The Exchange has a Compliance Department consisting of one or more compliance staff. The Chief Compliance Officer is responsible for overseeing the Compliance Department and shall report to the Regulatory Oversight Committee and the CEO.
 2. The Compliance Department shall investigate unusual trading activity or other activity that the Compliance Department has reasonable cause to believe could constitute a violation of these Rules, and shall enforce the Rules and prosecute possible Rule violations within the Exchange's disciplinary jurisdiction.
 3. The Compliance Department shall conduct at least annual reviews of all Participants to verify compliance with Exchange Rules. The Compliance Department may conduct periodic reviews of all persons and firms subject

to the Exchange's Rules to verify compliance with the Exchange Rules. Such reviews may include, but are not limited to, reviews of randomly selected samples of audit trail data, reviews of the process by which User ID records are maintained, reviews of usage patterns associated with User IDs, and reviews of account numbers and Customer Type Indicator codes.

- D. The Exchange, through the Compliance Department, Disciplinary Panel and Appeals Committee, shall conduct inquiries, investigations, disciplinary proceedings and appeals from disciplinary proceedings, summary impositions of fines, summary suspensions or other summary actions in accordance with this Chapter 9. Any Person subject to the Exchange's jurisdiction under Rule 3.1 is subject to the Exchange's disciplinary authority set forth in this Chapter 9.
- E. The Exchange, through the Compliance Department, will commence an investigation upon (i) the discovery or receipt of information that indicates a reasonable basis for finding that a violation may have occurred or will occur, or (ii) the receipt of a request from Commission staff.
- F. No Exchange Official shall interfere with or attempt to influence the process or resolution of any Disciplinary Action, except to the extent provided under these Rules with respect to a proceeding in which a Person is a member of the relevant Disciplinary Panel or Appeals Committee.
- G. Representation by Counsel
 - 1. A Respondent, upon being served with a Notice of Charges, has the right to retain and be represented by legal counsel or any other representation of its choosing, except any Director or a member of the Disciplinary Panel or person substantially related to the underlying investigations, such as material witnesses or respondents during such proceedings.
 - 2. In the event of any appeal that requires the Exchange to retain legal counsel, the Respondent shall be responsible for the reasonable attorney's fees incurred by the Exchange if the Respondent does not prevail in the dispute.

H. The Exchange may hold a Participant liable for, and impose sanctions against such Participant, for such Participant's own acts and omissions that constitute a violation as well as for the acts and omissions of each Authorized User, Authorized Representative or other Person using a User ID of such Participant, or other agent or representative of such Participant (other than an Executing Participant acting as agent for such Participant), in each case, that constitute a violation as if such violation were that of the Participant.

I. Ex Parte Communications

1. A Respondent (and any counsel or representative of such Respondent) and the Compliance Department (and any counsel or representative of the Compliance Department) shall not knowingly make or cause to be made an ex parte communication relevant to the merits of a disciplinary proceeding or an appeal from a disciplinary proceeding to any member of the Disciplinary Panel or the Appeals Committee that hears such proceeding.
2. Members of a Disciplinary Panel or Appeals Committee shall not knowingly make or cause to be made an ex parte communication relevant to the merits of a disciplinary proceeding or an appeal from a disciplinary proceeding to any Respondent (and any counsel or representative of such Respondent) or the Compliance Department (and any counsel or representative of the Compliance Department).
3. Any Person who receives, makes or learns of any communication that is prohibited by this Rule 9.11 shall promptly give notice of such communication and any response thereto to the Compliance Department and all parties to the proceeding to which the communication relates.
4. A Person shall not be deemed to have violated this Rule 9.11 if the Person refuses an attempted communication concerning the merits of a proceeding as soon as it becomes apparent that the communication concerns the merits.

Rule 9.2 Investigations

- A. The Compliance Department will endeavor to complete any investigation within 12 months of the time unusual trading activity or a potential Rule violation is suspected, unless there exists significant reason to extend the investigation beyond such period. Upon the conclusion of any investigation, the Compliance Department shall draft a report detailing the facts that led to the opening of the investigation, the facts that were found during the investigation, and the Compliance Department's analysis and conclusion. Such internal report shall be maintained in accordance with Rule 2.14.
- B. The Compliance Department has the authority to:
1. initiate and conduct inquiries and investigations;
 2. examine books and records of any Person subject to the Exchange's jurisdiction under Rule 3.1;
 3. prepare investigative reports and make recommendations concerning initiating disciplinary proceedings;
 4. issue a Notice of Charges to a Respondent;
 5. prosecute alleged violations within the Exchange's disciplinary jurisdiction; and
 6. represent the Exchange on appeal from any disciplinary proceeding, summary imposition of fines, summary suspension or other summary action.
- C. Each Person subject to the jurisdiction of the Exchange:
1. is obligated to appear and testify and respond in writing to interrogatories within the time period required by the Compliance Department in connection with:
 - a any Rule;
 - b any inquiry or investigation; or
 - c any preparation by and presentation during a Disciplinary Action;

2. is obligated to produce books, records, papers, documents or other tangible evidence in its possession, custody or control within the time period required by the Compliance Department in connection with:
 - a any Rule;
 - b any inquiry or investigation; or
 - c any preparation by and presentation during a Disciplinary Action; and
3. may not impede or delay any Disciplinary Action.

Rule 9.3 Disciplinary Panel

- A. The Respondent disputes the Compliance Department's findings with respect to a Disciplinary Action, the Exchange shall convene the Disciplinary Panel to adjudicate the findings by the Compliance Department that are under dispute. The Chief Compliance Officer or an individual designated by the Chief Compliance Officer may be appointed to argue the matter on behalf of the Exchange.
 1. Members of the Disciplinary Panel shall be individuals that do not have a direct interest (financial, personal or otherwise) in the matter, but in no event may be members of the Compliance Department or any Persons involved in adjudicating any other stage of the same proceeding.
 2. In the event that members of the Disciplinary Panel do not satisfy the requirements of this Rule 9.3A.2, then the Regulatory Oversight Committee may substitute a new member for the Disciplinary Panel or act as the Disciplinary Panel, to the extent that the substituted member or the Regulatory Oversight Committee, as the case may be, does not have a direct interest (financial, personal or otherwise) in the matter.
- B. Members of the Disciplinary Panel and the Compliance Department may not communicate regarding the merits of a matter brought before the Disciplinary Panel without informing the Respondent who is the subject of the communication of the substance of such communication and allowing the Respondent an opportunity to respond. The Compliance Department may compel testimony, subpoena documents, and require statements under oath from any Respondent

or, to the extent the Respondent is a Participant, any of its Authorized Users, Authorized Representatives or other employees or agents.

- C. The Compliance Department and other Exchange Representatives working under the supervision of the Compliance Department may not operate under the direction or control of any Participant, Authorized User, Authorized Representative or any other representative of a Participant, or trade, directly or indirectly, in any commodity interest traded on or subject to the rules of any Designated Contract Market or Swap Execution Facility.

Rule 9.4 Notice of Charges

- A. The Compliance Department shall issue a Notice of Charges to a Respondent by electronic mail and the U.S. Postal Service to that Respondent's last known address if the Compliance Department determines that there is reasonable cause to believe that a Respondent has violated these Rules or Applicable Law. The Notice of Charges shall include:
 - 1. the reason the investigation was initiated;
 - 2. the Rule or Rules alleged to have been violated;
 - 3. the Respondent's response, if any, or a summary of the response;
 - 4. a summary of the investigation conducted;
 - 5. findings of fact and the Compliance Department's conclusions as to each charge, including which of these Rules the Respondent violated, if any;
 - 6. a summary of the Respondent's, and any relevant Authorized User's or Authorized Representative's, disciplinary history, if any;
 - 7. the penalty, if any, proposed by the Compliance Department; and
 - 8. the Respondent's right to a hearing.
- B. If the Compliance Department institutes an investigation of any Affiliate of the Exchange, the Chief Compliance Officer shall notify the Commission's Division of Market Oversight, or its successor division, of that fact. At the conclusion of any such investigation, the Chief Compliance Officer shall provide the Commission's Division of Market Oversight, or its successor division, with a copy of the report or other documentation specified in Rule 9.2.

