

June 28, 2021

**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 Day-Ahead USD/ETH Deci Swaps  
LedgerX LLC Submission No. 21-18**

Dear Mr. Kirkpatrick:

LedgerX LLC (“LedgerX”) hereby notifies the Commodity Futures Trading Commission (the “Commission”), pursuant to Commission Regulation 40.2(a), that it is certifying the attached amendment to the contract specifications for Day-Ahead USDETH Deci Swaps (the “Company Contract”) for trading on LedgerX’s designated contract market (“DCM”) and swap execution facility (“SEF”).<sup>1</sup>

This certification includes the following:

- The submission cover sheet, which shall be generated through the Commission’s submission portal at the time of filing.
- A concise explanation and analysis of the Company Contract, attached as Exhibit A.
- A redline reflecting the changes to the Company Contract’s rules, which previously were certified on March 9, 2021 for the DCM, attached as Exhibit B;
- A final version of the Company Contract’s rules, which will be published as contract specifications for both the SEF and DCM on LedgerX’s website, attached as Exhibit C.
- A concise explanation and analysis of the Company Contract’s compliance with applicable provisions of the Commodity Exchange Act (the “CEA”), including the Core Principles, and the Commission’s Regulations thereunder, attached as Exhibit D.
- A deliverable supply analysis, attached as Exhibit E.

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<sup>1</sup> LedgerX previously self-certified substantively the same contract on March 9, 2021 for trading through LedgerX’s Designated Contract Market (“DCM”).



LedgerX certifies that the Company Contract complies with the CEA and Commission Regulations thereunder. LedgerX additionally certifies that it has concurrently posted a copy of this submission letter and the attachments hereto on LedgerX's website at <https://ledgerx.com/>.

\* \* \* \*

Please contact the undersigned at [gc@ledgerx.com](mailto:gc@ledgerx.com) if you have any questions or you would otherwise like to discuss this further.

Sincerely,

A handwritten signature in black ink that reads "Brian G. Mulherin".

Brian G. Mulherin  
General Counsel, LedgerX LLC



### Exhibit A

Below is a concise explanation of the Company Contract:

The Company Contract is a USD-priced swap on 1/10<sup>th</sup> of an Ether (“ETH”), which is fully collateralized. Prior to order execution, LedgerX ensures that each party to the Company Contract is capable of fully performing its obligations under the Company Contract, whether it be to deliver U.S. dollars (“USD”) or ETH, as described below.

Prior to accepting an order for the purchase or sale of a Company Contract, LedgerX shall review the Participant’s Collateral Account to ensure the Participant can fully collateralize the Participant’s obligations under the Company Contract. *See* Rules 6.1.A and 7.1. A prospective buyer must post to LedgerX the aggregate amount that will be debited from buyer’s Participant Account on the Initial Payment Date (the “Premium”). A prospective seller must post to LedgerX the total amount of ETH that will be debited from seller’s Participant Account at Settlement.

At the time an order for a Company Contract is executed (the “Initial Payment Date”), LedgerX shall debit from the buyer’s Participant Account, and credit to the seller’s Participant Account, the Premium for the Company Contract. Additionally, LedgerX shall hold the seller’s collateral unencumbered pending Settlement of the Company Contract to ensure performance. *See* Rule 7.2. Settlement occurs on the next Business day at 5 p.m., at which time LedgerX shall credit the buyer’s Participant Account with the total amount of ETH under the Company Contract, which transfer shall be recorded in the books and records of LedgerX.

For more information, a redline reflecting the changes to the Company Contract’s contract specifications, which previously were self-certified for trading through the Company’s DCM, are attached as Exhibit B, and a final version of those specifications which are being self-certified for trading through both the Company’s DCM and the Company’s SEF is attached hereto as Exhibit C.

