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March 6, 2020

**Submitted via CFTC Portal**

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

Re: *tpSEF Inc. – Regulation 40.2 Certification of Non-Deliverable Foreign Exchange Options – THB/CNY (tpSEF Submission #20-284P)*

Dear Mr. Kirkpatrick:

tpSEF Inc. (“tpSEF”) hereby notifies the Commodity Futures Trading Commission (the “Commission”) of its intent to list Non-Deliverable Foreign Exchange Options – THB/CNY (the “Contracts”) on its swap execution facility. tpSEF intends to list the Contracts on March 10, 2020.

Pursuant to Commission Regulation 40.2, this submission includes:

- i. The intended listing date – March 10, 2020;
- ii. A certification by tpSEF that: (a) the Contracts comply with the Commodity Exchange Act, as amended, and the Commission regulations thereunder; and (b) concurrent with this submission, tpSEF posted on its website: (i) a notice of pending certification of the Contracts and (ii) a copy of this submission, attached as Exhibit A;
- iii. The terms and conditions of the Contracts, attached as Exhibit B; and
- iv. An explanation and analysis of the Contracts’ compliance with applicable core principles and Commission regulations, attached as Exhibit C.

tpSEF is listing the Contracts by virtue of updating the terms and conditions of Non-Deliverable Vanilla American or European Style Foreign Exchange Options submitted to the Commission for self-certification pursuant to Commission Regulation 40.2 on November 13, 2013. A copy of the terms and conditions marked to show changes from the version submitted on November 13, 2013 is attached as Exhibit D.

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

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

Very truly yours,

tpSEF Inc.

By: 

Name: Brian D. Donnelly

Title: Chief Compliance Officer

Date: March 6, 2020

Enclosures

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

**EXHIBIT A**

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

tpSEF Inc. (“tpSEF”) hereby certifies that: (i) Non-Deliverable Foreign Exchange Options – THB/CNY (the “Contracts”) comply with the Commodity Exchange Act, 7 U.S.C. §1 *et seq.* and Commodity Futures Trading Commission (“Commission”) regulations thereunder; and (ii) concurrent with this submission, tpSEF posted on its website: (a) a notice of pending certification of the Contracts with the Commission and (b) a copy of this submission.

tpSEF Inc.

By: \_\_\_\_\_

Name: Brian D. Donnelly

Title: Chief Compliance Officer

Date: March 6, 2020

**EXHIBIT B**

**Terms and Conditions**

|  |   |
|--|---|
| Summary:                               | This covers “Non-Deliverable Foreign Exchange Options”.   |
| Incorporated Standards:                | This contract description incorporates by reference the following industry standard documentation and standards:<br>(a) the 1998 FX and Currency Option Definitions, as amended and supplemented from time to time, including the 2005 Barrier Option Supplement to the 1998 FX and Currency Option Definitions (the “1998 Definitions”);<br>(b) the current EMTA Template Terms for Non-Deliverable Currency Option Transactions applicable to the Reference Currency and Settlement Currency (to the extent available for a particular Currency Pair) (available at: <a href="https://www.emta.org/ndfft.aspx">https://www.emta.org/ndfft.aspx</a> ); and<br>(c) ISDA OTC Taxonomies.   |
| Contract Types:                        | Each Non-Deliverable Foreign Exchange Option traded is bespoke and the terms agreed between the Buyer and Seller. All option strategies result in call options and/or put options executed with the following strategies traded as agreed between the parties:<br><br>Vanilla: Outright Call / Put, Straddle, Strangle, Butterfly, Risk Reversal, Calendar (tenor) spread, Cross Currency Spread, Condor, Call Spread, Put Spread, Live Trading with no delta hedge.<br><br>Exotic: Barriers, Baskets, Digitals (or Binary), Knockins, Knockouts, Reverse Knockins/Kockouts, No Touch, Double No Touch, Average Price, Worst of Options, Compound Options; trades may be with or without delta hedges and some structures may also be bilaterally negotiated with additional options as part of the package to form a vega hedge. |
| <b>Product Type/ISDA OTC Taxonomy:</b> |   |
| ISDA OTC Asset Class:                  | Foreign Exchange  |
| ISDA OTC Base Product:                 | Vanilla Option, NDO, Simple Exotic or Complex Exotic  |
| <b>Terms:</b>                          |   |
| Trade Date:                            | The date the transaction is agreed between and becomes legally binding on the parties.  |
| Commencement Date:                     | The Trade Date, unless otherwise specified by the parties. This applies only where the Currency Option Style is American.   |
| Buyer:                                 | As specified by the parties.  |

|                         |  |
|-------------------------|--|
| Seller:                 | As specified by the parties.   |
| Currency Option Style:  | As specified by the parties.<br><br>(An American option can be exercised any time up to and including the Expiration Date; a European option can only be exercised on the Expiration Date.)  |
| Currency Option Type:   | A Call with respect to the Call Currency and a Put with respect to the Put Currency; Binary in the case of a binary or digital option.   |
| Call Currency:          | The currency as specified by the parties from among those included in the list of available Currency Pairs.<br><br>The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.   |
| Call Currency Amount:   | As specified by the parties or, if not so specified, derived from the Put Currency Amount and Strike Price.  |
| Put Currency:           | The currency as specified by the parties from among those included in the list of available Currency Pairs.<br><br>The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.   |
| Put Currency Amount:    | As specified by the parties or, if not so specified, derived from the Call Currency Amount and Strike Price.   |
| Strike Price:           | As specified by the parties (if only one of the Put Currency or Call Currency is specified).<br><br>If no Strike Price is specified and Automatic Exercise is applicable, the Strike Price will be calculated using the Put Currency and Call Currency in order to determine if the option is to be automatically exercised. |
| Reference Currency:     | As specified by the parties.   |
| Settlement Currency:    | As specified by the parties.   |
| Settlement Rate:        | As specified by the parties or otherwise per the 1998 Definitions.   |
| Settlement Rate Option: | As specified by the parties.   |
| Expiration Date:        | As specified by the parties.   |
| Expiration Time:        | The time in the location specified by the parties.   |
| Latest Exercise Time:   | The Expiration Time, unless otherwise specified by the parties. This applies only where the Currency Option Style is American.   |
| Automatic Exercise:     | Applicable, unless otherwise specified by the parties.   |
| Settlement:             | Non-Deliverable  |

|                          |   |
|--------------------------|---|
| Settlement Amount:       | In the case of a digital or binary option, as specified by the parties.                                 |
| Settlement Date:         | As specified by the parties.  |
| Valuation Date:          | As specified by the parties.  |
| Averaging Dates:         | As specified by the parties.  |
| Premium:                 | As specified by the parties.  |
| Premium Payment Date:    | As specified by the parties.  |
| Barrier Event:           | As specified by the parties.  |
| Calculation Agent:       | As specified by the parties.  |
| Business Day:            | As specified by the parties.  |
| Business Day Convention: | As specified by the parties.  |
| Disruption Events:       | As specified by the parties.  |
| Disruption Fallbacks:    | As specified by the parties for each applicable Disruption Event or otherwise per the 1998 Definitions. |