Rule 9.5 Contesting and Appeals

- A. The Respondent subject to the investigation may contest the Notice of Charges by submitting an answer to the Notice of Charges by electronic mail to the Compliance Department within 15 days of receipt of the Notice of Charges. The Respondent's answer must contain a detailed response to the findings and conclusions as to each charge and any other information the Respondent believes is relevant.
- B. The Respondent has a right to examine all relevant books, documents, or other evidence in the possession or under the control of the Compliance Department, except that the Compliance Department may withhold from inspection any documents that:
 - 1. are privileged or that constitute attorney work product;
 - 2. were prepared by any Exchange Representative but which will not be offered in evidence in the disciplinary proceedings;
 - 3. may disclose a technique or guideline used in examinations, investigations, or enforcement proceedings; or
 - 4. disclose the identity of a confidential source.
- C. If the Respondent fails to answer a Notice of Charges, then such failure shall be deemed an admission to the findings in the Notice of Charges, and the Compliance Department's findings and conclusions shall become final and the Compliance Department shall impose the penalty (if any) that it proposes. The Compliance Department shall notify the Respondent of the imposition of any penalty and send a copy of the Notice of Charges by electronic mail and the U.S. Postal Service to that Respondent's last known address.
- D. If the findings of the Compliance Department are contested, the Compliance Department's report and the Respondent's response will be submitted to a Disciplinary Panel.
- E. The Disciplinary Panel will conduct a fair hearing with the Compliance Department or other Exchange Representative and the Respondent within 15 calendar days of receipt of the Participant's answer to the Notice of Charges contesting such Notice of Charges. Parties may attend telephonically. The

formal rules of evidence shall not apply, but the hearing procedures must not deny a fair hearing.

1. The hearing shall be recorded, and all information submitted by the parties and the recording of the hearing shall be preserved by the Compliance Department, along with the Disciplinary Panel's findings, as the record of the proceedings (the "hearing record") in accordance with Rule 2.14.
 2. The hearing record shall be transcribed if requested by the Commission or Respondent, if the decision is appealed pursuant to these Rules, or if the Commission reviews the decision pursuant to Section 8c of the CEA or Part 9 of CFTC Regulations.
- F. Prior to the Disciplinary Panel's hearing, the parties may (but need not) submit proposed findings, briefs, and exhibits (including affidavits), and during the hearing the parties may present witnesses. The Respondent is entitled to cross-examine witnesses. Persons within the Exchange's jurisdiction who are called as witnesses must participate in the hearing and produce evidence. The Compliance Department shall use reasonable efforts to secure the presence of all other witnesses whose testimony would be relevant.
- G. Within 15 days after the Disciplinary Panel's hearing, the Disciplinary Panel shall issue a decision, which shall be delivered to the Respondent by electronic mail and the U.S. Postal Service to the Respondent's last known address. The findings of the Disciplinary Panel shall contain the following information:
1. the Notice of Charges or a summary thereof, and any answer to the charges or a summary thereof;
 2. a summary of the evidence received;
 3. findings and conclusions with respect to each charge, and a complete explanation of the evidence and other basis for such findings and conclusions;
 4. an indication of each specific rule that the Respondent was found to have violated;

5. a declaration of any penalty to be imposed on the Respondent as the result of the findings and conclusions, including the basis for such penalty;
 6. the effective date and duration of that penalty; and
 7. a statement that the Respondent has the right to appeal any adverse decision by the Disciplinary Panel to the Appeals Committee within 15 calendar days of receipt of the Disciplinary Panel's decision.
- H. The Disciplinary Panel's decision shall be final on the date it is signed by the members of the Disciplinary Panel, the finality of which shall be effective on the day after the last day of the appeal period.
- I. Either the Participant or the Compliance Department or the Exchange Representative may appeal the decision of the Disciplinary Panel within 15 calendar days by filing an appeal by electronic mail with the Appeals Committee and forwarding a copy to the other parties to the appeal. The Appeals Committee may review a decision on its own initiative. Any penalties shall be stayed pending appeal unless the Regulatory Oversight Committee determines that a stay pending appeal would likely be detrimental to the Exchange, other Participants, or the public. The Appeals Committee shall review the hearing record and any information submitted by the Compliance Department or the Exchange Representative and the Respondent on appeal and issue a decision, which shall be final on the date of such issuance. The Respondent shall be notified of the Appeals Committee's decision by electronic mail and by the U.S. Postal Service to the Respondent's last known address. The hearing record, any information submitted on appeal, and the Appeals Committee's decision shall be preserved as the record on appeal in accordance with Rule 2.14. The decision shall contain the information listed in Rule 9.5 except for 9.5(G)(7), and will also contain:
1. a statement that any Person aggrieved by the action may have a right to appeal the action pursuant to Part 9 of the Commission's Regulations, within 30 calendar days of service; and

2. a statement that any Person aggrieved by the action may petition the Commission for a stay pursuant to Part 9 of the Commission's Regulations, within ten calendar days of service.

Rule 9.6 Settlements

- A. The Exchange may enter into settlements with any Respondent any time following the issuance of a Notice of Charges and prior to any final decision by the Appeals Committee. The Respondent may initiate a settlement offer. Any settlement offer shall be forwarded to the Disciplinary Panel with a recommendation by the Compliance Department that the proposed settlement be accepted, rejected, or modified. A settlement offer may be withdrawn at any time before it is accepted by the Disciplinary Panel.
- B. The Disciplinary Panel may accept or reject a proposed settlement, and the decision of the Disciplinary Panel shall be final. In addition, the Disciplinary Panel may propose a modification to the proposed settlement for consideration by the Respondent and the Compliance Department.
- C. Any settlement under this Rule shall be in writing and shall state:
 1. the Notice of Charges or a summary thereof;
 2. the Respondent's answer, if any, or a summary thereof;
 3. a summary of the investigation conducted;
 4. findings and conclusions as to each charge, including each act the Respondent was found to have committed or omitted, be committing or omitting, or be about to commit or omit, and each of these Rules or Applicable Law that such act or practice violated, is violating, or is about to violate;
 5. any penalty imposed and the penalty's effective date; and
 6. where customer harm is found to exist, full customer restitution where it can be reasonably determined.
- D. Failed settlement negotiations, or withdrawn settlement offers, will not prejudice a Respondent or otherwise affect subsequent procedures in the Rule enforcement process.

Rule 9.7 Notice of Decision

- A. The Compliance Department shall provide to the Respondent notice of the Disciplinary Action, decision of the Disciplinary Panel or Appeals Committee, or settlement in which sanctions are imposed, no later than two Settlement Bank Business Days after it becomes final.
- B. The Compliance Department shall provide to the NFA for inclusion in its Internet-accessible database of disciplinary matters within two Settlement Bank Business Days after a decision becomes final, notice of any decision providing that a Respondent is suspended, expelled, disciplined or denied access to the Exchange.
- C. The Compliance Department shall make public notice of the Disciplinary Action when the Disciplinary Action becomes final by posting on its Website the information required by CFTC Regulation 9.11, for a period of five consecutive Settlement Bank Business Days in accordance with CFTC Regulation 9.13.

Rule 9.8 Penalties

As a result of a Disciplinary Action or as part of a settlement, the Compliance Department may impose one or more of the following penalties, commensurate with the violation committed, in consideration with the Respondent's disciplinary history, and including full customer restitution where customer harm is found and where such restitution can be reasonably determined:

- A. a letter of warning, censure, or reprimand (although no more than one such letter may be issued to the same Person found to have committed the same Rule violation within a rolling 12-month period);
- B. a fine or penalty for each Rule or Applicable Law violation sufficient to deter recidivism plus the monetary value of any benefit received as a result of the violation or the cost of damages to the unoffending counterparty;
- C. suspension of Participant or Authorized User status or privileges for a specified period, including partial suspension of such privileges (for example, suspension of Trading Privileges or Clearing Privileges in particular types of Exchange Contracts or of placement of certain types of orders);

- D. a prohibition against FCM Participants and/or Executing Participants from entering Transactions on behalf of a Customer who has violated these Rules, the CEA or CFTC Regulation or other Applicable Law; and
- E. revocation of Participant or Authorized User status or privileges, including partial revocation of such privileges (for example, revocation of Trading Privileges or Clearing Privileges in particular types of Exchange Contracts or of placement of certain types of orders).

Rule 9.9 Summary Suspension

- A. The Compliance Department may summarily suspend or restrict a Participant's or an Authorized User's privileges if the Chief Compliance Officer believes suspension or restriction is necessary to protect the swaps, commodity futures or options markets, the Exchange, the public, or other Participants.
- B. All access denials, suspensions, expulsions and other restrictions imposed upon a Participant or Authorized User by the Compliance Department pursuant to these Rules shall restrict with equal force and effect, access to, and use of, the Exchange.
- C. The Compliance Department may deny or terminate the status of a Participant, including an FCM Participant, Executing Participant or Liquidity Provider, and any Authorized User if (i) such Person is unable to demonstrate its ability to satisfy the applicable criteria set forth in Chapter 3 of these Rules; (ii) such Person is unable to demonstrate its compliance with all other applicable Rules; (iii) such Person's inability to demonstrate compliance with such criteria or Rules would, in the Exchange's sole discretion, bring the Exchange into disrepute or cause the Exchange to fail to be in compliance with the CEA or CFTC Regulations or other laws and regulations; (iv) such Person or any of its Authorized Users, as applicable, has committed a violation of the Rules; or (v) other good cause is shown as the Exchange may reasonably determine in its discretion.
- D. Upon any suspension or revocation of an FCM Participant, any open Order on the Platform for such FCM Participant's Cleared Swaps Customer(s) shall be cancelled by the Exchange.

