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## Ledger Holdings Inc

February 14, 2019

**VIA COMMISSION PORTAL**

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

**Re: Commission Regulation 40.2(a) – Certification of BTC Block Height Options  
LedgerX LLC Submission No. [2019-04]**

Dear Mr. Kirkpatrick:

LedgerX LLC (“LedgerX”) hereby amends the Certification of BTC Block Height Options (Submission No. [2019-04]) in order to provide a revised no earlier than date.

LedgerX will list the Exchange Contract no earlier than March 1, 2019, which is amended from the previous submission which stated no earlier than February 18, 2019.

\* \* \* \*

Please contact the undersigned at (917) 267-2381 or [juthica@ledgerx.com](mailto:juthica@ledgerx.com) with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Juthica Chou".

Juthica Chou  
Chief Risk Officer  
LedgerX LLC



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### Exhibit A

Below is a concise explanation of the Exchange Contract:

The Exchange Contract is an option contract on whether bitcoin has reached a particular block height before a specific date and time. The Exchange Contract will provide a purchaser, in exchange for a premium, the payoff if the bitcoin blockchain has reached the block height before the expiration of the contract. The Exchange Contract will provide the purchaser no payoff if the bitcoin blockchain has not reached the block height before the expiration of the contract.

The Exchange Contract will be fully-collateralized, and Participants shall have such collateral on deposit with LedgerX prior to entering the order. For the option purchaser, the Participant shall have the full premium on deposit with LedgerX prior to purchasing the option. For the option seller, the Participant shall have the full maximum payoff on deposit with LedgerX prior to selling the option.

The seller of the Exchange Contract will collect the premium at the time of trade. If the bitcoin blockchain has reached the block height of the contract before the expiration of the contract, the seller will deliver the full payoff amount. If the bitcoin blockchain has not reached the block height before the expiration of the contract, the seller will receive the collateral back.

Bitcoin block height options are important to LedgerX's market participants whose businesses and profitability often depend on factors such as when the mining reward will be reduced by half. Block height options provide a way for participants to hedge their exposure to these types of risks that are inherent to bitcoin. While the mining reward halving is one blockchain-based event that market participants need to manage, there may be others. For example, if the difficulty is expected to change significantly, this could affect miners and other participants.

LedgerX currently determines USD-BTC option tenors based on risks and events that participants need to hedge. LedgerX will take a similar approach with block height options, listing tenors based on participant risk profiles. LedgerX will initially list tenors surrounding the expected halving of the bitcoin mining reward in May 2020.

For more information, the Exchange Contract's contract specifications are attached as Exhibit B.

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**Exhibit B**

**Rule 12.5 BTC Block Height Options**

- A. 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”).
- B. Bitcoin Block Height.** The block number as part of the bitcoin blockchain. The Bitcoin Block Height shall be specified by the Exchange for the Exchange Contract.
- C. Trading Hours.** The Trading Hours of the Exchange’s Swap Execution Facility that are applicable to the BTC Block Height Options described in this Rule 12.5 will be as stated in Rule 5.6; provided, that, with respect to a BTC Block Height Options, 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 BTC Block Height Options will be United States dollars, expressed as dollars and cents per bitcoin.
- E. Underlying.** The BTC Block Height Options underlying will be Bitcoin Block Height.
- F. Position Limits.** As of any date of determination, no person will own or control positions in excess of 100,000 options.
- G. Collateral.** All Exchange Contracts will be fully-collateralized. Each Participant must post the maximum potential loss on an Exchange Contract prior to executing an Exchange Contract.
- H. Expiration Date.** The Expiration Date shall be a Friday specified by the Exchange.
- I. Expiration Time.** 4:00pm ET on the Expiration Date.
- J. Settlement Date.** The Settlement Date shall be the earlier of the date on which the Bitcoin Block Height is reached, or the Expiration Date.
- K. Payout Criterion.** If the Bitcoin Block Height has been reached prior to the Expiration
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Time on the Expiration Date, the Exchange Contract shall payout the Payout Value at such time that the Block Height has reached 6 confirmations.

**L. Payout Value.** \$100.00.





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### Exhibit C

LedgerX has determined that the Exchange Contract certified herein relate to the following Core Principles:

#### **Core Principle 2 – Compliance with Rules**

Trading in the Exchange Contract will be subject to the LedgerX Rulebook (the “Rules”), which prohibits abusive trading practices, including, but not limited to, the following: fraudulent trading (Rule 8.3.C); spoofing or any other conduct that constitutes a disruptive trading practice or is otherwise prohibited under CEA Section 4c(a)(5) or applicable CFTC Regulations (Rules 8.3.J, 8.3.N and 8.9); any manipulation proscribed under CEA Section 9(a)(2) or CFTC Regulations 180.1(a) or 180.2 (Rules 8.3.K and 8.9); making fictitious bids or offers (Rules 8.3.M and 8.9); or any other activity that tends to impair the welfare, reputation, integrity or good name of LedgerX (Rule 8.5).