Non-Deliverable Foreign Exchange Option Available Currency Pairs

|         |         |         |         |         |
|---------|---------|---------|---------|---------|
| AUD/CNY | CNY/THB | IDR/PHP | MYR/CNH | THB/INR |
| AUD/IDR | CNY/TWD | IDR/THB | MYR/CNY | THB/KRW |
| AUD/INR | EUR/ARS | IDR/TWD | MYR/EUR | THB/MYR |
| AUD/KRW | EUR/BRL | INR/AUD | MYR/GBP | THB/PHP |
| AUD/MYR | EUR/CLP | INR/CAD | MYR/IDR | THB/TWD |
| AUD/PHP | EUR/CNY | INR/CHF | MYR/INR | TWD/AUD |
| AUD/TWD | EUR/COP | INR/CNH | MYR/JPY | TWD/CAD |
| BRL/JPY | EUR/IDR | INR/CNY | MYR/KRW | TWD/CHF |
| BRL/MXN | EUR/INR | INR/EUR | MYR/NZD | TWD/CNH |
| CAD/BRL | EUR/KRW | INR/GBP | MYR/PHP | TWD/CNY |
| CAD/CNY | EUR/KZT | INR/HKD | MYR/SGD | TWD/EUR |
| CAD/IDR | EUR/MYR | INR/IDR | MYR/TWD | TWD/GBP |
| CAD/INR | EUR/PEN | INR/JPY | NZD/CNY | TWD/HKD |
| CAD/KRW | EUR/PHP | INR/KRW | NZD/IDR | TWD/IDR |
| CAD/MYR | EUR/TWD | INR/NZD | NZD/INR | TWD/INR |
| CAD/PHP | EUR/UAH | INR/PHP | NZD/KRW | TWD/JPY |
| CAD/TWD | GBP/BRL | INR/SGD | NZD/MYR | TWD/KRW |
| CHF/BRL | GBP/CNY | INR/TWD | NZD/PHP | TWD/MYR |
| CHF/CNY | GBP/IDR | JPY/CNY | NZD/TWD | TWD/NZD |

|         |         |         |         |         |
|---------|---------|---------|---------|---------|
| CHF/IDR | GBP/INR | JPY/IDR | PHP/AUD | TWD/PHP |
| CHF/INR | GBP/KRW | JPY/INR | PHP/CAD | TWD/SGD |
| CHF/KRW | GBP/MYR | JPY/KRW | PHP/CHF | TWD/THB |
| CHF/MYR | GBP/PHP | JPY/MYR | PHP/CNH | USD/ARS |
| CHF/PHP | GBP/TWD | JPY/PHP | PHP/CNY | USD/BRL |
| CHF/TWD | HKD/CNY | JPY/TWD | PHP/EUR | USD/CLP |
| CNH/IDR | HKD/IDR | KRW/AUD | PHP/GBP | USD/CNY |
| CNH/INR | HKD/INR | KRW/CAD | PHP/HKD | USD/COP |
| CNH/KRW | HKD/KRW | KRW/CHF | PHP/IDR | USD/EGP |
| CNH/MYR | HKD/MYR | KRW/CNH | PHP/INR | USD/GHS |
| CNH/PHP | HKD/PHP | KRW/CNY | PHP/JPY | USD/IDR |
| CNH/TWD | HKD/TWD | KRW/EUR | PHP/KRW | USD/INR |
| CNY/AUD | IDR/AUD | KRW/GBP | PHP/MYR | USD/KES |
| CNY/CAD | IDR/CAD | KRW/IDR | PHP/NZD | USD/KRW |
| CNY/CHF | IDR/CHF | KRW/INR | PHP/THB | USD/KZT |
| CNY/EUR | IDR/CNH | KRW/JPY | PHP/TWD | USD/MYR |
| CNY/GBP | IDR/CNY | KRW/MYR | SGD/CNY | USD/NGN |
| CNY/HKD | IDR/EUR | KRW/NZD | SGD/IDR | USD/PEN |
| CNY/IDR | IDR/GBP | KRW/PHP | SGD/INR | USD/PHP |
| CNY/INR | IDR/HKD | KRW/SGD | SGD/KRW | USD/RUB |
| CNY/JPY | IDR/INR | KRW/THB | SGD/MYR | USD/TWD |
| CNY/KRW | IDR/JPY | KRW/TWD | SGD/PHP | USD/UAH |
| CNY/MYR | IDR/KRW | MYR/AUD | SGD/TWD | USD/VND |
| CNY/NZD | IDR/MYR | MYR/CAD | THB/CNY | USD/ZMW |
| CNY/PHP | IDR/NZD | MYR/CHF | THB/IDR |         |

## EXHIBIT C

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

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

#### Appendix B to Part 37—Demonstration of Compliance That a Contract Is Not Readily Susceptible to Manipulation

##### **CORE PRINCIPLE 3 OF SECTION 5H OF THE ACT—SWAPS NOT READILY SUSCEPTIBLE TO MANIPULATION**

**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.**

As is typical of non-deliverable foreign exchange (“FX”) option contracts, the option buyer has the right, but not the obligation, to cause the option seller to pay to the option buyer the “In-The-Money Amount” (calculated in accordance with the 1998 Definitions), if any, of the option in a liquid settlement currency on the Settlement Date. Non-deliverable options relate to deliverable options in the same way as non-deliverable forwards relate to deliverable forwards. The non-deliverable feature is a mechanism used to settle FX transactions where currency restrictions make delivery of the underlying currencies illegal or impracticable. All of the terms (e.g., Strike Price, currency, Settlement Date) are agreed upon by the parties at the start of the Contract, and do not change throughout the life of the Contract. The reference



price is agreed by the parties at the outset from among the reference sources determined by ISDA and EMTA included in Annex A to the 1998 Definitions. These are broadly publicized and widely used rates.

