

December 16, 2022

**Submitted via CFTC Portal**

Secretary of the Commission  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21<sup>st</sup> Street, N.W.  
Washington, D.C. 20581

Re: *TeraExchange, LLC – Regulation 40.2 Certification of Foreign Exchange Non Deliverable Forward Contract – SGD/USD*

Ladies and Gentlemen:

TeraExchange, LLC (“TeraExchange”) hereby notifies the Commodity Futures Trading Commission (the “Commission”) of its intent to list Foreign Exchange Non Deliverable Forward Contract – SGD/USD (the “Contract”) on the TeraExchange swap execution facility. TeraExchange intends to list the Contract on December 19, 2022.

Pursuant to Commission Regulation 40.2, this submission includes:

1. A copy of the submission cover sheet in accordance with the instructions provided in Appendix D to Part 40 of the Commission’s regulations, attached as Exhibit A.
2. A certification by TeraExchange that the Contract complies with the Commodity Exchange Act, as amended (the “Act”), and the Commission regulations thereunder; and that TeraExchange has posted a notice of pending certification of the Contract and a copy of this submission on its website concurrent with the filing of this submission with the Commission, attached as Exhibit B;
3. The Contract’s terms and conditions, attached as Exhibit C; and
4. A concise explanation and analysis of the Contract’s compliance with applicable core principles and Commission regulations, attached as Exhibit D.

Questions regarding this submission should be directed to Todd Langdon, Chief Compliance Officer, at 908-273-8277 or by e-mail at [tlangdon@teraexchange.com](mailto:tlangdon@teraexchange.com).

Sincerely,

*Christopher Rossman*  
Christopher Rossman  
Chief Operating Officer

EXHIBIT A

**SUBMISSION COVER SHEET**

**IMPORTANT:** Check box if Confidential Treatment is requested

Registered Entity Identifier Code (optional): \_\_\_\_\_

Organization: TeraExchange, LLC \_\_\_\_\_

Filing as a:  DCM  SEF  DCO  SDR Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): 12/16/2022 Filing Description:

New Product Certification

**SPECIFY FILING TYPE** Please note only ONE choice allowed per Submission.

**Organization Rules and Rule Amendments**

- Certification § 40.6(a)
- Approval § 40.5(a)
- Notification § 40.6(d)
- Advance Notice of SIDCO Rule Change § 40.10(a)
- SIDCO Emergency Rule Change § 40.10(h)

Rule Numbers: \_\_\_\_\_

**New Product** Please note only ONE product per Submission.

- Certification § 40.2(a)
- Certification Security Futures § 41.23(a)
- Certification Swap Class § 40.2(d)
- Approval § 40.3(a)
- Approval Security Futures § 41.23(b)
- Novel Derivative Product Notification § 40.12(a)
- Swap Submission § 39.5

Official Product Name: Non Deliverable Forward SGD-USD \_\_\_\_\_

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

- Certification § 40.6(a)
- Certification Made Available to Trade Determination § 40.6(a)
- Certification Security Futures § 41.24(a)
- Delisting (No Open Interest) § 40.6(a)
- Approval § 40.5(a)
- Approval Made Available to Trade Determination § 40.5(a)
- Approval Security Futures § 41.24(b)
- Approval Amendments to enumerated agricultural products § 40.4(a), § 40.5(a)
- "Non-Material Agricultural Rule Change" § 40.4(b)(5)
- Notification § 40.6(d)

Official Name(s) of Product(s) Affected: \_\_\_\_\_

Rule Numbers: \_\_\_\_\_

EXHIBIT B

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

TeraExchange, LLC (“TeraExchange”) hereby certifies that: a) the Foreign Exchange Non Deliverable Forward Contract – SGD/USD complies with the Commodity Exchange Act, 7 U.S.C. §1 *et seq.* and the Commodity Futures Trading Commission (the “Commission”) regulations thereunder; and b) concurrent with this submission, TeraExchange, posted on its website: (i) a notice of pending certification of the Contract with the Commission; and (ii) a copy of this submission.