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## Exhibit B

### **Rule 12.17 Day-Ahead USD/ETH Deci 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 a Company Contract as a buyer, whereby such Participant will pay USD and receive ETH, or as a seller, whereby such Participant will pay ETH and receive USD. This Rule 12.17 pertains to swaps on Ether (as described further herein) (the “Day-ahead USD/ETH Deci Swaps”) and contains general terms and conditions. The Day-ahead USD/ETH Deci-Swap requires that a buyer pay USD on the Initial Payment Date, and that the seller pay ETH on the Final Payment Date. All Company Contracts referencing Underlying Digital Currency, are subject to the LedgerX Digital Currency Fork Policy found in Rule 11.14.
- B. Ethereum.** Ethereum 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 Ethereum 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 Ethereum 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 Designated Contract Market~~ that are applicable to the Company Contract described in this Rule 12.17~~5~~ will be 24 hours a day, seven days a week or as otherwise determined by the Exchange from time to time as disclosed on the Website and through Participant Notice.
- D. Currency.** The currency applicable to Day-Ahead USD/ETH Deci Swaps will be United States dollars, which will be expressed in dollars and cents per ETH.
- E. Underlying.** The underlying applicable to Day-Ahead USD/ETH Deci Swaps will be Ethereum (sometimes referred to as “ETH”).
- F. Contract Size.** Each Day-Ahead USD/ETH Deci Swap will be for 1/10 Underlying (i.e., one-tenth ETH).
- G. Listing Cycle.** LedgerX shall list the Company Contract on a daily basis as available for trading.
- H. Prices and Intervals.** LedgerX shall list prices denominated in U.S. dollars. Those prices shall be separated by equal intervals of at least \$10, or such other greater amount
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determined by LedgerX that is at least 20% above and below the spot market trading range over the prior 1-week period.

**I. Position Limits.** As of any date of determination, no person will own or control positions in excess of 1,000,000 Day-Ahead USD/ETH Deci Swaps.

**J. Collateral.** All Company Contracts will be fully collateralized. Before the Exchange's ~~Designated Contract Market~~ will accept a buy order for a Day-Ahead USD/ETH Deci Swap from a Participant, such Participant must have sufficient USD available for trading in its account to satisfy its obligation to pay the Premium on such Company Contract(s). Before the Exchange's ~~Designated Contract Market~~ will accept a sell order for one or more Day-Ahead USD/ETH Deci Swaps from a Participant, such Participant must have sufficient ETH available for trading in its account to satisfy its delivery obligations on such Company Contract at Settlement.

**K. Conventions.**

- a. *Trade Date.* With respect to any Day-Ahead USD/ETH Deci 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 USD/ETH Deci Swap, the Trade Date applicable thereto.
  - c. *Minimum Price Fluctuation.* With respect to any Day-Ahead USD/ETH Deci Swap, \$0.01.
  - d. *Initial Payment Date.* With respect to any Day-Ahead USD/ETH Deci Swap, the Trade Date applicable thereto. The buyer of a Day-Ahead USD/ETH Deci Swap will pay the agreed Premium of such Company Contract on the Trade Date thereof.
  - e. *Premium.* With respect to any Day-Ahead USD/ETH Deci Swap, the Buyer thereof will pay the premium thereon on the Initial Payment Date. In the context of a Day-Ahead USD/ETH Deci Swap, the agreed amount is equal to the Premium.
  - f. *Last Trading Day/Time.* Up to but not including 4:5:00 pm New York time (adjusted for daylight savings) on the Business Day immediately preceding Settlement.
  - g. *Final Payment Day/Time.* 4:5:00 pm New York time (adjusted for daylight savings) on the Business Day immediately after the Last Trading Day/Time.
  - h. *Settlement.* Physical delivery on the *Final Payment Day/Time*.
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- L. Block Trading.** Each Block Trade of as Day-Ahead USD/ETH Deci Swaps must be effectuated in accordance with Rule 5.7. The minimum block size for the Day-Ahead USD/ETH Deci Swaps is equal to 10 contracts. All parties to a Day-Ahead USD/ETH Deci Swap Block Trade must be Eligible Contract Participants.