**(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**

**(4) Options on Physicals Contracts.**

**(i) Under the Commission's regulations, the term “option on physicals” refers to option contracts that do not provide for exercise into an underlying futures contract. Upon exercise, options on physicals can be settled via physical delivery of the underlying commodity or by a cash payment. Thus, options on physicals raise many of the same issues associated with trading in futures contracts regarding adequacy of deliverable supplies or acceptability of the cash settlement price series. In this regard, an option that is cash settled based on the settlement price of a futures contract would be considered an “option on physicals” and the futures settlement price would be considered the cash price series.**

**(ii) In view of the above, acceptable practices for the terms and conditions of options on physicals contracts include, as appropriate, those practices set forth above for physical-delivery or cash-settled futures contracts plus the practices set forth for options on futures contracts.**

As required by Appendix C, the following analysis with respect to the Contracts, which are options on physicals, sets forth those relevant sections of Appendix C that pertain to “cash settled contracts” and to “options on futures contracts.”

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

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

The terms and conditions of the Contracts match the terms of non-deliverable FX option contracts that are commonly offered in the market and are listed in Exhibit B.

As is common with non-deliverable FX option contracts, the Contracts have several flexible terms – for instance, counterparties are able to choose: (a) the Trade Date; (b) whether or not the option can be

exercised at any time prior to the Expiration Date or only at the Expiration Date (i.e., American or European); (c) currency that will be used for the Premium, Put/Call Currency Amounts and Settlement Currency; and (d) the Strike Price. The trading hours, however, are fixed for each contract – trading is available twenty-three hours a day, from Sunday to Friday.

### ***Contract Not Readily Susceptible to Manipulation***

The Contracts are not susceptible to manipulation for a number of reasons. First, all of the essential terms of the Contract are agreed upon at the start of the Contract and remain static throughout the life of the Contract. Second, foreign currencies are standard and readily available, and are not to subject to variations in the patterns of production, consumption or supply. Finally, tpSEF Inc. (“tpSEF”) 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. tpSEF staff conduct real-time market surveillance and the National Futures Association (“NFA”) provides regulatory services on a T+1 basis. NFA’s services include comprehensive trade practice and market surveillance services (the scope of which can be found in the Regulatory Services Agreement between NFA and tpSEF submitted to the Commission as part of tpSEF’s swap execution facility application) (note that the foregoing also demonstrates compliance with Core Principle 4).

### ***Calculation of Cash Settlement Price***

The cash settlement price will be based on the In-The-Money Amount, calculated as follows:

Where the Settlement Currency is the Call Currency:

$$\text{Call Currency Amount} \times \frac{\text{Settlement Rate} - \text{Strike Price}}{\text{Settlement Rate}}$$

Where the Settlement Currency is the Put Currency:

$$\text{Put Currency Amount} \times \frac{\text{Strike Price} - \text{Settlement Rate}}{\text{Settlement Rate}}$$

(in each case, the Strike Price and Settlement Rate are quoted on a unit of reference currency per one unit of Settlement Currency).

In the case of a digital or binary Contract, the In-The-Money Amount will be the Settlement Amount agreed by the parties.

This method of cash settlement is consistent with the customary practice of cash-settling non-deliverable FX option contracts in the market.

**(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.**

Foreign currency is an extremely liquid market with massive volume, making manipulation very difficult to achieve. Information about spot FX rates is readily available from a variety of sources including central banks, the Emerging Markets Traders Association, Bloomberg and Reuters. The Strike Price is determined by the counterparties at the point of entering into a transaction and will not change due to fluctuations of the spot FX price. Accordingly, the Contracts are not readily susceptible to 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.**

The rates used are broadly disseminated rates which have been used for many years. In many cases, the rates are published by governmental agencies rather than private-sector third parties.

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

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

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

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

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

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

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

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 B for the Contracts' terms and conditions. While there are common terms such as the trading hours, many of the terms are flexible. Nevertheless, the terms are all within commonly accepted market standards.

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

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

**(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 contract size is the notional amount, which, as is customary in the market, is agreed upon by the counterparties at the start of the Contract.

**(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 settlement procedures for a particular Contract are determined by the counterparties. If the option is exercised, the option buyer receives the In-The-Money Amount of the Contract in the Settlement Currency agreed by the parties on the Settlement Date.

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

As agreed between the counterparties.

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

As agreed between 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 of the Contract is the Expiration Date of the Contract, which is the last opportunity (and in the case of European options, the only opportunity) for the holder of the option to exercise it. The Settlement Date is set at an appropriate time to allow for the transfer of the In-The-Money Amount in the Settlement Currency if the option has been exercised.

**(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.

As noted above, an American option can be exercised any time up to and including the Expiration Date, while a European option can only be exercised on the Expiration Date.

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

tpSEF will comply with Parts 150 and 151 of the Commission's regulations.

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

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

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

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

**(d) Options on a Futures Contract. (1) The Commission's experience with the oversight of trading in futures option contracts indicates that most of the terms and conditions associated with such trading do not raise any regulatory concerns or issues. The Commission has found that the following terms do not affect an option contract's susceptible to manipulation or its utility for risk management. Thus, the Commission believes that, in most cases, any specification of the following terms would be acceptable; the only requirement is that such terms be specified in an automatic and objective manner in the option contract's rules:**

- **Exercise method;**
- **Exercise procedure (if positions in the underlying futures contract are established via book entry);**
- **Strike price listing provisions, including provisions for listing strike prices on a discretionary basis;**
- **Strike price intervals;**
- **Automatic exercise provisions;**
- **Contract size (unless not set equal to the size of the underlying futures contract); and**
- **Option minimum tick should be equal to or smaller than that of the underlying futures contract.**

As noted in the Contract's terms and conditions (see Exhibit B), the following terms are specified in an automatic and objective manner at the start of the Contract: (a) exercise method – the counterparties choose the Currency Option Style, whether American or European; (b) the Strike Price and the strike

price intervals – these are as agreed by the counterparties, which is consistent with customary practice in the market; (c) whether Automatic Exercise is specified to be applicable; and (d) the contract size and minimum tick – these terms are also as agreed by the counterparties.

As is typical with FX options, on the Expiration Date / Time (or anytime up to and including the Expiration Date / Time, in the case of an American option), the owner of the option can choose to exercise it at the agreed upon Strike Price. The payments must be made on the Settlement Date, which is set by the counterparties at the start of the Contract.