TeraExchange, LLC

By: Christopher Rossman

Name: Christopher Rossman

Title: Chief Operating Officer

Date: December 16, 2022

## EXHIBIT C

### Terms and Conditions

NON DELIVERABLE FOREIGN EXCHANGE FORWARD CONTRACTS				
General				
<b>Contract Overview</b>	A Non Deliverable Forward ("NDF") is an outright forward in which counterparties settle the difference between the contracted NDF price or rate and the prevailing spot price or rate on an agreed upon notional amount, where settlement is performed in USD.			
<b>Reference Currency</b>	<b>Description</b>	<b>Settlement Currency</b>	<b>Template</b>	<b>Max Tenor</b>
AUD	Australian Dollar	United States Dollar (USD)	Non-EMTA Pair	5 Years
BRL	Brazilian Real		EMTA Pair	5 Years
CAD	Canadian Dollar		Non-EMTA Pair	2 Years
CHF	Swiss Franc		Non-EMTA Pair	5 Years
CLP	Chilean Peso		EMTA Pair	2 Years
CNY	Chinese Yuan		EMTA Pair	2 Years
COP	Colombian Peso		EMTA Pair	2 Years
DKK	Danish Krone		Non-EMTA Pair	2 Years
EUR	Euro		Non-EMTA Pair	5 Years
GBP	British Pound Sterling		Non-EMTA Pair	5 Years
HKD	Hong Kong Dollar		Non-EMTA Pair	2 Years
IDR	Indonesian Rupiah		EMTA Pair	2 Years
INR	Indian Rupee		EMTA Pair	2 Years
JPY	Japanese Yen		Non-EMTA Pair	5 Years
KRW	Korean Won		EMTA Pair	2 Years
MXN	Mexican Peso		Non-EMTA Pair	2 Years
MYR	Malaysian Ringgit		EMTA Pair	2 Years
NZD	New Zealand Dollar		Non-EMTA Pair	2 Years
NOK	Norwegian Krone		Non-EMTA Pair	2 Years
PEN	Peruvian Sol		EMTA Pair	2 Years
PHP	Philippine Peso	EMTA Pair	2 Years	
RUB	Russian Ruble	EMTA Pair	2 Years	
SEK	Swedish Krona	Non-EMTA Pair	2 Years	
SGD	Singapore Dollar	Non-EMTA Pair	2 Years	
TWD	Taiwanese Dollar	EMTA Pair	2 Years	
ZAR	South African Rand	Non-EMTA Pair	2 Years	
<b>Reference Currency Buyer</b>	The party to which an amount denominated in the Reference Currency is owed on Settlement Date			
<b>Reference Currency Seller</b>	The party that owes an amount denominated in the Reference Currency on Settlement Date			
<b>Settlement Currency</b>	United States Dollar (USD)			
<b>Contract Rate</b>	Currency exchange rate expressed as the amount of Reference Currency per unit of Settlement Currency, as agreed by Participants			
<b>Minimum Order Size</b>	Notional amount, as agreed by Participants			
<b>Minimum Size Increment</b>	\$1,000			
<b>Trading Conventions</b>	Buy or Sell, which refers to the contract size expressed in Reference Currency			
<b>Trading Hours</b>	00:01 - 24:00 Sunday to Friday Eastern Time			
<b>Trade Date</b>	As agreed by the Participants, the date on which counterparties enter into a contract			
<b>Valuation Date</b>	The date, no earlier than the Business Day following the Trade Date, upon which the difference between the prevailing market exchange rate and the agreed upon Contract Rate is calculated			
<b>Settlement Date</b>	Specified settlement or payment date no earlier than the date immediately following the Valuation Date, and no later than the Max Tenor plus two Business Days, in accordance with Clearing Venue Specifications.			
<b>Settlement Type</b>	Non Deliverable (Cash Settled in USD)			
<b>Pricing Source</b>	As agreed by counterparties, per EMTA Templates and Clearing Venue Specifications, as applicable			
<b>Settlement Procedure</b>	Bilateral settlement in USD, or as per Clearing Venue Specifications			
<b>Clearing Venue Specifications<sup>1</sup></b>	CME available at <a href="https://www.cmegroup.com/trading/fx/otc.html">https://www.cmegroup.com/trading/fx/otc.html</a> LCH available at <a href="https://www.lch.com/resources/rulebooks/lch-limited">https://www.lch.com/resources/rulebooks/lch-limited</a>			
<b>Block Size</b>	As set forth in Appendix F to Part 43 of the CFTC Regulations			
<b>Speculative Limits</b>	As set in Part 151 of the CFTC Regulations			
<b>Reportable Levels</b>	As set forth in CFTC Regulation 15.03			
<b>Position Accountability</b>	As may be determined and published by TeraExchange under CFTC Regulation 37.600(c)			
	<sup>1</sup> Clearing specifications, including all applicable settlement procedures, are subject to amendment by the clearing venue. References to position limits, position accountability, or reportable levels in any clearing specification apply only for clearing venue purposes.			