- E. Whenever practicable the Compliance Department shall notify the Participant or Authorized User whose privileges are to be summarily suspended by electronic mail before the action is taken. If prior notice is not practicable, the Participant or Authorized User shall be served with notice by electronic mail at the earliest opportunity. This notice shall:
1. state the action taken or to be taken;
 2. briefly state the reasons for the action;
 3. state the time and date when the action became or becomes effective and its duration; and
 4. state that any Person aggrieved by the action may petition the Commission for a stay of the effective date of the action pending a hearing pursuant to Part 9 of CFTC Regulations, within ten calendar days of service.
- F. The Participant or Authorized User whose privileges are to be summarily suspended shall be given an opportunity for appeal under the procedures outlined in Rule 9.5l. The decision affirming, modifying, or reversing the summary suspension shall be furnished by electronic mail to the suspended Participant or Authorized User, and to the Commission no later than one Settlement Bank Business Day after it is issued. The decision shall contain:
1. a description of the action taken and the reasons for the action;
 2. a brief summary of the evidence received during the appeal process;
 3. findings and conclusions;
 4. a determination as to whether the summary action that was taken should be affirmed, modified, or reversed;
 5. a declaration of any action to be taken against the suspended Participant or Authorized User as the result of that determination;
 6. the effective date and duration of that action;
 7. a determination of the appropriate relief based on the findings and conclusions;

8. a statement that any Person aggrieved by the action may have a right to appeal the action pursuant to Part 9 of the Commission's Regulations, within 30 calendar days of service; and
9. a statement that any Person aggrieved by the action may petition the Commission for a stay pursuant to Part 9 of the Commission's Regulations, within ten calendar days of service.

Rule 9.10 Reporting Violations to the Commission

- A. The Exchange will submit to the Commission a schedule listing all those Exchange Rule violations which constitute disciplinary offenses as defined in paragraph (a)(6)(i) of CFTC Regulation 1.63 and, to the extent necessary to reflect revisions, will submit an amended schedule within thirty days of the end of each calendar year. The Exchange will maintain the schedule required by this section, and post the schedule on the Exchange's website.
- B. The Exchange will submit to the Commission within thirty days of the end of each calendar year a certified list of any Participants or Persons who have been removed from any Disciplinary Panel, the Board or any Exchange committee pursuant to these Rule or Applicable Law during the prior year.
- C. Whenever the Exchange finds by final decision that a Participant or Person has violated a Rule or otherwise committed a disciplinary offense and such finding makes such person ineligible to serve on the Exchange's Disciplinary Panels, Exchange committees, or the Board, the Exchange shall inform the Commission of such finding and the length of the ineligibility in a notice it is required to provide to the Commission pursuant to either CEA Section 17(h)(1) or CFTC Regulation 9.11.

CHAPTER 10 Arbitration

Rule 10.1 In General

- A. Any dispute between and among Participants and Customers and any Authorized Users that relates to or arises out of any Exchange Contract, these Rules or Applicable Law, shall be resolved by the American Arbitration Association and conducted pursuant to the Rules and the Commercial Arbitration Rules of the American Arbitration Association.

- B. A dispute brought pursuant to this Chapter 10 shall be submitted before three qualified arbitrators who shall be appointed in accordance with the Commercial Arbitration Rules of the American Arbitration Association. All arbitrators must have no less than five years' experience in the financial services industry, and no less than one arbitrator must have no less than five years' experience in the commodity futures or swap industry.
- C. The Person that submits a dispute to the American Arbitration Association for resolution must submit all demands for arbitration, claims, notices, answers, counterclaims, award and any other filings that such Person submits or that such Person receives from the other party to the dispute or from the American Arbitration Association, including the arbitrators, to the Exchange within ten Settlement Bank Business Days of submission or receipt of such document.
- D. Persons to a dispute resolved in accordance with this Chapter 10 shall be responsible for their own costs, expenses and attorneys' fees incurred in connection with the dispute. Notwithstanding the foregoing, the Person that prevails shall be entitled to recover from the other party all costs, expenses and reasonable attorneys' fees incurred in any arbitration arising out of or relating to this Chapter 10, and in any legal action or administrative proceeding to enforce any arbitration award or relief.
- E. Any award or relief granted by the arbitrators hereunder shall be final and binding on the parties hereto and may be enforced by any court of competent jurisdiction.
- F. Notwithstanding the foregoing, this Chapter 10 does not apply to disputes between Participants or Authorized Users where:
 - 1. such Persons are required by the rules of a Self-Regulatory Organization to submit to the dispute resolution procedures of that Self-Regulatory Organization; or
 - 2. such Persons have, by valid and binding agreement, committed to arbitrate or litigate in a forum other than the American Arbitration Association.

Rule 10.2 Forum and Arbitration Rules

The American Arbitration Association shall conduct arbitrations described in Rule 10.1 pursuant to the rules and procedures of the American Arbitration Association.

Rule 10.3 Initiating an Arbitration Claim

A Person may initiate an arbitration claim by submitting the required documents and fees to the American Arbitration Association. A Person that initiates such an arbitration claim shall submit notice thereof to the Exchange.

Rule 10.4 Penalties

- A. Any failure on the part of a Person to arbitrate a dispute subject to this Chapter 10, or the commencement by any such Person of a suit in any court prior to arbitrating a case that is required to be arbitrated pursuant to this Chapter 10, violates these Rules and shall subject such Person to disciplinary proceedings pursuant to Chapter 9. Any Person that does not arbitrate a dispute through the American Arbitration Association pursuant to Rule 10.1F shall not be deemed to have violated these Rules.
- B. The Chief Compliance Officer, in consultation with the Regulatory Oversight Committee, may summarily suspend, pursuant to Rule 9.9, a Participant or Authorized User that fails to timely satisfy an arbitration award rendered in any arbitration pursuant to this Chapter 10.

CHAPTER 11 Miscellaneous

Rule 11.1 Adjustments Necessitated by Material Changes in the Underlying

In the event that, prior to or during the term of a Series, changes beyond the control of the Exchange occur in the availability of the Underlying or in the way the Underlying is calculated, or a value for the Underlying is unavailable or undefined in light of intervening events, the Exchange may delay listing Series or adjust the terms of outstanding Series as it deems appropriate in its discretion to achieve fairness to holders of Exchange Contracts of the affected Series.

Rule 11.2 Prohibition on Trading by Exchange Personnel; Misuse of Material, Non-Public Information

- A. Terms used in this Rule 11.2 and not otherwise defined in these Rules shall have the meanings set forth in CFTC Regulations 1.3 and 1.59.
- B. Exchange Personnel may not trade, directly or indirectly any Exchange Contract or any related financial instrument.
- C. Exchange Representatives may not trade, directly or indirectly any Exchange Contract or financial instrument where such Exchange Representative has access to material, non-public information concerning such Exchange Contract or financial instrument.
- D. The Chief Compliance Officer (or, in the case of the Chief Compliance Officer, the Board) may grant exemptions in accordance with the provisions of this Rule 11.2 to Exchange Personnel on a case-by-case basis under circumstances where the Exchange Personnel is participating in pooled investment vehicles and the Exchange Personnel has no direct or indirect control over Transactions effected by or for the account of the pool.
- E. For the avoidance of doubt, participation by Exchange Personnel in a retirement plan sponsored by the Exchange shall not be deemed to constitute trading directly or indirectly in an Exchange Contract or financial instrument, notwithstanding such plan's trading of Exchange Contracts or financial instruments.
- F. Any exempt Exchange Personnel that has received an exemption under Rule 11.2D must:
 - 1. furnish to the Exchange (or, in the case of the Chief Compliance Officer, to the Board) account statements and other documents relevant to the trading activities that are so exempted; and
 - 2. inform the Chief Compliance Officer (or, in the case of the Chief Compliance Officer, the Board) within one Settlement Bank Business Day of any material change of information that may affect such Exchange Personnel's qualification for such exemption.

- G. Exchange Representatives are prohibited from disclosing material, non-public information obtained as a result of their employment, agency relationship or engagement with the Exchange for any purpose inconsistent with such Person's duties or responsibilities as an employee, agent, independent contractor, Director or Committee member.