If Automatic Exercise is specified (or deemed specified) to be applicable to a Contract and at the Expiration Time on the Expiration Date the Contract has not been exercised, then the Contract will be deemed exercised if the conditions set forth in Section 3.6(c) of the 1998 Definitions are met. Unless the counterparties specify otherwise, Automatic Exercise will be deemed to apply to the Contract.

**(2) Option Expiration & Last Trading Day. For options on futures contracts, specification of expiration dates should consider the relationship of the option expiration date to the delivery period for the underlying futures contract. In particular, an assessment should be made of liquidity in the underlying futures market to assure that any futures contracts acquired through exercise can be liquidated without adversely affecting the orderly liquidation of futures positions or increasing the underlying futures contract's susceptibility to manipulation. When the underlying futures contract exhibits a very low trading activity during an expiring delivery month's final trading days or has a greater risk of price manipulation than other contracts, the last trading day and expiration day of the option should occur prior to the delivery period or the settlement date of the underlying future. For example, the last trading day and option expiration day might appropriately be established prior to first delivery notice day for option contracts with underlying futures contracts that have very limited deliverable supplies. Similarly, if the futures contract underlying an option contract is cash settled using cash prices from a very limited number of underlying cash market transactions, the last trading and option expiration days for the option contract might appropriately be established prior to the last trading day for the futures contract.**

As noted above, the last trading day of the Contract is the Expiration Date, which is the last opportunity (and in the case of European options, the only opportunity) for the holder of the option to exercise it. As previously stated, foreign currency is an extremely liquid market with massive volume. Accordingly, the Contract is not readily susceptible to manipulation.

**(3) Speculative Limits. In cases where the terms of an underlying futures contract specify a spot-month speculative position limit and the option contract expires during, or at the close of, the futures contract's delivery period, the option contract should include a spot-month speculative position limit provision that requires traders to combine their futures and option position and be subject to the limit established for the futures contract. 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.

**EXHIBIT D**

**Terms and Conditions for Non-Deliverable Foreign Exchange Options  
 Marked Against November 13, 2013 Version**

|   |   |
|---|---|
| <p>Summary:</p>   | <p>This covers <del>non-deliverable vanilla American or European style foreign exchange options</del> <u>“Non-Deliverable Foreign Exchange Options”</u>.</p>  |
| <p><del>Limitations on Available Selections and Default Settings</del> <u>Incorporated Standards:</u></p> | <p><del>The terms under which a Non-Deliverable Vanilla American or European Style Foreign Exchange Option may be traded are as specified in these terms and conditions and in the attached tables.</del><br/> <u>This contract description incorporates by reference the following industry standard documentation and standards:</u></p> <p><del>For amounts or rates, the relevant term cannot be less than the specified Minimum, must represent an even Increment and cannot exceed the Maximum; for a date, the date cannot be earlier than Earliest nor later than Latest.</del><br/> <u>(a) the 1998 FX and Currency Option Definitions, as amended and supplemented from time to time, including the 2005 Barrier Option Supplement to the 1998 FX and Currency Option Definitions (the “1998 Definitions”);</u></p> <p><del>For Business Days, the defaults shall be the locations specified for the relevant currency, any additional locations specified for the relevant Floating Rate Options.</del><br/> <u>(b) the current EMTA Template Terms for Non-Deliverable Currency Option Transactions applicable to the Reference Currency and Settlement Currency (to the extent available for a particular Currency Pair) (available at: <a href="https://www.emta.org/ndfft.aspx">https://www.emta.org/ndfft.aspx</a>); and</u></p> <p><del>(c) ISDA OTC Taxonomies. The parties may add additional locations from the Available Locations and may eliminate some or all of the other locations, so long as there is at least one location in which payment may be made.</del><br/> <del>For these purposes “TARGET”/EUTA is considered a location.</del></p> <p><del>In many cases there are normal “vanilla” terms on which the parties will transact. These are shown as “Default” and will apply unless the parties vary them.</del></p> <p><del>It should be noted that these contracts can be traded in a variety of currencies. Since each national market has its own peculiarities, the “Available Terms” and/or “Default Terms” may vary by currency.</del></p> <p><del>In some cases, the same contract might have different terms depending on the market in which it is traded (e.g.,</del></p> |



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|  | <del>London versus NY). In that case the default settings may vary by market.</del>   |
| <del>Incorporated Standards</del> <u>Contract Types:</u>               | <p><u>Each Non-Deliverable Foreign Exchange Option traded is bespoke and the terms agreed between the Buyer and Seller. All option strategies result in call options and/or put options executed with the following strategies traded as agreed between the parties:</u></p> <p><u>Vanilla: Outright Call / Put, Straddle, Strangle, Butterfly, Risk Reversal, Calendar (tenor) spread, Cross Currency Spread, Condor, Call Spread, Put Spread, Live Trading with no delta hedge.</u></p> <p><u>Exotic: Barriers, Baskets, Digitals (or Binary), Knockins, Knockouts, Reverse Knockins/Knockouts, No Touch, Double No Touch, Average Price, Worst of Options, Compound Options; trades may be with or without delta hedges and some structures may also be bilaterally negotiated with additional options as part of the package to form a vega hedge. This contract description incorporates by reference the following industry standard documentation and standards:</u></p> <p><del>(a) the 1998 FX and Currency Option Definitions and 2005 Amendment and Annex A and supplements</del><br/> <del>(b) ISDA OTC Taxonomies</del><br/> <del>(c) FpML Location Codes</del></p> <p><del>For convenience, certain terms are mapped to their FpML 5.5 equivalent.</del><br/> <del>For purposes of this description, the term COP means the lawful currency of the Republic of Columbia</del></p> |
| <b>Product Type/ISDA OTC Taxonomy:</b>                                 |   |
| ISDA OTC Asset Class:  | Foreign Exchange  |
| ISDA OTC Base Product:   | <del>Foreign Exchange</del> <u>Vanilla Option, NDO, Simple Exotic or Complex Exotic</u>   |
| <del>ISDA OTC Sub Product:</del>                                       | <del>Vanilla Option</del>   |
| <del>Further Limitations:</del>  | <del>None</del>   |
| <del>FpML Schema:</del>  | <del>"confirmation.fxOption"</del>  |
| <b>Terms:</b>  |   |
| Trade Date:  | The date the transaction is agreed between and becomes legally binding on the parties.  |
| Commencement Date<br><del>("americanExercise.commencementDate"):</del> | <del>As</del> <u>The Trade Date, unless otherwise</u> specified by the parties. This applies only where the <u>Currency</u> Option Style is American.   |
| Buyer ( <del>"buyerPartyReference"):</del>                             | As specified by the parties.  |
| Seller ( <del>"sellerPartyReference"):</del>                           | As specified by the parties.  |
| Currency Option Style:   | As specified by the parties.  |