## EXHIBIT D

### EXPLANATION AND ANALYSIS OF THE CONTRACT'S COMPLIANCE WITH APPLICABLE CORE PRINCIPLES AND COMMISSION REGULATIONS

As required by Commission Regulation § 40.2(a), the following analysis, in narrative form, demonstrates that the Foreign Exchange Non Deliverable Forward Contract – SGD/USD (the “Contracts”) is consistent with the requirements of the Commodity Exchange Act, as amended (the “Act”), and the Commission regulations and guidance thereunder (in particular, Appendix B to Part 37 and Appendix C to Part 38).

#### **Appendix B to Part 37**

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

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

**(a) *Guidance.***

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

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

Non-deliverable forwards are cash-settled transactions between two counterparties and are typically used to either hedge or speculate against currencies where exchange controls in a particular country make it difficult to trade in the spot market directly. No exchange of the underlying currency occurs. Instead, the contracts are settled in a Settlement Currency agreed upon by the counterparties.

This Contract is typical of non-deliverable forwards, in that the counterparties arrange settlement by calculating the difference between the Contract Rate, which is agreed on between the counterparties at the start of the contract, and the prevailing applicable Spot FX Rate, incorporating all relevant EMTA, Inc. (“EMTA”) Template terms then in effect as recommended by EMTA or a recognized successor, on the Valuation Date. This difference is then multiplied by the notional amount, which is also determined at the start of the contract. As such, the reference price is the prevailing Spot FX Rate on the date / time in which the parties agree that the comparison will be made (i.e., Valuation Date). The source for the Spot FX Rate on the Valuation Date will be as predetermined in the EMTA Templates or non-EMTA NDF Contract Templates appropriate to the applicable currency pair, as bilaterally agreed to by the counterparties, and in the case of cleared NDFs, in accordance with

the Clearing Venue Specifications and acceptance by the Calculation Agent. Some Spot FX Rates are determined by the relevant Central Bank of the issuing country, while others are an average of interbank prices published by WM/Reuters or other recognized commercial market data vendors. Regardless of their source, Spot FX Rates are very reliable, well distributed and easily accessible to the public, and widely used and generally accepted by market participants.

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

Please see below.

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

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

#### *Essential Economic Characteristics of the Contract Terms*

The terms and conditions of the Contract, listed in Exhibit C, follow industry convention and match the terms of non deliverable forward contracts that are commonly offered in the market.

#### *Calculation of Cash Settlement Price*

As noted above and as is typical with non-deliverable forwards, the cash settlement price will be the difference between the agreed upon NDF Contract Rate and the prevailing Spot FX Rate multiplied by an agreed upon notional amount. Thus, the settlement will be based on the following:

1. **Reference Currency:** As determined by the counterparties at the Trade Date (i.e., start of the Contract); available Reference Currencies are listed in the Contract's terms and conditions (Exhibit C).
2. **Settlement Currency:** The NDF Contract settles in United States Dollars (USD) (Exhibit C).
3. **Notional Amount:** Amount agreed by counterparties at Trade Date.
4. **Contract Rate:** Rate agreed by counterparties, expressed as Reference Currency per unit of Settlement Currency.
5. **Spot FX Rate:** Exchange rate, expressed as Reference Currency per unit of Settlement Currency. The Spot FX Rate is determined on the Valuation Date by reference to the relevant EMTA Template for the applicable non-deliverable currency, or the WM/Reuters Closing Spot Rate for deliverable currencies, expressed in USD.
6. **Valuation Date:** Date, agreed by counterparties, on which the difference between the Spot FX Rate and the Contract Rate is calculated.
7. **Settlement Date:** Date, agreed by counterparties, on which settlement payments will be made.

On the Valuation Date, the parties will agree on the Spot FX Rate, which will be expressed as Reference Currency per unit of Settlement Currency. They will calculate the difference between the NDF Contract Price or Rate and

the Spot FX Price or Rate and multiply that difference by the notional amount, to arrive at the cash settlement price. For cleared NDF Contracts, the Calculation Agent shall be the Clearing Venue. The cash settlement will be due on the Settlement Date. As noted, this method of calculating settlement for the Contract is a common, widely-used, and widely accepted method of calculating the cash settlement for non-deliverable forward contracts.