Rule 11.3 Property Rights

- A. Each Participant on behalf of itself and each of its Affiliates, Authorized Users and other Persons affiliated with any of the foregoing, hereby acknowledges and agrees that LedgerX LLC owns and shall retain all right, title and interest in and to the Exchange, all components thereof, including, without limitation, all related applications, all application programming interfaces, user interface designs, software and source code and any and all intellectual property rights therein, including, without limitation, all registered or unregistered, as applicable, (a) copyright, (b) trademark, (c) service mark, (d) trade secret, (e) trade name, (f) data or database rights, (g) design rights, (h) moral rights, (i) inventions, whether or not capable of protection by patent or registration, (j) rights in commercial information or technical information, including know-how, research and development data and manufacturing methods, (k) patent, and (l) other intellectual property and ownership rights, including applications for the grant of any of the same, in or to LedgerX LLC and all other related proprietary rights of LedgerX LLC and/or any of its Affiliates (together, with any and all enhancements, corrections, bug fixes, updates and other modifications to any of the foregoing and any and all data or information of any kind transmitted by means of any of the foregoing, including, without limitation, market data, the "Proprietary Information"). Each Participant on behalf of itself and each of its Affiliates, Authorized Users and other Persons affiliated with any of the foregoing, further acknowledges and agrees that the Proprietary Information is the exclusive, valuable and confidential property of LedgerX LLC. Each Participant acknowledges and agrees that it shall not and shall not permit its Affiliates, Authorized Users and other Persons affiliated with any of the foregoing to reverse engineer, copy, bug fix, correct, update, transfer, reproduce, republish, broadcast, create derivative works based on or otherwise modify, in any manner, all or any part of the Exchange or the Proprietary Information. Each Participant

further agrees to and to cause each of its Affiliates, Authorized Users and other Persons affiliated with any of the foregoing to keep the Proprietary Information confidential and not to transfer, rent, lease, copy, loan, sell or distribute, directly or indirectly, all or any portion of the Exchange or any Proprietary Information.

- B. Subject to the provisions of this Rule 11.3, each Participant on behalf of itself and each of its Affiliates, Authorized Users, and other Persons affiliated with any of the foregoing hereby acknowledges and agrees that LedgerX LLC is the owner of all rights, title and interest in and to all intellectual property and other proprietary rights (including all copyright, patent, trademark or trade secret rights) in market data, and all derivative works based thereon, and further agree not to distribute, create derivative works based on, or otherwise use or commercially exploit market data and any such derivative works, provided that Participants, Affiliates, Authorized Users, and such other Persons may use market data for their own internal business purposes. Without limiting the generality of the foregoing, Participants, Affiliates, Authorized Users, and other Persons affiliated with any of the foregoing may not distribute, sell or retransmit market data exchange to any third party.
- C. Notwithstanding any other provision of this Rule 11.3, each Participant and Authorized User retains such rights as it may enjoy under applicable law with respect to market data solely in the form such market data was submitted to the Exchange by such Participant or Authorized User.
- D. Regulatory Data shall not be disclosed publicly other than on an aggregated or anonymous basis, or in a manner that does not directly or indirectly identify any market participant who has submitted such data. LedgerX LLC shall not condition access to the Exchange upon a Participant's consent to the use of Regulatory Data for business or marketing purposes. Regulatory Data may not be used by the Exchange for business and marketing purposes unless the market participant has clearly consented to the use of Regulatory Data in such manner. Nothing in this Rule shall preclude LedgerX from disclosing Regulatory Data: (1) as required by Applicable Law or legal process; (2) as the Exchange may deem necessary or appropriate in connection with any litigation affecting the Exchange; (3) to any Exchange Representative authorized to receive such information within the scope of his or her duties; (4) to a third party performing

regulatory or operational services for the Exchange, provided that such party has executed a confidentiality and non-disclosure agreement in a form approved by the Exchange; (5) to a duly authorized representative of the CFTC lawfully requesting Regulatory Data; (6) in a manner in which a market participant consents to such disclosure; (7) pursuant to the terms of an information-sharing agreement; (8) as permitted by CFTC Regulations; or (9) to any other Person, if and to the extent that the Board may deem appropriate from time to time.

Rule 11.4 Signatures

Rather than rely on an original signature, the Exchange may elect to rely on a signature that is transmitted, recorded or stored by any electronic, optical, or similar means (including but not limited to telecopy, imaging, photocopying, electronic mail, electronic data interchange, telegram, or telex) as if it were (and the signature shall be considered and have the same effect as) a valid and binding original.

Rule 11.5 Governing Law

The Rules, and the rights and Obligations of the Exchange and Participants under the Rules, shall be governed by, and construed in accordance with, the laws of the State of New York without regard to any provisions of New York law that would apply the substantive law of a different jurisdiction. The State of New York is the “securities intermediary’s jurisdiction” within the meaning of Section 8-110(e) of the UCC for all purposes of the UCC.

Rule 11.6 Legal Proceedings

- A. Any action, suit or proceeding against the Exchange, its Officers, Directors, limited liability company members, employees, agents, or any member of any committee must be brought within one year from the time that a cause of action has accrued. Any such action, suit or proceeding shall be brought in the State or Federal courts located within the City of New York, New York. Each Participant and Authorized User expressly consents to the jurisdiction of any such court, waives any objection to venue therein, and waives any right it may have to a trial by jury.
- B. In the event that a Participant or Authorized User or an Affiliate of such Person who fails to prevail in a lawsuit or other legal proceeding instituted by such Participant or such Affiliate against (i) the Exchange or (ii) any Affiliate of the Exchange or any of its respective officers, directors, equity holders, employees,

agents, or any member of any committee, and related to the business of the Exchange, such Participant or Authorized User shall pay to the Exchange all reasonable costs and expenses, including attorneys' fees, incurred by the Exchange in the defense of such proceeding. This Rule 11.7 shall not apply to Exchange disciplinary actions, appeals thereof, or an instance in which the Board has granted a waiver of the provisions hereof.

- C. The Exchange will provide to the Commission copies of documents pertaining to Exchange-related pending legal proceedings as required under CFTC Regulation 1.60.

Rule 11.7 LIMITATION OF LIABILITY; NO WARRANTIES

- A. EXCEPT AS OTHERWISE SET FORTH IN THE RULES, OR DUE TO EXCHANGE OBLIGATIONS ARISING FROM THE ACT OR CFTC REGULATIONS, INCLUDING PARTS 37 AND 39 OF THE CFTC REGULATIONS, OR OTHERWISE UNDER APPLICABLE LAW, NEITHER THE EXCHANGE NOR ANY OF ITS EXCHANGE REPRESENTATIVES, AFFILIATES OR AFFILIATES' REPRESENTATIVES SHALL BE LIABLE TO ANY PERSON, OR ANY PARTNER, DIRECTOR, OFFICER, AGENT, EMPLOYEE, AUTHORIZED USER OR AUTHORIZED REPRESENTATIVE THEREOF, FOR ANY LOSS, DAMAGE, INJURY, DELAY, COST, EXPENSE, OR OTHER LIABILITY OR CLAIM, WHETHER IN CONTRACT, TORT OR RESTITUTION, OR UNDER ANY OTHER CAUSE OF ACTION, SUFFERED BY OR MADE AGAINST THEM AS A RESULT OF THEIR USE OF SOME OR ALL OF THE PLATFORM AND BY MAKING USE OF THE PLATFORM, SUCH PERSONS EXPRESSLY AGREE TO ACCEPT ALL LIABILITY ARISING FROM THEIR USE OF SAME.
- B. EXCEPT AS OTHERWISE SET FORTH IN THESE RULES OR DUE TO EXCHANGE OBLIGATIONS ARISING FROM THE ACT OR CFTC REGULATIONS, INCLUDING PARTS 37 AND 39 OF THE CFTC REGULATIONS, OR OTHERWISE UNDER APPLICABLE LAW, NEITHER THE EXCHANGE NOR ANY OF ITS EXCHANGE REPRESENTATIVES, AFFILIATES OR AFFILIATES' REPRESENTATIVES SHALL BE LIABLE TO ANY PERSON, OR ANY PARTNER, DIRECTOR, OFFICER, AGENT, EMPLOYEE, AUTHORIZED USER OR AUTHORIZED REPRESENTATIVE THEREOF, FOR

ANY LOSS, DAMAGE, INJURY, DELAY, COST, EXPENSE, OR OTHER LIABILITY OR CLAIM, WHETHER IN CONTRACT, TORT OR RESTITUTION, OR UNDER ANY OTHER CAUSE OF ACTION, SUFFERED BY OR MADE AGAINST THEM, ARISING FROM (A) ANY FAILURE OR NON-AVAILABILITY OF THE PLATFORM; (B) ANY ACT OR OMISSION ON THE PART OF THE EXCHANGE, EXCHANGE REPRESENTATIVES, AFFILIATES OR AFFILIATES' REPRESENTATIVES INCLUDING WITHOUT LIMITATION A DECISION OF THE EXCHANGE TO SUSPEND, HALT, OR TERMINATE TRADING OR TO VOID, NULLIFY OR CANCEL ORDERS OR TRADES IN WHOLE OR IN PART; (C) ANY ERRORS OR INACCURACIES IN INFORMATION PROVIDED BY THE EXCHANGE, AFFILIATES OR THE PLATFORM; (D) UNAUTHORIZED ACCESS TO OR UNAUTHORIZED USE OF THE PLATFORM BY ANY PERSON; (E) ANY FORCE MAJEURE EVENT, INCLUDING, BUT NOT LIMITED TO, THE UNAVAILABILITY OF THE BLOCKCHAIN AS REASONABLY DETERMINED BY THE EXCHANGE, AFFECTING THE EXCHANGE OR AN EXCHANGE CONTRACT; OR (F) ANY LOSS TO ANY PARTICIPANT RESULTING FROM A PARTICIPANT'S OWN SECURITY OR THE INTEGRITY OF A PARTICIPANT'S TECHNOLOGY OR TECHNOLOGY SYSTEMS. THIS LIMITATION OF LIABILITY WILL APPLY REGARDLESS OF WHETHER OR NOT THE EXCHANGE, ANY EXCHANGE REPRESENTATIVES, ANY EXCHANGE AFFILIATES OR AFFILIATES' REPRESENTATIVES (OR ANY DESIGNEE THEREOF) WAS ADVISED OF OR OTHERWISE MIGHT HAVE ANTICIPATED THE POSSIBILITY OF SUCH DAMAGES.