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|  | <u>(An American option can be exercised any time up to and including the Expiration Date; a European option can only be exercised on the Expiration Date.)</u>   |
| Currency Option Type:  | A Call with respect to the Call Currency and a Put with respect to the Put Currency; <u>Binary in the case of a binary or digital option.</u>  |
| Call Currency ( <del>“callCurrencyAmount”</del> ):   | The currency <del>and amount</del> as specified by the parties; <del>or, if not so specified, derived from the Put</del> <u>from among those included in the list of available</u> Currency <del>Amount and Strike Price</del> <u>Pairs.</u><br><br>The Put Currency and Call Currency must represent a traded pair <del>as shown on</del> <u>included in</u> the <del>attached</del> list of <del>currencies</del> <u>available Currency Pairs.</u> |
| <u>Call Currency Amount:</u>   | <u>As specified by the parties or, if not so specified, derived from the Put Currency Amount and Strike Price.</u>   |
| <u>Put Currency:</u>   | <u>The currency as specified by the parties from among those included in the list of available Currency Pairs.</u><br><br><u>The Put Currency and Call Currency must represent a traded pair included in the list of available Currency Pairs.</u>   |
| Put Currency ( <del>“putCurrencyAmount”</del> ) <u>Amount:</u>   | <del>The currency and amount as</del> <u>As</u> specified by the parties; or, if not so specified, derived from the Call Currency Amount and Strike Price.   |
| Strike Price ( <del>“strikePrice”</del> ):   | As specified by the parties (if only one of the Put Currency or Call Currency is specified).<br><br>If no Strike Price is specified and Automatic Exercise is applicable, the Strike Price will be calculated using the Put Currency and Call Currency in order to determine if the <del>Option</del> <u>option</u> is to be automatically exercised.  |
| Reference Currency:  | As specified by the parties.   |
| Settlement Currency:   | As specified by the parties.   |
| Settlement Rate:   | As specified by the parties; <del>if no Settlement Rate Option is specified</del> <u>or otherwise per the 1998 Definitions.</u>  |
| Settlement Rate Option:  | As specified by the parties <del>from among the Available Settlement Rate Options if the Settlement Currency is USD.</del>   |
| Expiration Date ( <del>“expiryDate”</del> ):   | As specified by the parties.   |
| <u>Expiration Time:</u>  | <u>The time in the location specified by the parties.</u>  |
| Latest Exercise Time:  | <del>As</del> <u>The Expiration Time, unless otherwise</u> specified by the parties. This applies only where the <u>Currency</u> Option Style is American.   |
| <del>Expiration Time</del> ( <del>“americanExercise.expiryTime”</del> or <del>“europeanExercise.expiryTime”</del> ) <u>Automatic Exercise:</u> | <del>The time in the location</del> <u>Applicable, unless otherwise</u> specified by the <del>parties</del> <u>parties.</u>  |

|  |   |
|--|---|
| <del>Automatic Exercise Settlement:</del>                              | <del>As specified by the parties.</del> <u>Non-Deliverable</u>  |
| Settlement <del>Date</del> <u>Amount:</u>                              | <del>As</del> <u>In the case of a digital or binary option, as</u> specified by the parties.  |
| <del>Valuation Settlement</del> Date:                                  | As specified by the parties.  |
| <del>Averaging Dates</del> <u>Valuation Date:</u>                      | As specified by the parties.  |
| <del>Premium (“premium”)</del>   | <del>As specified by the parties.</del>   |
| <del>Premium Payment Date</del> <u>Averaging Dates:</u>                | As specified by the parties.  |
| <del>Calculation Agent</del> <u>Premium:</u>                           | As specified by the parties.  |
| <del>Business Days for</del> Premium Payment Date:                     | As specified by the parties.  |
| <del>Business Days for Settlement Date</del> <u>Barrier Event:</u>     | As specified by the parties.  |
| <del>Business Days for Exercise Date</del>                             | <del>For American Options, as specified by the parties.</del>   |
| <del>Business Days for Expiration Date</del> <u>Calculation Agent:</u> | As specified by the parties.  |
| Business <del>Days (General)</del> <u>Day:</u>                         | As specified by the parties.  |
| Business Day Convention <del>for Premium Payment Date:</del>           | As specified by the parties.  |
| <del>Business Day Convention for Expiration Date:</del>                | <del>As specified by the parties.</del>   |
| <del>Business Day Convention for Settlement Date:</del>                | <del>As specified by the parties.</del>   |
| <del>Event Currency:</del>   | <del>As specified by the parties if any Disruption Events are applicable.</del>   |
| Disruption Events:   | As specified by the parties.  |
| Disruption Fallbacks:  | As specified by the parties for each <u>applicable</u> Disruption Event <del>applicable</del> <u>or otherwise per the 1998 Definitions.</u> |

~~FX-Non-Deliverable Vanilla~~ Foreign Exchange Option Available ~~Currencies and Principal Financial Centers~~ Currency Pairs