**(2) Cash settled contracts may be susceptible to manipulation or price distortion. In evaluating the susceptibility of a cash-settled contract to manipulation, a designated contract market should consider the size and liquidity of the cash market that underlies the listed contract in a manner that follows the determination of deliverable supply as noted above in (b)(1). In particular, situations susceptible to manipulation include those in which the volume of cash market transactions and/or the number of participants contacted in determining the cash-settlement price are very low. Cash-settled contracts may create an incentive to manipulate or artificially influence the data from which the cash-settlement price is derived or to exert undue influence on the cash-settlement price's computation in order to profit on a futures position in that commodity.**

**The utility of a cash-settled contract for risk management and price discovery would be significantly impaired if the cash settlement price is not a reliable or robust indicator of the value of the underlying commodity or instrument. Accordingly, careful consideration should be given to the potential for manipulation or distortion of the cash settlement price, as well as the reliability of that price as an indicator of cash market values. Appropriate consideration also should be given to the commercial acceptability, public availability, and timeliness of the price series that is used to calculate the cash settlement price. Documentation demonstrating that the settlement price index is a reliable indicator of market values and conditions and is commonly used as a reference index by industry/market agents should be provided. Such documentation may take on various forms, including carefully documented interview results with knowledgeable agents.**

The Contract is not readily susceptible to manipulation for a number of reasons. First, the foreign exchange market is an extremely liquid market with massive volume, making manipulation very difficult to achieve. Second, as noted above, the method for calculating the cash settlement price – calculating the difference between the Spot FX Rate and the Contract Rate – is widely used and generally accepted by market participants. Third, as discussed above, the reference used for the Spot FX Rate is very reliable and widely available, and used by numerous market participants. And last, TeraExchange has a robust market surveillance program that is effectively able to surveil this market, detect uncommon activity, and investigate any such activity for signs of manipulation.

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

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

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

**(ii) Where a designated contract market itself generates the cash settlement price series, the designated contract market should establish calculation procedures that safeguard against potential attempts to artificially influence the price. For example, if the cash settlement price is derived by the designated contract market based on a survey of cash market sources, the designated contract market should maintain a list of such entities which all should be reputable sources with knowledge of the cash market. In addition, the sample of sources polled should be representative of the cash market, and the poll should be conducted at a time when trading in the cash market is active.**

Please see above.

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

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

Please see above regarding the reliability and widespread acceptance of the method used to generate the cash settlement price.

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

Spot FX rates are widely available via a number of public sources including the websites of Central Banks, EMTA and WM/Reuters. Please see above regarding the calculation of the cash settlement price.

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

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

Please see Exhibit C for the Contract's terms and conditions.

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

The terms and conditions of the Contract note that the Contract is based on the applicable foreign exchange rates.



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

The size of the Contract, which is determined by the counterparties, is consistent with the customary transaction sizes in the market.

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

The cash settlement procedure and an explanation of how it is reliable, accepted, publicly available, and reported in a timely manner is described above.

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

As agreed by the counterparties, the pricing basis is consistent with customary transactions in the market.

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

As agreed by the counterparties.

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

The last trading day is the Valuation Date, when the difference between the prevailing Spot FX Rate and the agreed upon Contract Rate is calculated.

**(G) *Trading Months:*** Trading months should be established based on the risk management needs of commercial entities as well as the availability of price and other data needed to calculate the cash settlement price in the specified months. Specification of the last trading day should take into consideration whether the volume of transactions underlying the cash settlement price would be unduly limited by occurrence of

**holidays or traditional holiday periods in the cash market. Moreover, a contract should not be listed past the date for which the designated contract market has access to use a proprietary price index for cash settlement.**

The Contract will be entered into on the Trade Date, the settlement price will be determined on the Valuation Date, and the settlement payments will be made on the Settlement Date. As is common with non-deliverable forwards, these dates will be set by the individual counterparties.

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

None required by Parts 150 or 151 of the Commission's regulations.

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

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

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

The Contract is available to trade twenty-four hours a day (00:01 – 24:00)(ET), Sunday to Friday.