## Exhibit C

### **Rule 12.17 Day-Ahead USD/ETH Deci 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 a Company Contract as a buyer, whereby such Participant will pay USD and receive ETH, or as a seller, whereby such Participant will pay ETH and receive USD. This Rule 12.17 pertains to swaps on Ether (as described further herein) (the “Day-ahead USD/ETH Deci Swaps”) and contains general terms and conditions. The Day-ahead USD/ETH Deci-Swap requires that a buyer pay USD on the Initial Payment Date, and that the seller pay ETH on the Final Payment Date. All Company Contracts referencing Underlying Digital Currency, are subject to the LedgerX Digital Currency Fork Policy found in Rule 11.14.
- B. Ethereum.** Ethereum 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 Ethereum 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 Ethereum 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 that are applicable to the Company Contract described in this Rule 12.17 will be 24 hours a day, seven days a week or as otherwise determined by the Exchange from time to time as disclosed on the Website and through Participant Notice.
- D. Currency.** The currency applicable to Day-Ahead USD/ETH Deci Swaps will be United States dollars, which will be expressed in dollars and cents per ETH.
- E. Underlying.** The underlying applicable to Day-Ahead USD/ETH Deci Swaps will be Ethereum (sometimes referred to as “ETH”).
- F. Contract Size.** Each Day-Ahead USD/ETH Deci Swap will be for 1/10 Underlying (i.e., one-tenth ETH).
- G. Listing Cycle.** LedgerX shall list the Company Contract on a daily basis as available for trading.
- H. Prices and Intervals.** LedgerX shall list prices denominated in U.S. dollars. Those prices shall be separated by equal intervals of at least \$10, or such other greater amount
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determined by LedgerX that is at least 20% above and below the spot market trading range over the prior 1-week period.

**I. Position Limits.** As of any date of determination, no person will own or control positions in excess of 1,000,000 Day-Ahead USD/ETH Deci Swaps.

**J. Collateral.** All Company Contracts will be fully collateralized. Before the Exchange will accept a buy order for a Day-Ahead USD/ETH Deci Swap from a Participant, such Participant must have sufficient USD available for trading in its account to satisfy its obligation to pay the Premium on such Company Contract(s). Before the Exchange will accept a sell order for one or more Day-Ahead USD/ETH Deci Swaps from a Participant, such Participant must have sufficient ETH available for trading in its account to satisfy its delivery obligations on such Company Contract at Settlement.

**K. Conventions.**

- a. *Trade Date.* With respect to any Day-Ahead USD/ETH Deci 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 USD/ETH Deci Swap, the Trade Date applicable thereto.
- c. *Minimum Price Fluctuation.* With respect to any Day-Ahead USD/ETH Deci Swap, \$0.01.
- d. *Initial Payment Date.* With respect to any Day-Ahead USD/ETH Deci Swap, the Trade Date applicable thereto. The buyer of a Day-Ahead USD/ETH Deci Swap will pay the agreed Premium of such Company Contract on the Trade Date thereof.
- e. *Premium.* With respect to any Day-Ahead USD/ETH Deci Swap, the Buyer thereof will pay the premium thereon on the Initial Payment Date. In the context of a Day-Ahead USD/ETH Deci Swap, the agreed amount is equal to the Premium.
- f. *Last Trading Day/Time.* Up to but not including 4:00 pm New York time (adjusted for daylight savings) on the Business Day immediately preceding Settlement.
- g. *Final Payment Day/Time.* 4:00 pm New York time (adjusted for daylight savings) on the Business Day immediately after the Last Trading Day/Time.
- h. *Settlement.* Physical delivery on the *Final Payment Day/Time*.

**Block Trading.** Each Block Trade of as Day-Ahead USD/ETH Deci Swaps must be effectuated in accordance with Rule 5.7. The minimum block size for the Day-Ahead USD/ETH Deci

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Swaps is equal to 10 contracts. All parties to a Day-Ahead USD/ETH Deci Swap Block Trade must be Eligible Contract Participants.



## Exhibit D

LedgerX has determined that the Company Contract certified herein relates to the following Core Principles:

### **DCM Core Principle 2 and SEF Core Principle 2 – Compliance with Rules**

Trading in the Company 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 contracts listed for trading on LedgerX, trading activity in the Company 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.