|                |   |  |   |                |
|----------------|---|--|---|----------------|
| <u>AUD/CNY</u> | <del>Three Letter Currency Code (ISDA/ISO)</del> <u>CNY/THB</u> | <del>Currency Name (ISDA)</del> <u>IDR/PHP</u> | <del>Principal Financial Centers for Currency (FpML Codes)</del> <u>MYR/CNH</u> | <u>THB/INR</u> |
| <u>AUD/IDR</u> | <u>CNY/TWD</u>  | <u>IDR/THB</u>                                 | <u>MYR/CNY</u>  | <u>THB/KRW</u> |
| <u>AUD/INR</u> | <u>EUR/ARS</u>  | <del>Argentine Peso</del> <u>IDR/TWD</u>       | <u>ARB</u> <u>MYR/EUR</u>   | <u>THB/MYR</u> |
| <u>AUD/KRW</u> | <u>EUR/BRL</u>  | <del>Brazilian Real</del> <u>INR/AUD</u>       | <u>BRBR, BRRJ or BRSP</u> <u>MYR/GBP</u>  | <u>THB/PHP</u> |
| <u>AUD/MYR</u> | <u>EUR/CLP</u>  | <del>Chilean Peso</del> <u>INR/CAD</u>         | <u>CLSA</u> <u>MYR/IDR</u>  | <u>THB/TWD</u> |
| <u>AUD/PHP</u> | <u>EUR/CNY</u>  | <del>Chinese Renminbi</del> <u>INR/CHF</u>     | <u>CNBE</u> <u>MYR/INR</u>  | <u>TWD/AUD</u> |
| <u>AUD/TWD</u> | <u>EUR/COP</u>  | <del>Colombian Peso</del> <u>INR/CNH</u>       | <u>COBO</u> <u>MYR/JPY</u>  | <u>TWD/CAD</u> |
|                | <u>EGP</u>  | <del>Egyptian Pound</del>                      | <u>EGCA</u>   |                |
|                | <u>EUR</u>  | <del>Euro</del>                                | <u>EUTA</u>   |                |
| <u>BRL/JPY</u> | <u>EUR/IDR</u>  | <del>Indonesian Rupiah</del> <u>INR/CNY</u>    | <u>IDJA</u> <u>MYR/KRW</u>  | <u>TWD/CHF</u> |

|                         |   |  |   |                         |
|-------------------------|---|--|---|-------------------------|
| <a href="#">BRL/MXN</a> | <a href="#">EUR/INR</a>                     | <a href="#">Indian Rupee</a> <a href="#">INR/EUR</a>       | <a href="#">INMU</a> <a href="#">MYR/NZD</a>  | <a href="#">TWD/CNH</a> |
| <a href="#">CAD/BRL</a> | <a href="#">EUR/KRW</a>                     | <a href="#">Korean Won</a> <a href="#">INR/GBP</a>         | <a href="#">KRSE</a> <a href="#">MYR/PHP</a>  | <a href="#">TWD/CNY</a> |
| <a href="#">CAD/CNY</a> | <a href="#">EUR/KZT</a>                     | <a href="#">Kazakhstan Tenge</a> <a href="#">INR/HKD</a>   | <a href="#">KZAL</a> <a href="#">MYR/SGD</a>  | <a href="#">TWD/EUR</a> |
| <a href="#">CAD/IDR</a> | <a href="#">EUR/MYR</a>                     | <a href="#">Malaysian Ringgit</a> <a href="#">INR/IDR</a>  | <a href="#">MYKL</a> <a href="#">MYR/TWD</a>  | <a href="#">TWD/GBP</a> |
| <a href="#">CAD/INR</a> | <a href="#">EUR/PEN</a>                     | <a href="#">Peruvian Nuevo Sol</a> <a href="#">INR/JPY</a> | <a href="#">PELN</a> <a href="#">NZD/CNY</a>  | <a href="#">TWD/HKD</a> |
| <a href="#">CAD/KRW</a> | <a href="#">EUR/PHP</a>                     | <a href="#">Philippine Peso</a> <a href="#">INR/KRW</a>    | <a href="#">PHMA</a> <a href="#">NZD/IDR</a>  | <a href="#">TWD/IDR</a> |
| <a href="#">RUB</a>     |   | <a href="#">Russian Ruble</a>                              | <a href="#">RUMO</a>                          |                         |
| <a href="#">CAD/MYR</a> | <a href="#">EUR/TWD</a>                     | <a href="#">Taiwanese Dollar</a> <a href="#">INR/NZD</a>   | <a href="#">TWTAN</a> <a href="#">NZD/INR</a> | <a href="#">TWD/INR</a> |
| <a href="#">USD</a>     |   | <a href="#">United States Dollar</a>                       | <a href="#">USNY</a>                          |                         |
| <a href="#">VEB</a>     |   | <a href="#">Venezuelan Bolivar</a>                         | <a href="#">VECA</a>                          |                         |
| <a href="#">CAD/PHP</a> | <a href="#">VND</a> <a href="#">EUR/UAH</a> | <a href="#">Vietnamese Dong</a> <a href="#">INR/PHP</a>    | <a href="#">VNHA</a> <a href="#">NZD/KRW</a>  | <a href="#">TWD/JPY</a> |

The Minimum Amount for any currency pair is 5,000,000 of the Call Currency with an Increment of 5,000,000 of the Call Currency

FX Non-Deliverable Vanilla Option Available Settlement Rate Options

|   |   |                         |                         |                         |
|---|---|-------------------------|-------------------------|-------------------------|
| <a href="#">ARS</a>                         | <a href="#">ARS01-ARS BNAR</a>  |                         |                         |                         |
| <a href="#">ARS</a>                         | <a href="#">ARS02-ARS OFFICIAL RATE</a>                                       |                         |                         |                         |
| <a href="#">ARS</a>                         | <a href="#">ARS03-CME/EMTA-ARS INDUSTRY SURVEY RATE</a>                       |                         |                         |                         |
| <a href="#">ARS</a>                         | <a href="#">ARS03-EMTA-ARS INDUSTRY SURVEY RATE</a>                           |                         |                         |                         |
| <a href="#">ARS</a>                         | <a href="#">ARS04-EMTA-ARS INDICATIVE INDUSTRY SURVEY RATE</a>                |                         |                         |                         |
| <a href="#">BRL</a> <a href="#">CAD/TWD</a> | <a href="#">GBP/BRL01-BRL BRBY</a>  | <a href="#">INR/SGD</a> | <a href="#">NZD/MYR</a> | <a href="#">TWD/KRW</a> |
| <a href="#">CHF/BRL</a>                     | <a href="#">BRL02-BRL OFFICIAL RATE</a> <a href="#">GBP/CNY</a>               | <a href="#">INR/TWD</a> | <a href="#">NZD/PHP</a> | <a href="#">TWD/MYR</a> |
| <a href="#">BRL</a> <a href="#">CHF/CNY</a> | <a href="#">BRL03-BRL PCOT</a> <a href="#">GBP/IDR</a>                        | <a href="#">JPY/CNY</a> | <a href="#">NZD/TWD</a> | <a href="#">TWD/NZD</a> |
| <a href="#">BRL</a> <a href="#">CHF/IDR</a> | <a href="#">BRL09-BRL PTAX</a> <a href="#">GBP/INR</a>                        | <a href="#">JPY/IDR</a> | <a href="#">PHP/AUD</a> | <a href="#">TWD/PHP</a> |
| <a href="#">BRL</a>                         | <a href="#">BRL10-BRL PTAX-BRFR</a>   |                         |                         |                         |
| <a href="#">BRL</a> <a href="#">CHF/INR</a> | <a href="#">BRL11-BRL INDUSTRY SURVEY RATE</a> <a href="#">GBP/KRW</a>        | <a href="#">JPY/INR</a> | <a href="#">PHP/CAD</a> | <a href="#">TWD/SGD</a> |
| <a href="#">BRL</a>                         | <a href="#">BRL12-EMTA-BRL INDUSTRY SURVEY RATE</a>                           |                         |                         |                         |
| <a href="#">BRL</a> <a href="#">CHF/KRW</a> | <a href="#">BRL13-EMTA-BRL INDICATIVE SURVEY RATE</a> <a href="#">GBP/MYR</a> | <a href="#">JPY/KRW</a> | <a href="#">PHP/CHF</a> | <a href="#">TWD/THB</a> |
| <a href="#">CLP</a>                         | <a href="#">CLP01-BCCCHILG</a>  |                         |                         |                         |
| <a href="#">CLP</a>                         | <a href="#">CLP02-CLP INFORMAL</a>  |                         |                         |                         |
| <a href="#">CLP</a> <a href="#">CHF/MYR</a> | <a href="#">CLP03-CLP</a>   | <a href="#">JPY/MYR</a> | <a href="#">PHP/CNH</a> | <a href="#">USD/ARS</a> |