- C. A PERSON'S USE OF THE PLATFORM, EXCHANGE PROPERTY AND ANY OTHER INFORMATION AND MATERIALS PROVIDED BY THE EXCHANGE IS AT THE PERSON'S OWN RISK, AND THE PLATFORM, THE EXCHANGE PROPERTY AND ANY OTHER INFORMATION AND MATERIALS PROVIDED BY THE EXCHANGE HEREUNDER ARE PROVIDED ON AN "AS IS" AND "AS AVAILABLE" BASIS, WITHOUT WARRANTIES OR REPRESENTATIONS OF ANY KIND, EXPRESS OR IMPLIED, BY STATUTE, COMMON LAW OR OTHERWISE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT, AND ANY WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE. THE EXCHANGE DOES NOT

GUARANTEE THAT (A) THE EXCHANGE PROPERTY OR THE PLATFORM WILL OPERATE IN AN ERROR-FREE, SECURE OR UNINTERRUPTED MANNER; (B) ANY INFORMATION OR MATERIALS PROVIDED BY THE EXCHANGE OR ACCESSIBLE THROUGH THE EXCHANGE PROPERTY OR THE PLATFORM WILL BE ACCURATE, COMPLETE, RELIABLE, OR TIMELY; OR (C) THE EXCHANGE PROPERTY OR ANY ASPECTS OF THE PLATFORM WILL BE FREE FROM VIRUSES OR OTHER HARMFUL COMPONENTS. THE EXCHANGE SHALL HAVE NO LIABILITY FOR THE CREDITWORTHINESS OF ANY PERSON OR FOR THE ACTS OR OMISSIONS OF ANY PERSON UTILIZING THE PLATFORM OR ANY ASPECT OF THE EXCHANGE OR PLATFORM. A PERSON ACCESSING THE EXCHANGE IS SOLELY RESPONSIBLE FOR THE SECURITY AND INTEGRITY OF THE PERSON'S TECHNOLOGY. A PERSON'S ACCESS TO THE EXCHANGE MAY BE INTERNET-BASED AND THE EXCHANGE HAS NO CONTROL OVER THE INTERNET OR A PERSON'S CONNECTIONS THERETO. ANY PERSON ACCESSING THE EXCHANGE ACKNOWLEDGES THAT THE INTERNET, COMPUTER NETWORKS, AND COMMUNICATIONS LINKS AND DEVICES NECESSARY TO ENABLE A PERSON TO ACCESS AND USE THE PLATFORM ARE INHERENTLY INSECURE AND VULNERABLE TO ATTEMPTS AT UNAUTHORIZED ENTRY AND THAT NO FORM OF PROTECTION CAN ENSURE THAT A PARTICIPANT'S DATA, HARDWARE, OR SOFTWARE OR THE PLATFORM OR OTHER EXCHANGE PROPERTY WILL BE FULLY SECURE. FURTHERMORE, THE EXCHANGE SHALL HAVE NO OBLIGATION TO MONITOR OR VERIFY ANY INFORMATION DISPLAYED THROUGH THE PLATFORM.

- D. A PARTICIPANT THAT DEPOSITS COLLATERAL FOR ITS BENEFIT WITH THE EXCHANGE PURSUANT TO THESE RULES SHALL HOLD THE EXCHANGE HARMLESS FROM ALL LIABILITY, LOSSES AND DAMAGES WHICH MAY RESULT FROM OR ARISE WITH RESPECT TO THE CARE AND SALE OF SUCH COLLATERAL PROVIDED THAT THE EXCHANGE HAS ACTED REASONABLY AND IN ACCORDANCE WITH APPLICABLE LAW UNDER THE CIRCUMSTANCES. FURTHERMORE, THE EXCHANGE HAS NO RESPONSIBILITY FOR ANY ACT OR OMISSION OF ANY THIRD PARTY SERVICE PROVIDER THAT THE EXCHANGE HAS CHOSEN WITH

REASONABLE CARE. THE EXCHANGE HAS NO RESPONSIBILITY OR LIABILITY FOR ANY LOSS OF COLLATERAL THAT RESULTS, DIRECTLY OR INDIRECTLY, FROM A BREACH TO A PARTICIPANT'S SECURITY OR ELECTRONIC SYSTEMS, INCLUDING BUT NOT LIMITED TO CYBER ATTACKS, OR FROM A PARTICIPANT'S NEGLIGENCE WITH RESPECT TO A WALLET, ADDRESS OR THE RECEIPT OF COLLATERAL UPON THE REQUEST OF A WITHDRAWAL, OR FROM A PARTICIPANT'S DEPOSIT, MISTAKE, ERROR, NEGLIGENCE, OR MISCONDUCT WITH RESPECT TO ANY COLLATERAL TRANSFERS A PARTICIPANT MAKES OR ATTEMPTS TO MAKE TO THE EXCHANGE.

- E. NO PARTICIPANT, AUTHORIZED USER, AUTHORIZED REPRESENTATIVE OR ANY OTHER PERSON SHALL BE ENTITLED TO COMMENCE OR CARRY ON ANY PROCEEDING AGAINST THE EXCHANGE, ANY OF ITS EXCHANGE REPRESENTATIVES, AFFILIATES OR AFFILIATES' REPRESENTATIVES, IN RESPECT OF ANY ACT, OMISSION, PENALTY OR REMEDY IMPOSED PURSUANT TO THE RULES OF THE EXCHANGE. THIS SECTION SHALL NOT RESTRICT THE RIGHT OF SUCH PERSONS TO APPLY FOR A REVIEW OF A DIRECTION, ORDER OR DECISION OF THE EXCHANGE BY A COMPETENT REGULATORY AUTHORITY.
- F. NOTWITHSTANDING ANYTHING TO THE CONTRARY HEREIN, IN NO EVENT SHALL THE EXCHANGE OR ANY OF ITS EXCHANGE REPRESENTATIVES, AFFILIATES OR AFFILIATES' REPRESENTATIVES BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES (WHETHER OR NOT THE EXCHANGE OR ANY SUCH PERSON HAD BEEN INFORMED OR NOTIFIED OR WAS AWARE OF THE POSSIBILITY OF SUCH DAMAGES).
- G. ANY CLAIM FOR REDRESS OR DAMAGES HEREUNDER SHALL BE FILED IN A COURT OF COMPETENT JURISDICTION WITHIN ONE YEAR OF THE DATE ON WHICH SUCH CLAIM ALLEGEDLY AROSE. FAILURE TO INSTITUTE LITIGATION WITHIN SUCH TIME PERIOD SHALL BE DEEMED TO BE A WAIVER OF SUCH CLAIM AND THE CLAIM SHALL BE OF NO FURTHER FORCE OR EFFECT. THE ALLOCATIONS OF LIABILITY IN THIS RULE 11.7 REPRESENT THE AGREED AND BARGAINED FOR

UNDERSTANDING OF THE PARTIES, AND EACH PARTY ACKNOWLEDGES THAT THE OTHER PARTY'S RIGHTS AND OBLIGATIONS HEREUNDER REFLECT SUCH ALLOCATIONS. THE PARTIES AGREE THAT THEY WILL NOT ALLEGE THAT THIS REMEDY FAILS ITS ESSENTIAL PURPOSE.

- H. THE LIMITATIONS ON LIABILITY IN THIS RULE 11.7 SHALL NOT PROTECT ANY PARTY FOR WHICH THERE HAS BEEN A FINAL DETERMINATION (INCLUDING EXHAUSTION OF ANY APPEALS) BY A COURT OR ARBITRATOR TO HAVE ENGAGED IN WILLFUL OR WANTON MISCONDUCT OR FRAUD. ADDITIONALLY, THE FOREGOING LIMITATIONS ON LIABILITY OF THIS RULE SHALL BE SUBJECT TO THE CEA AND THE REGULATIONS PROMULGATED THEREUNDER, EACH AS IN EFFECT FROM TIME TO TIME.