### **DCM Core Principle 3 and SEF Core Principle 3 – Contracts Not Readily Susceptible to Manipulation**

The Company Contract is not readily susceptible to manipulation because it is fully-collateralized and results in physical delivery. LedgerX’s fully-collateralized model limits the ability of Participants to manipulate the market through corners and squeezes. Under a partially-collateralized model, a Participant might be unable to source a sufficient quantity of the underlying to satisfy its delivery obligations because the market had been cornered. LedgerX’s approach substantially reduces the likelihood of manipulation of the Company Contract because positions requiring performance are fully collateralized at the time of execution. For example, a Participant selling a Day-Ahead USD/ETH Deci Swaps would not need to cover the position by purchasing more ETH because the Participant will have already posted the ETH underlying the contract with LedgerX pursuant to the fully-collateralized model. As a result, the swap seller will not experience a squeeze, and an attempt to squeeze the LedgerX market likely would be unsuccessful.

### **DCM Core Principle 4 and SEF Core Principle 4– Prevention of Market Disruption**

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

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### **DCM Core Principle 5 and SEF Core Principle 6– Position Limits or Accountability**

Rules 8.15 and 8.16 allow LedgerX to adopt position limits or position accountability levels for contracts listed by LedgerX. LedgerX has elected to set position limits as described above in Exhibit B 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.

### **DCM Core Principle 6 and SEF 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 Company Contract, including the following: (i) suspend or curtail trading in, or limit trading to liquidation, for the Company Contract; (ii) extend or shorten the last trading date for the Company Contract; (iii) provide alternative settlement mechanisms for the Company 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 Company Contract under certain circumstances; (v) extend, shorten or change the trading hours or the settlement date of the Company Contract; (vi) require participants to meet special margin requirements; (vii) order the transfer of positions in the Company Contract and the associated margin or alter the Company Contract’s settlement terms or conditions; or (viii) impose or modify position limits, price limits, and intraday market restrictions.

LedgerX also has an added layer of protection through Rule 11.14 (Digital Currency Fork Policy), in anticipation of digital currency specific circumstances that may require LedgerX to exercise emergency authority.

### **DCM Core Principle 7 and SEF Core Principle 9 – Availability of General Information**

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

### **DCM Core Principle 11 and SEF Core Principle 7 – Financial Integrity of Transactions and Financial Integrity of Swaps**

Rule 6.1.A describes the process by which LedgerX verifies sufficient funds and/or collateral prior to accepting an order in any contract, including an order in the Company 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 Company 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 Company Contract have been successfully matched, LedgerX’s derivatives clearing organization will immediately clear the Company Contract in accordance with Rule 6.1.B.

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## Exhibit E

### DELIVERABLE SUPPLY ANALYSIS

Pursuant to Regulation 38.252, LedgerX monitors the supply of ETH underlying the Day-Ahead USD/ETH Deci Swaps contract and its adequacy to satisfy the delivery requirements so that LedgerX may make good faith efforts to resolve conditions that threaten the adequacy of supplies or the delivery process.

The commodity underlying the Day-Ahead USD/ETH Deci Swaps contract (namely ETH) is a decentralized digital currency. The supply of ETH is publicly available on the ETH blockchain, and currently stands in excess of 116 million ETH. The total number of ETH, however, does not equal the total deliverable supply, since to accidental loss and willful destruction may effectively remove some ETH from circulation temporarily or permanently.

#### Total Supply of ETH

The Ethereum network also increases the total supply over time by issuing new ETH as blocks are added to the blockchain. This process of issuing new ETH incentivizes miners to process and validate those blocks. Currently, the network provides 2 ETH per new block in mining rewards. The network also rewards miners whose found blocks do not make it into the blockchain (“uncle blocks”) with up to 1.75 ETH per uncle block.<sup>2</sup> This is necessary because Ethereum has short block confirmation times, so it is more likely that multiple blocks will be found around the same time. If Ethereum did not have an uncle block reward, it would be less attractive for miners to secure the network, as they would “win” the block rewards more rarely. Over the past year, the total supply of ETH has increased as follows:<sup>3</sup>

2020						
	Jan	Feb	Mar	Apr	May	Jun
<b>Total ETH</b>	109,511,661	109,907,159	110,330,033	110,752,856	111,161,261	111,556,089

2020						
	July	Aug	Sept	Oct	Nov	Dec
<b>Total ETH</b>	111,9787,163	112,400,518	112,820,993	113,225,824	113,645,918	114,065,028

2021						
	Jan	Feb	Mar	Apr	May	Jun <sup>4</sup>
<b>Total ETH</b>	114,484,369	114,863,230	115,282,571	115,687,432	116,105,205	116,467,708

<sup>2</sup> ETH monetary policy may undergo changes as a result of off-chain governance. These monetary policy changes are generally expected to relate to the rate of issuance of new ETH, or the nature of payment of transaction fees.