|   |   |                         |                         |                         |
|---|---|-------------------------|-------------------------|-------------------------|
|   | <a href="#">INTERBANK</a> <a href="#">GBP/PHP</a>                                       |                         |                         |                         |
| CLP   | CLP04-CLP OBSERVADO   |                         |                         |                         |
| CLP   | CLP08-CLP OFFICIAL RATE   |                         |                         |                         |
| CLP   | CLP09-CLP TELERATE 38942  |                         |                         |                         |
| CLP   | CLP10-CLP DOLAR OBS   |                         |                         |                         |
| CLP   | CLP11-EMTA-CLP INDICATIVE SURVEY RATE   |                         |                         |                         |
| <a href="#">CNY</a> <a href="#">CHF/PHP</a> | <a href="#">CNY01-CNY</a><br><a href="#">SAED</a> <a href="#">GBP/TWD</a>               | <a href="#">JPY/PHP</a> | <a href="#">PHP/CNY</a> | <a href="#">USD/BRL</a> |
| <a href="#">CNY</a> <a href="#">CHF/TWD</a> | <a href="#">HKD/CNY02-SFEMC</a><br>CNY INDICATIVE<br>SURVEY RATE                        | <a href="#">JPY/TWD</a> | <a href="#">PHP/EUR</a> | <a href="#">USD/CLP</a> |
| COP   | COP01-COP CO/COL03  |                         |                         |                         |
| COP   | COP02-COP TRM   |                         |                         |                         |
| COP   | COP03-COP INDICATIVE SURVEY RATE  |                         |                         |                         |
| EGP   | EGP01-EGP FEMF  |                         |                         |                         |
| EGP   | EGP02-EMTA-EGP INDICATIVE SURVEY RATE   |                         |                         |                         |
| <a href="#">CNH/IDR</a>                     | <a href="#">HKD/IDR01-IDR ABS</a>   | <a href="#">KRW/AUD</a> | <a href="#">PHP/GBP</a> | <a href="#">USD/CNY</a> |
| IDR   | IDR02-SFEMC INDICATIVE SURVEY RATE  |                         |                         |                         |
| IDR   | IDR03-IDR VWAP  |                         |                         |                         |
| <a href="#">CNH/INR</a>                     | <a href="#">HKD/INR01-INR RBIB</a>  | <a href="#">KRW/CAD</a> | <a href="#">PHP/HKD</a> | <a href="#">USD/COP</a> |
| INR   | INR02-SFEMC INR INDICATIVE SURVEY RATE  |                         |                         |                         |
| <a href="#">CNH/KRW</a>                     | <a href="#">HKD/KRW02-KRW</a><br>KFTC18   | <a href="#">KRW/CHF</a> | <a href="#">PHP/IDR</a> | <a href="#">USD/EGP</a> |
| <a href="#">KRW</a> <a href="#">CNH/MYR</a> | <a href="#">KRW03-KRW</a><br>TELERATE<br>45644 <a href="#">HKD/MYR</a>                  | <a href="#">KRW/CNH</a> | <a href="#">PHP/INR</a> | <a href="#">USD/GHS</a> |
| KRW   | KRW04-SFEMC-KRW INDICATIVE SURVEY RATE  |                         |                         |                         |
| KZT   | KZT01-KZT-KASE  |                         |                         |                         |
| KZT   | KZT 02-EMTA-KZT INDICATIVE SURVEY RATE  |                         |                         |                         |
| MYR   | MYR01-MYR-ABS   |                         |                         |                         |
| MYR   | MYR02-SFEMC-MYR INDICATIVE SURVEY RATE  |                         |                         |                         |
| MYR   | MYR03-MYR-PPKM  |                         |                         |                         |
| PEN   | PEN01-PEN-PDSB  |                         |                         |                         |
| PEN   | PEN02-PEN-PDSC  |                         |                         |                         |
| PEN   | PEN03-PEN-WT-AVE  |                         |                         |                         |
| PEN   | PEN04-EMTA-PEN INDICATIVE SURVEY RATE   |                         |                         |                         |
| PEN   | PEN05-PEN-INTERBANK-AVE   |                         |                         |                         |
| <a href="#">CNH/PHP</a>                     | <a href="#">HKD/PHP01-PHPESO</a>  | <a href="#">KRW/CNY</a> | <a href="#">PHP/JPY</a> | <a href="#">USD/IDR</a> |
| <a href="#">PHP</a> <a href="#">CNH/TWD</a> | <a href="#">PHP02-PHP</a><br>TELERATE<br>2920 <a href="#">HKD/TWD</a>                   | <a href="#">KRW/EUR</a> | <a href="#">PHP/KRW</a> | <a href="#">USD/INR</a> |
| PHP   | PHP03-PHP TELERATE 15439  |                         |                         |                         |
| PHP   | PHP04-PHPESO1   |                         |                         |                         |
| <a href="#">PHP</a> <a href="#">CNY/AUD</a> | <a href="#">PHP05-SFEMC-PHP</a><br>INDICATIVE<br>SURVEY<br>RATE <a href="#">IDR/AUD</a> | <a href="#">KRW/GBP</a> | <a href="#">PHP/MYR</a> | <a href="#">USD/KES</a> |