Rule 11.8 Error Trade Policy

The Exchange shall have the discretion to delete Orders, adjust prices, cancel trades or suspend the market in the interest of maintaining a fair and orderly market, in accordance with this Rule 11.8.

- A. In normal circumstances, the Exchange will only adjust prices or cancel trades on the basis that the price traded is not representative of market value. The Exchange will make the final decision on whether a trade price is adjusted, or a trade is cancelled or is allowed to stand. In determining whether a trade has taken place at an unrepresentative price, certain factors will be taken into account. They may include, but not be limited to:
1. price movements in other expiration months of the same Exchange Contract;
 2. current market conditions, including levels of activity and volatility;
 3. time period between different quotes and between quoted and traded prices;
 4. information regarding price movement in related contracts, the release of economic data or other relevant news just before or during electronic Trading Hours, as applicable;
 5. manifest error;

6. whether there is any indication that the trade in question triggered stops or resulted in the execution of spread trades;
 7. whether another market user or client relied on the price;
 8. whether a transaction cancellation or price adjustment will adversely impact market integrity, facilitate market manipulation or other illegitimate activity, or otherwise violate applicable rules or regulations;
 9. whether any Participants to the trade in question request that any action be taken; and
 10. any other factor which the Exchange, in its sole discretion, may deem relevant.
- B. The Exchange, when applicable, may establish price and/or volume reasonability levels (“**Reasonability Levels**”) within the system for each Exchange Contract. The Exchange may also establish alert levels (“**Alert Levels**”) as applicable, beyond which the Exchange will send an alert (“**Alert**”) to the relevant Participants via the Participant Portal or API. These Reasonability Levels and Alert Levels necessarily are flexible to take account of prevailing market conditions. The Exchange incorporates Reasonability Levels in determining Alert Levels for issuing Alerts for items such as “fat finger” type errors. Reasonability Levels and Alert Levels are set by the Exchange and may be varied from time to time according to market conditions. The Exchange will notify Participants of any modifications to the Reasonability Levels. Upon receipt of any Alert, Participant can choose whether or not to proceed with entry and execution of the applicable Order. If the applicable Participants approve the volume and/or price following receipt of the Alert, the Exchange will attempt to execute the Order and the trade will be finalized.
- C. Any trade executed at a price outside of the No Cancellation Range (as defined below), if identified to the Exchange within the designated time period, may be considered an alleged error trade.
- D. The Reasonability Levels applicable to each Exchange Contract will be listed on the Exchange’s website.

- E. Any trade which is alleged to be an error trade and subsequently is cancelled due to the determination that it has been executed at an unrepresentative price may be investigated by the Exchange.
- F. There is a defined “no cancellation range” (“**No Cancellation Range**”) for each Exchange Contract. Trades executed within this price range will not be cancelled or price adjusted. A component of market integrity is the assurance that once executed, except in exceptional circumstances, a trade will stand and not be subject to cancellation or price adjustment. Any trades that do not have an adverse effect on the market should not be able to be cancelled or price adjusted, even if executed in error.
- G. In applying the No Cancellation Range, the Exchange shall determine the fair market price for the Exchange Contract. The Exchange may consider any relevant information including, but not limited to, the bid, the ask, the bid size, the ask size, and the spot price.
- H. The No Cancellation Range will be determined per Exchange Contract and will be available on the Exchange’s website.
- I. If a trade takes place within the No Cancellation Range and is alleged to be an error, the trade will not be cancelled.
- J. Trades executed outside of the No Cancellation Range may be reported to or considered by the Exchange as an error.
- K. Market users have ten (10) minutes from the time of the original trade in which to allege a trade has been executed in error.
- L. The Exchange will notify the market immediately through its website that an error has been alleged, giving details of the trade, including Exchange Contract month, price and volume. The Exchange also will notify the Participants involved via e-mail. The Exchange will then notify all Participants through a Participant Notice whether the price is adjusted or the trade is cancelled or stands. The Exchange will then contact those parties involved in the trade to explain the Exchange’s decision.
- M. In order to assist the Exchange in determining whether the trade alleged to be an error has taken place at an unrepresentative price, the Exchange may

contact/consult Participants and other market Participants. The Exchange will not disclose to the parties to the alleged error trade the identity of their counterparty. In addition, the identities of the counterparties to the alleged error trade will not be disclosed to any Participant or other Person the Exchange may consult with. The Exchange will take into account a variety of market factors in its determination. Each error situation will be assessed on its individual circumstances.

- N. If the Exchange determines that a trade price is outside the No Cancellation Range for an Exchange Contract, the trade price may be adjusted to a price that equals the fair value market price for that Exchange Contract at the time the trade under review occurred. The Exchange may consult and obtain the consent of the parties to the price adjustment or may determine a price adjustment is appropriate regardless of any party's consent or lack thereof. The Exchange, at its discretion, may allow the trades to stand or cancel the trades rather than adjusting the price. The decision of the Exchange is final.
- O. If the Exchange determines that the price differential of a spread trade is not representative of the market for that spread trade at the time of execution, then the differential of such spread trade may be adjusted to the price differential for that spread trade at the time the trade under review occurred. The Exchange, at its discretion, may allow the trades to stand or cancel the trades rather than adjusting the price differential. The decision of the Exchange is final.
- P. The Exchange will make every attempt to ensure that a decision on whether an alleged error trade will have its price adjusted, will stand or be cancelled will be communicated to the market as soon as reasonably possible after the time of the original trade.
- Q. The Exchange has the unilateral right to cancel any Order, adjust the price of a trade and cancel any trade which it considers to be at an unrepresentative price, even where there has been no referral or request from a Participant or other Person, in the interest of maintaining a fair and orderly market. The Exchange aims to exercise this right within thirty (30) minutes after the trade has been identified. The Exchange also reserves its right to cancel any Order, adjust the price of a trade and cancel any trade due to any technology failure or system malfunction, even where there has been no referral or request from a Participant

or other Person, in the interest of maintaining a fair and orderly market and aims to exercise this right within thirty (30) minutes after the system or technology failure has been identified. The Exchange reserves its right to consider each alleged error trade situation on its individual merits and may therefore amend these policies in light of the circumstances of each individual case. The decision of the Exchange is final.

- R. Cancelled trades and prices that have been adjusted will be noted as such in the Exchange's official record of time and sales. A special marker will indicate trades that have been priced adjusted in the official record of time and sales at the adjusted trade price.
- S. NEITHER THE EXCHANGE NOR ANY OF ITS REPRESENTATIVES, ITS AFFILIATES OR ITS AFFILIATES' REPRESENTATIVES SHALL BE LIABLE TO ANY PERSON, OR ANY PARTNER, DIRECTOR, OFFICER, AGENT, EMPLOYEE, AUTHORIZED USER OR AUTHORIZED REPRESENTATIVE THEREOF, FOR ANY LOSS, DAMAGE, INJURY, DELAY, COST, EXPENSE, OR OTHER LIABILITY OR CLAIM, WHETHER IN CONTRACT, TORT OR RESTITUTION, OR UNDER ANY OTHER CAUSE OF ACTION, SUFFERED BY OR MADE AGAINST THEM ARISING FROM ANY ACT OR OMISSION ON THE PART OF THE EXCHANGE, ITS REPRESENTATIVES, ITS AFFILIATES OR ITS AFFILIATES' REPRESENTATIVES RELATING TO ANY DECISION BY THE EXCHANGE TO, OR TO NOT, VOID, NULLIFY OR CANCEL ORDERS OR TRADES OR ADJUST THE PRICES OF ANY TRADES IN WHOLE OR IN PART. THIS LIMITATION OF LIABILITY WILL APPLY REGARDLESS OF WHETHER OR NOT THE EXCHANGE, ITS REPRESENTATIVES, ITS AFFILIATES OR ITS AFFILIATES' REPRESENTATIVES (OR ANY DESIGNEE THEREOF) WERE ADVISED OF OR OTHERWISE MIGHT HAVE ANTICIPATED THE POSSIBILITY OF SUCH DAMAGES.

Rule 11.9 Exchange Contacts

All requests to cancel Orders or trades must be directed to the Exchange via the Participant Portal or the Exchange telephone number posted on the website. Any such request for the removal of Orders will be acted upon on a best-efforts basis by the relevant Exchange Personnel.

Rule 11.10 Reasonability Levels

The Error Trade Policy includes Reasonability Levels and No Cancellation Ranges for all Exchange Contracts on the Platform.