As with all swaps listed for trading on LedgerX’s SEF, trading activity in the Exchange Contract will be subject to monitoring and surveillance by LedgerX’s Compliance Department. LedgerX has the authority to exercise its investigatory and enforcement power where potential Rule violations are identified. *See* Chapter 9 of the Rules.

#### **Core Principle 3 – Swaps Not Readily Susceptible to Manipulation**

LedgerX’s market for block height option contracts is inherently not susceptible to manipulation because the contracts are not tied to any specific settlement price. LedgerX’s contracts settle based on the bitcoin blockchain which is an open, decentralized blockchain with a wide range of participation. The contracts settle only after the block height has received 6 confirmations on the bitcoin blockchain, ensuring that the block has been sufficiently validated by the bitcoin network.

LedgerX block height option contracts are fully-collateralized, preventing participants from accumulating exposure for which there is insufficient capital to cover the maximum potential loss. Additionally, LedgerX imposes position limits which necessarily disincentivize and prevent participants from attempting to manipulate the contract.

#### **Core Principle 4 – Monitoring of Trading and Trade Processing**

Rule 8.9 prohibits traders from attempting to manipulate, or manipulating the market, in any swap listed on LedgerX’s SEF, including any manipulation or attempted manipulation of the swap’s underlying. This prohibition would include manipulation and attempted manipulation of the Exchange Contract and the underlying for the Exchange Contract. This Rule is enforced by LedgerX in accordance with Chapter 9 of the Rules.

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### **Core Principle 5 – Ability to Obtain Information**

Pursuant to the Rules, LedgerX has the ability and authority to obtain sufficient information for the Exchange Contract to allow LedgerX to fully perform its operational, risk management, governance and regulatory functions and requirements under Part 37 of Commission Regulations.

### **Core Principle 6 – Position Limits or Accountability**

Rules 8.15 and 8.16 allow LedgerX to adopt position limits or position accountability levels for swaps listed on LedgerX's SEF. LedgerX has elected to set position limits as described above in Exhibit A in order to (i) add a further layer of protection for market participants by mitigating the risk of market manipulation and (ii) prevent excess speculation in the Underlying.

### **Core Principle 7 – Financial Integrity of Transactions**

Rule 6.1.A describes the process by which LedgerX verifies sufficient funds and/or collateral prior to accepting an order in any swap, including an order in the Exchange Contract. Specifically, upon submission of an order, LedgerX will conduct a review of the relevant participant's collateral account to ensure that the participant can fully collateralize the order prior to entering into the Exchange Contract. If the relevant participant's collateral account does not have the necessary funds and/or collateral for the order, LedgerX will not accept the order. Once orders in the Exchange Contract have been successfully matched, LedgerX's derivatives clearing organization will immediately clear the Exchange Contract in accordance with Rule 6.1.B.

### **Core Principle 8 – Emergency Authority**

Pursuant to Rule 2.12, LedgerX may take necessary or appropriate actions in response to an emergency affecting trading or open positions in the Exchange Contract, including the following: (i) suspend or curtail trading in, or limit trading to liquidation, for the Exchange Contract; (ii) extend or shorten the last trading date for the Exchange Contract; (iii) provide alternative settlement mechanisms for the Exchange Contract (including by altering the settlement terms or conditions or fixing the settlement price) or suspend the transfer of the underlying; (iv) order the transfer or liquidation of open positions in the Exchange Contract under certain circumstances; (v) extend, shorten or change the trading hours or the expiration date of the Exchange Contract; (vi) require participants to meet special margin requirements; (vii) order the transfer of positions in the Exchange Contract and the associated margin or alter the Exchange Contract's settlement terms or conditions; or (viii) impose or modify position limits, price limits, and intraday market restrictions.

### **Core Principle 9 – Timely Publication of Trading Information**

In accordance with Rule 2.17, LedgerX will publish daily information on the Exchange Contract regarding settlement prices, volume, and open interest.

LedgerX will submit electronic reports of all reportable swap data for each executed Exchange Contract to a registered swap data repository immediately following execution of the Exchange

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Contract. *See* Rule 6.17. All such reports will meet the standards set out in Parts 43 and 45 of Commission Regulations.