|                                       |  |                         |                         |                         |
|---------------------------------------|--|-------------------------|-------------------------|-------------------------|
| <b>PHP</b>                            | <b>PHP06-PHP-PDSPESO</b>   |                         |                         |                         |
| <b>RUB</b><br><a href="#">CNY/CAD</a> | <b>RUB01-RUB</b><br><b>MICEXFR</b> <a href="#">IDR/CAD</a>   | <a href="#">KRW/IDR</a> | <a href="#">PHP/NZD</a> | <a href="#">USD/KRW</a> |
| <b>RUB</b>                            | <b>RUB02-RUB-MMVB</b>  |                         |                         |                         |
| <b>RUB</b>                            | <b>RUB03-RUB-CME-EMTA</b>  |                         |                         |                         |
| <b>RUB</b><br><a href="#">CNY/CHF</a> | <b>RUB04-EMTA-RUB</b><br><b>INDICATIVE</b><br><b>SURVEY</b><br><b>RATE</b> <a href="#">IDR/CHF</a> | <a href="#">KRW/INR</a> | <a href="#">PHP/THB</a> | <a href="#">USD/KZT</a> |
| <b>TWD</b>                            | <b>TWD01-TWD-TELERATE-6161</b>   |                         |                         |                         |
| <b>TWD</b><br><a href="#">CNY/EUR</a> | <b>TWD02-TWD</b><br><b>TFEMA</b> <a href="#">IDR/CNH</a>   | <a href="#">KRW/JPY</a> | <a href="#">PHP/TWD</a> | <a href="#">USD/MYR</a> |
| <b>TWD</b>                            | <b>TWD03-TWD-TAIFIX1</b>   |                         |                         |                         |
| <b>TWD</b>                            | <b>TWD04-SFEMC</b>   |                         |                         |                         |
| <b>VEB</b><br><a href="#">CNY/GBP</a> | <b>VEF01-VEF</b><br><b>FIX</b> <a href="#">IDR/CNY</a>   | <a href="#">KRW/MYR</a> | <a href="#">SGD/CNY</a> | <a href="#">USD/NGN</a> |
| <b>VND</b>                            | <b>VND01-VND-ABS</b>   |                         |                         |                         |
| <b>VND</b><br><a href="#">CNY/HKD</a> | <b>VND02-VND</b><br><b>FX</b> <a href="#">IDR/EUR</a>  | <a href="#">KRW/NZD</a> | <a href="#">SGD/IDR</a> | <a href="#">USD/PEN</a> |
| <b>VND</b>                            | <b>VND03-SFEMC-VND-INDICATIVE-SURVEY-RATE</b>  |                         |                         |                         |
| <a href="#">CNY/IDR</a>               | <a href="#">IDR/GBP</a>  | <a href="#">KRW/PHP</a> | <a href="#">SGD/INR</a> | <a href="#">USD/PHP</a> |
| <a href="#">CNY/INR</a>               | <a href="#">IDR/HKD</a>  | <a href="#">KRW/SGD</a> | <a href="#">SGD/KRW</a> | <a href="#">USD/RUB</a> |
| <a href="#">CNY/JPY</a>               | <a href="#">IDR/INR</a>  | <a href="#">KRW/THB</a> | <a href="#">SGD/MYR</a> | <a href="#">USD/TWD</a> |
| <a href="#">CNY/KRW</a>               | <a href="#">IDR/JPY</a>  | <a href="#">KRW/TWD</a> | <a href="#">SGD/PHP</a> | <a href="#">USD/UAH</a> |
| <a href="#">CNY/MYR</a>               | <a href="#">IDR/KRW</a>  | <a href="#">MYR/AUD</a> | <a href="#">SGD/TWD</a> | <a href="#">USD/VND</a> |
| <a href="#">CNY/NZD</a>               | <a href="#">IDR/MYR</a>  | <a href="#">MYR/CAD</a> | <a href="#">THB/CNY</a> | <a href="#">USD/ZMW</a> |
| <a href="#">CNY/PHP</a>               | <a href="#">IDR/NZD</a>  | <a href="#">MYR/CHF</a> | <a href="#">THB/IDR</a> |                         |

**FX Non-Deliverable Vanilla Option Requirements and Defaults**

| Variable  | Requirement  | Default   |
|---|--|---|
| Commencement Date                                 | American Style ONLY  | Trade Date  |
| Latest Exercise Time                              | American Style ONLY  | Same as Expiration Time   |
| Automatic Exercise                                |  | Applicable  |
| Business Days for Premium Payment Date            | At least one of the specified locations must be able to settle relevant Currency   | Principal Financial Center for Currency of Premium                    |
| Business Days for Settlement Dates:               | The specified locations must at least be able to settle each Currency in the Currency Pair   | Principal Financial Center for each Currency of the Currency Pair     |
| Business Days for Exercise Date                   | Location of Seller   | Location of Seller  |
| Business Days for Expiration Dates:               | If Automatic Exercise does not apply, location of Seller<br>If Automatic Exercise does apply, trading day for each Currency of Currency Pair | Location of Seller and trading day for each Currency of Currency Pair |
| Business Day Convention for Premium Payment Date: | Cannot result in payment due prior to Trade Date   | Following   |
| Business Day Convention for Expiration Date:      |  | Following   |
| Business Day Convention for Settlement Date       | Cannot result in payment due prior to Exercise Date  | Following   |
| Disruption Events:                                |  | Price Source Disruption <b>ONLY</b>                                   |
| Disruption Fallbacks:                             | Required only if there are Disruption Events   | For Price Source Disruption per the 1998 Definitions                  |

**FX Non-Deliverable Vanilla Available Option Styles**

| Style    | Description   | Default |
|----------|---|---------|
| American | Can be exercised on any Exercise Business Day from and including the Commencement Date to and including the Expiration Date | Yes     |
| European | Can be exercised only on the Expiration Date  | No      |

**Available Business Day Conventions**

| ISDA Name                   |
|-----------------------------|
| Following                   |
| Modified/Modified Following |
| Nearest                     |
| Preceding                   |