- A. Benchmark:
 - 1. If there exists a last price in the applicable Exchange Contract in the last 48 hours, then such price will be used as the benchmark; or
 - 2. If there exists no last price but there is a bid AND an ask in the last 48 hours, then the Exchange will use the midpoint of the most recent bid & most recent ask as the benchmark.

- B. Reasonability Levels:
 - 1. If Benchmark 1 or 2 is applicable, then the Reasonability Level = 50% of the Benchmark; or
 - a If neither Benchmark 1 nor 2 apply, then there will be no alerts generated for this Exchange Contract and error trades are subject to the No Cancellation Range and Exchange discretion with respect to adjusting or cancelling trades.

Rule 11.11 No Cancellation Ranges

- A. Benchmark:
 - 1. If there exists a last price in the applicable Exchange Contract in the last 48 hours, then such price will be used as the benchmark; or
 - 2. If there exists no last price but there is a bid AND an ask in the last 48 hours, then the Exchange will use the midpoint of the most recent bid and most recent ask as the benchmark.

- B. No Cancellation Range:
 - 1. If Benchmark 1 or 2 is applicable, then the No Cancellation Range = 20% of the Benchmark; or
 - 2. If neither Benchmark 1 nor 2 apply, then there is not a No Cancellation Range for that Exchange Contract at that time and the Exchange will

evaluate each error alleged error trade situation on its individual merits and the facts and circumstances of each individual case.

Rule 11.12 Amendments to the Rules

These Rules may be amended or repealed, or new Rules may be adopted. An amendment to a Rule, repeal of a Rule or adoption of a new Rule shall be effective on a date set forth by the Exchange, and set forth in a Participant Notice and on the Website.

CHAPTER 12 Exchange Contract Specifications

Rule 12.1 USD/BTC Options

- A. Contract Description.** Generally speaking, an option is an agreement that grants the option purchaser, in exchange for a premium, the right, but not the obligation, to purchase from (in the case of a call option) or to sell to (in the case of a put option) the option writer, at a specified exercise or “strike” price, and at specified time(s) or within a specified period, a specified underlying interest. Participants may enter into Exchange Contracts as buyers or sellers of calls and/or puts. This Rule 12.1 pertains to options on bitcoin (as described further herein) and contains general Exchange Contract terms and conditions.
- B. Bitcoin.** Bitcoin is a computer network and protocol that allows digital currency to be stored and transferred in a distributed manner without the need for a central intermediary. The Bitcoin network is a form of blockchain, which allows consensus to be built and maintained on a distributed, decentralized basis by parties with no inherent reason to trust one another. Each individual bitcoin transaction is validated by the network of decentralized parties, or nodes, over a period of time and then added to a “block”, which is then cryptographically linked to the immediately preceding block (over time, creating a chain, or a “blockchain”).
- C. Trading Hours.** The trading hours of the Exchange’s Swap Execution Facility that are applicable to the Exchange Contract described in this Rule 12.1 (a “USDBTC Option”) will be as stated in Rule 5.6 above, follows:
- ~~a. Trading hours on the Exchange’s Swap Execution Facility will commence each Business Day at 9:30 a.m. New York time (EST/EDT) and end each Business Day at 4:00 p.m. New York time (EST/EDT).~~
- D. Currency.** The currency applicable to USDBTC Options will be United States dollars, expressed as dollars and cents per bitcoin.

- E. Underlying.** The USDBTC Option underlying will be bitcoin (sometimes referred to as “BTC”).
- F. Contract Size.** Each USDBTC Option contract size will be one bitcoin.
- G. Position Limits.** No person will own or control positions in excess of:
- a. 100,000 USDBTC Options net long or net short in any single Exchange Contract month; or
 - b. 250,000 USDBTC Option net long or net short in all Exchange Contract months combined.
- H. Collateral.** All Exchange Contracts will be fully collateralized. Each Participant must post the maximum potential loss on a USDBTC Option prior to executing a USDBTC Option.
- I. Option Conventions.**
- a. *Traded Price.* The traded price on the Trade Date.
 - b. *Strike Price.* As of any Trade Date, (i) a range of approximately 15% up and 15% down from the approximate prevailing spot market price as of such date, with increments of \$100.00, (ii) a smaller number of additional strikes in increments ranging from \$250.00 to \$1000.00 for prices between 20% and 300% of the approximate prevailing spot market price as of such date, and (iii) any previously-listed strikes with remaining open interest, in each case as may be determined and listed from time to time by the Exchange in its sole discretion.
 - c. *Daily Settlement Price.* None. Because all Exchange Contracts are fully collateralized and physically settled, it is not necessary for the Exchange to publish a settlement price. Each Participant determines whether the intrinsic value of the underlying is greater than the relevant Strike Price as of the Last Trading Date and makes a corresponding decision as to exercise.

- d. *Business Day Convention.* Previous.
- e. *Exercise Type.* European.
- f. *Contract Series.* Consecutive months up to and including 60 months from the month including the Trade Date, or as otherwise determined and listed from time to time by the Exchange in its sole discretion.
- g. *Last Trading Date.* The last Friday of each USDBTC Option month.
- h. *Expiration Time.* With respect to any USDBTC Option, 4:00pm New York time on the Last Trading Date applicable thereto.
- i. *Settlement.* Physical delivery upon exercise. With respect to any USDBTC Option, physical delivery will occur on the Business Day next succeeding the Last Trading Day in respect of such Exchange Contract.
- j. *Final Payment Date.* With respect to any USDBTC Option, the Business Day next succeeding the Last Trading Day in respect of such Exchange Contract.

J. Exercise

On the Last Trading Date, Participants submit or update exercise instructions for any long USDBTC Option positions. All exercise instructions are processed on the Last Trading Date not earlier than 5:00pm.

Because the Exchange does not publish a settlement price, there is no provision for automatic exercise of Exchange Contracts.

Rule 12.2 Day-Ahead USD/BTC Swaps

- A. Contract Description.** The term “swap” is a generic one that covers many types of instruments, including (among other things) any agreement, contract or transaction that is for the purchase or sale of any one or more currencies or commodities. A Participant may enter into an Exchange Contract as a buyer, whereby such Participant will pay USD and receive BTC, or as a seller, whereby such Participant will pay BTC and receive USD. The Exchange Contract requires that a buyer pay USD on the Initial Payment Date, and that the seller pay BTC on the Final Payment Date. This Rule 12.2 pertains to swaps on bitcoin (as described further herein) and contains general Exchange Contract terms and conditions.
- B. Bitcoin.** Bitcoin is a computer network and protocol that allows digital currency to be stored and transferred in a distributed manner without the need for a central intermediary. The Bitcoin network is a form of blockchain, which allows consensus to be built and maintained on a distributed, decentralized basis by parties with no inherent reason to trust one another. Each individual bitcoin transaction is validated by the network of decentralized parties, or nodes, over a period of time and then added to a “block”, which is then cryptographically linked to the immediately preceding block (over time, creating a chain, or a “blockchain”).
- C. Trading Hours.** The trading hours of the Exchange’s Swap Execution Facility that are applicable to the Exchange Contract described in this Rule 12.2 (a “Day-ahead Swap”) will be as stated in Rule 5.6 above. ~~follows:~~
- ~~a.—Trading hours on the Exchange’s Swap Execution Facility will commence each Business Day at 9:30 a.m. New York time (EST/EDT) and end each Business Day at 4:00 p.m. New York time (EST/EDT).~~
- D. Currency.** The currency applicable to Day-ahead Swaps will be United States dollars, which will be expressed in dollars and cents per bitcoin.
- E. Underlying.** The underlying applicable to Day-ahead Swaps will be bitcoin (sometimes referred to as “BTC”).

F. Contract Size. Each Day-ahead Swap will be for a single Underlying (i.e., one bitcoin).

G. Position Limits. As of any date of determination, no person will own or control positions in excess of 100,000 Day-ahead Swaps.

H. Collateral. All Exchange Contracts will be fully collateralized. Before the Exchange's Swap Execution Facility will accept a buy order for one or more Day-ahead Swaps from a Participant, such Participant must have sufficient USD available for trading in its account to satisfy its settlement obligations on such Exchange Contract(s). Before the Exchange's Swap Execution Facility will accept a sell order for one or more Day-ahead Swaps from a Participant, such Participant must have sufficient bitcoin available for trading in its account to satisfy its delivery obligations on such Exchange Contract(s).

I. Swap Tenor. One Business Day.

J. Swap Conventions.

- a. *Trade Date.* With respect to any Day-ahead Swap, the date on which the Exchange, in its sole discretion accepts a buy or sell order, as the case may be.
- b. *Effective Date.* With respect to any Day-ahead Swap, the Trade Date applicable thereto.
- c. *Minimum Price Fluctuation.* With respect to any Day-ahead Swap, \$0.25.
- d. *Initial Payment Date.* With respect to any Day-ahead Swap, the Trade Date applicable thereto. The buyer of a Day-ahead Swap will pay the bid amount of such Exchange Contract on the Trade Date thereof.
- e. *Premium.* With respect to any Day-ahead Swap, the Buyer thereof will pay the premium thereon on the Initial Payment Date. In the context of a Day-ahead Swap, the bid amount is equal to the Premium.