<sup>3</sup> Source: <https://etherscan.io/chart/ethersupplygrowth>.

<sup>4</sup> As of June 27, 2021.

## **Blockchain Transfers of ETH**

In addition to the expanding supply of ETH, substantial numbers of ETH transactions occur regularly among wallets on the blockchain. The following chart reflects the total number of ETH transactions recorded on the blockchain: <sup>5</sup>

Month	2018	2019	2020	2021
January	33,504,270	16,569,597	17,703,536	37,490,761
February	22,231,978	13,413,899	19,212,778	35,578,516
March	20,261,862	18,029,582	22,748,700	39,236,425
April	20,876,642	19,830,158	23,211,389	41,736,844
May	25,105,717	24,332,475	26,6485,87	45,055,042 <sup>6</sup>
June	22,471,788	25,679,653	28,802,843	
July	19,937,033	22,892,039	33,896,953	
August	19,842,059	22,003,889	36,679,836	
September	16,056,742	20,465,806	32,848,877	
October	17,056,926	20,954,629	33,297,049	
November	16,713,911	20,388,573	33,785,905	
December	17,107,601	18,271,815	35,930,517	
<b>Yearly Total:</b>	<b>251,166,529</b>	<b>242,832,115</b>	<b>318,118,383</b>	

## **Major Spot Exchange Trades of ETH**

The volume of ETH transacted on spot exchanges is also extensive. The following chart reflects the total number of ETH traded each month on major spot exchanges:<sup>7</sup>

Month	2018	2019	2020	2021
January	19,727,609	19,150,973	7,829,149	45,329,356
February	14,813,754	17,414,591	14,305,798	25,984,996
March	12,907,881	10,545,202	27,446,677	17,446,712
April	13,840,051	17,381,625	16,497,060	21,029,888
May	13,813,195	23,443,609	12,889,006	42,873,026
June	10,376,771	15,474,969	9,485,508	
July	7,215,427	12,981,963	11,066,344	
August	11,484,458	7,371,810	15,387,261	
September	23,281,832	8,968,387	15,703,915	
October	10,062,781	7,768,303	8,764,006	
November	23,792,955	5,781,297	18,217,716	
December	32,049,358	4,951,217	17,903,988	
<b>Yearly Total:</b>	<b>193,366,072</b>	<b>151,233,946</b>	<b>175,496,428</b>	

<sup>5</sup> Source: <https://etherscan.io/chart/tx>. This table reflects transactions involving ETH, but does not quantify the number of ETH included in each transaction.

<sup>6</sup> As of June 27, 2021.

<sup>7</sup> Source: <https://coinmetrics.io> (measuring ETH volumes across BinanceUS, Bitfinex, Bitstamp, Bittrex, Cex.io, Coinbase, FTX, Gatecoin, Gemini, Itbit, Kraken, Liquid, and Lmax).

### **Sufficiency of Deliverable Supply**

Based on the above information, LedgerX recommends an initial position limit of 1,000,000 contracts, which is the equivalent of 100,000 ETH (each LedgerX Company Contract is the equivalent of 1/10<sup>th</sup> ETH). This amounts to 0.086% of the total outstanding ETH as of June 2021. It further amounts to 0.222% of the total number of ETH transferred on the blockchain as of May 2021. Moreover, it equals 0.233% of the total ETH transacted on major spot exchanges in May of 2021, as detailed above.

LedgerX further ensures that there is sufficient deliverable supply of ETH to satisfy LedgerX's Company Contracts by requiring full collateralization of any position requiring performance at the time of execution. Thus, when the seller of a Day-Ahead USD/ETH Deci Swap enters into the position, the ETH must already be in the possession of the seller to ensure delivery at settlement.

Based on the foregoing, LedgerX concludes that there is sufficient deliverable supply of ETH for the performance of LedgerX Company Contracts, as explained above.