- f. *Final Payment Date.* With respect to any Day-ahead Swap, the Business Day next succeeding the Trade Date applicable thereto.
- g. *Expiration Time.* With respect to any Day-ahead Swap, 4:00pm New York time (EDT/EST) on the Trade Date applicable thereto.
- h. *Business Day Convention.* Previous.
- i. *Settlement.* Physical delivery. With respect to any Day-ahead Swap, physical delivery will occur on the Final Payment Date applicable thereto.

Rule 12.3 USD/BTC Weekly Options

A. Contract Description. Generally speaking, an option is an agreement that grants the option purchaser, in exchange for a premium, the right, but not the obligation, to purchase from (in the case of a call option) or to sell to (in the case of a put option) the option writer, at a specified exercise or “strike” price, and at specified time(s) or within a specified period, a specified underlying interest. Participants may enter into USDBTC Weekly Options as buyers or sellers of calls and/or puts. This Rule 12.3 pertains to options on bitcoin (as described further herein) and contains general Contract terms and conditions.

B. Bitcoin. Bitcoin is a computer network and protocol that allows digital currency to be stored and transferred in a distributed manner without the need for a central intermediary. The Bitcoin network is a form of blockchain, which allows consensus to be built and maintained on a distributed, decentralized basis by parties with no inherent reason to trust one another. Each individual bitcoin transaction is validated by the network of decentralized parties, or nodes, over a period of time and then added to a “block”, which is then cryptographically linked to the immediately preceding block (over time, creating a chain, or a “blockchain”).

C. Trading Hours. The Trading Hours of the Exchange's Swap Execution Facility that are applicable to the USDBTC Weekly Option described in this Rule 12.3 will be as stated in Rule 5.6 above.~~24 hours a day, seven days a week~~; *provided, that*, with respect to a USDBTC Weekly Option with any given tenor and/or strike, the Exchange may establish different Trading Hours by providing notice to participants on its Website and by Participant Notice.

D. Currency. The currency applicable to USDBTC Weekly Options will be United States dollars, expressed as dollars and cents per bitcoin.

E. Underlying. The USDBTC Weekly Option underlying will be bitcoin (sometimes referred to as "BTC").

F. Contract Size. Each USDBTC Weekly Option will be one bitcoin.

G. Position Limits. No person will own or control positions in excess of:

- a. 100,000 USDBTC Weekly Options net long or net short in any single Exchange Contract month; or
- b. 250,000 USDBTC Weekly Options net long or net short in all Exchange Contract months combined.

H. Collateral. All Exchange Contracts will be fully collateralized. Each Participant must post the maximum potential loss on a USDBTC Weekly Option prior to executing a USDBTC Weekly Option.

I. Option Conventions.

- a. *Traded Price.* The traded price on the Trade Date.

- b. *Strike Price.* As of any Trade Date, (i) a range of approximately 15% up and 15% down from the approximate prevailing spot market price as of such date, with increments of \$100.00, (ii) a smaller number of additional strikes in increments ranging from \$250.00 to \$1000.00 for prices between 20% and 300% of the approximate prevailing spot market price as of such date, and (iii) any previously-listed strikes with remaining open interest, in each case as may be determined and listed from time to time by the Exchange in its sole discretion.

- c. *Daily Settlement Price.* None. Because all Exchange Contracts are fully collateralized and physically settled, it is not necessary for the Exchange to publish a settlement price. Each Participant determines whether the intrinsic value of the underlying is greater than the relevant Strike Price as of the Last Trading Date and makes a corresponding decision as to exercise.

- d. *Business Day Convention.* Previous.

- e. *Exercise Type.* European.

- f. *Contract Series.* Consecutive weeks up to and including four weeks from the week including the Trade Date, or as otherwise determined and listed from time to time by the Exchange in its sole discretion.

- g. *Last Trading Date.* Friday of each calendar week.

- h. *Last Trading Time.* 4:00 pm ET on the Last Trading Date.

- i. *Settlement.* Physical delivery upon exercise. With respect to any USDBTC Weekly Option, physical delivery will occur on the Business Day next succeeding the Last Trading Day in respect of such Exchange Contract.
- j. *Final Payment Date.* With respect to any USDBTC Weekly Option, the Business Day next succeeding the Last Trading Day in respect of such Exchange Contract.

J. Exercise

On the Last Trading Date, Participants submit or update exercise instructions for any long USDBTC Weekly Option positions. All exercise instructions are processed on the Last Trading Date not earlier than 5:00pm ET.

Because the Exchange does not publish a settlement price, there is no provision for automatic exercise of Exchange Contracts.

Rule 12.4 Day-Ahead USD/BTC Options

- A. Contract Description.** Generally speaking, an option is an agreement that grants the option purchaser, in exchange for a premium, the right, but not the obligation, to purchase from (in the case of a call option) or to sell to (in the case of a put option) the option writer, at a specified exercise or “strike” price, and at specified time(s) or within a specified period, a specified underlying interest. Participants may enter into USDBTC Day-Ahead Options as buyers or sellers of calls and/or puts. This Rule 12.4 pertains to options on bitcoin (as described further herein) and contains general Contract terms and conditions.
- B. Bitcoin.** Bitcoin is a computer network and protocol that allows digital currency to be stored and transferred in a distributed manner without the need for a central

intermediary. The Bitcoin network is a form of blockchain, which allows consensus to be built and maintained on a distributed, decentralized basis by parties with no inherent reason to trust one another. Each individual bitcoin transaction is validated by the network of decentralized parties, or nodes, over a period of time and then added to a “block”, which is then cryptographically linked to the immediately preceding block (over time, creating a chain, or a “blockchain”).

C. Trading Hours. The Trading Hours of the Exchange’s Swap Execution Facility that are applicable to the USDBTC Day-Ahead Option described in this Rule 12.4 will be as stated in Rule 5.6 above~~24 hours a day, seven days a week~~; *provided, that*, with respect to a USBTC Day-Ahead Option with any given tenor and/or strike, the Exchange may establish different Trading Hours by providing notice to participants on its Website and by Participant Notice.

D. Currency. The currency applicable to USDBTC Day-Ahead Options will be United States dollars, expressed as dollars and cents per bitcoin.

E. Underlying. The USDBTC Day-Ahead Option underlying will be bitcoin (sometimes referred to as “BTC”).

F. Contract Size. Each USDBTC Day-Ahead Option will be one bitcoin.

G. Position Limits. No person will own or control positions in excess of: 100,000 USDBTC Day-Ahead Options net long or net short.

H. Collateral. All Exchange Contracts will be fully collateralized. Each Participant must post the maximum potential loss on a USDBTC Day-Ahead Option prior to executing a USDBTC Day-Ahead Option.

I. Option Conventions.

- a. *Traded Price.* The traded price on the Trade Date.

- b. *Strike Price.* As of any Trade Date, (i) a range of approximately 15% up and 15% down from the approximate prevailing spot market price as of such date, with increments of \$50.00, (ii) a smaller number of additional strikes in increments ranging from \$100.00 to \$1000.00 for prices between 20% and 300% of the approximate prevailing spot market price as of such date, and (iii) any previously-listed strikes with remaining open interest, in each case as may be determined and listed from time to time by the Exchange in its sole discretion.

- c. *Daily Settlement Price.* None. Because all Exchange Contracts are fully collateralized and physically settled, it is not necessary for the Exchange to publish a settlement price. Each Participant determines whether the intrinsic value of the underlying is greater than the relevant Strike Price as of the Last Trading Date and makes a corresponding decision as to exercise.

- d. *Business Day Convention.* Previous.

- e. *Exercise Type.* European.

- f. *Last Trading Time.* With respect to any USDBTC Day-Ahead Option, 4:00pm New York time (EDT/EST) on the Trade Date applicable thereto.

- g. *Settlement.* With respect to any USDBTC Day-Ahead Option, physical delivery will occur on the Final Payment Date applicable thereto.

- h. *Final Payment Date.* With respect to any USDBTC Day-Ahead Option, the Business Day next succeeding the Trade Date applicable thereto.

J. Exercise

On the Last Trading Date, Participants submit or update exercise instructions for any long USDBTC Day-Ahead Option positions. All exercise instructions are processed on the Last Trading Date not earlier than 5:00pm ET.

Because the Exchange does not publish a settlement price, there is no provision for automatic exercise of Exchange Contracts.

Appendix C

[SEE OPERATIONS MANUAL REDLINE – CONFIDENTIAL TREATMENT REQUESTED]

