



55 East 52<sup>nd</sup> Street  
New York, New York 10055

Submission No. 21-91 (24 of 34)  
September 8, 2021

Mr. Christopher J. Kirkpatrick  
Secretary of the Commission  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21<sup>st</sup> Street, NW  
Washington, DC 20581

**Re: New MSCI Japan NTR USD Index Future TIC+ Second Month Futures Contract  
(24 of 34) -- Submission Pursuant to Section 5c(c)(1) of the Act and Regulation 40.2**

Dear Mr. Kirkpatrick:

Pursuant to Commission Regulation 40.2, ICE Futures U.S., Inc. (“Exchange” or “IFUS”) submits, by written certification the terms and conditions for 34 new TIC+ contracts based on 17 existing MSCI Index futures contracts. The contract specifications are set forth in Exhibit A and the Rules setting forth the relevant terms are contained in Exhibits B, C and D to this submission.

The Exchange currently lists a number of futures contracts based on various MSCI equity indexes which have quarterly expirations. The TIC+ futures contracts (“TIC+ contracts”) are daily contracts which are based on the same underlying MSCI Index as quarterly futures contracts currently listed by the Exchange. The daily contracts will provide market participants with a new way to trade the corresponding MSCI quarterly futures contract at a differential to the closing price of the underlying MSCI cash index, on a particular day. While the Exchange currently allows Block Trade at Index Close (“BTIC”) trading in each of the quarterly futures contracts, only same day pricing is supported. The new TIC+ contracts will allow participants to price positions in the related quarterly futures contract against the value of the relevant underlying MSCI cash index over the nearest five trading days, on a rolling 5-day basis.

The Exchange plans to list two TIC+ contract series for each of 17 indexes -- one that references the front listed month and another that references the second listed month of the related MSCI quarterly futures contract.<sup>1</sup> The nearest five business days (“Eligible Contract Dates”) will be listed for each TIC+ contract series and each futures contract will be quoted at a premium or discount (in index points) to the anticipated closing price of the relevant MSCI cash index on the Last Trading Day of the TIC+ contract.

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<sup>1</sup>On the last trading day of the quarterly futures contracts, the Front TIC+ month will reference the second and the Second TIC+ month will reference the third listed month of the related quarterly futures contract.

To replicate a position based on the cash closing price of the related MSCI index, each TIC+ contract has both a cash settlement and a physical delivery component. Positions in a TIC+ contract that are held to expiration will: (1) be subject to cash settlement using a Final Settlement Value (“FSV”) for the TIC+ contract; and (2) generate the physical delivery of an equivalent long or short position in the related MSCI quarterly futures contract. The FSV will be calculated as the difference between the daily settlement price of the related MSCI quarterly futures contract on the Last Trading Day of the expiring TIC+ contract minus the closing index value of the related MSCI Index on that day. The futures positions in the related MSCI quarterly futures contracts will be priced at the settlement price of the related MSCI quarterly futures contract month on the Last Trading Day of the expiring TIC+ futures contract. An example of a trade that is taken to delivery is described in Exhibit A.

Trading hours, minimum block trade sizes, daily settlement times and Exchange and Clearing fees for the new TIC+ contracts will be the same as the underlying quarterly MSCI futures contracts. The No Cancellation Range, Reasonability Limit and Interval Price Limit levels are in line with similar products and set forth in Exhibit C.

Positions in the TIC+ contracts will be subject to the same Position Limit and Position Accountability levels in place for the related quarterly futures on the same index, on an aggregated basis. Participants exceeding the accountability level of any new MSCI Contract: (i) automatically consent not to increase further and automatically consent to decrease those positions when so ordered by the Exchange acting in its own discretion and (ii) must provide, in a timely manner, information on the nature of that participant’s related cash position, Exchange Futures and Options position, trading strategy and/or hedging strategy and such other relevant information as the Exchange may require. The position limits are contained in Resolution 1 to Chapter 6 of the Rules and attached as part of Exhibit D.

The Exchange currently lists quarterly futures on each of the 17 MSCI Indexes upon which the new TIC+ contracts are based. None of the 17 MSCI indexes are narrow-based securities indexes as defined in Section 1(a)35 of the Commodity Exchange Act, as amended.

### **Certifications**

The Exchange is not aware of any substantive opposing views to the new contracts, which will be listed for trading on September 27, 2021. The Exchange certifies that the rule amendments comply with the requirements of the Act and the rules and regulations promulgated thereunder. The Exchange has reviewed the designated contract market core principles (“Core Principles”) as set forth in the Act and has determined that the listing of the contract complies with the following relevant Core Principles:

#### **COMPLIANCE WITH RULES**

The terms and conditions of the new MSCI equity index contract will be enforced by the Exchange and are set forth in Chapter 23 and Rule 6.25, and the no-cancellation range (“NCR”) table posted on the Reasonability Limits and NCR page of the Exchange’s website as well as the Interval Price Limits table on the site. In addition, trading of the

contract is subject to all relevant Exchange rules which are enforced by the Market Regulation Department.

**CONTRACTS NOT READILY SUBJECT TO MANIPULATION**

The new contracts are not readily subject to manipulation as they are based on liquid underlying broad-based equity indexes which are widely traded. In addition, trading of the new contracts will be monitored by the Exchange's Market Regulation Department.

**POSITION LIMITS OR ACCOUNTABILITY**

Positions in the new MSCI equity index contracts will be subject to the single month accountability level and all-months combined position limits set by the Exchange. Such accountability and position limits are based upon the deliverable supply in the cash market. A detailed deliverable supply analysis previously has been submitted in connection with the listing of the quarterly futures on the same underlying MSCI indexes.

**FINANCIAL INTEGRITY OF CONTRACTS**

The new contracts will be cleared by ICE Clear U.S., a registered derivatives clearing organization subject to Commission regulation, and carried by registered futures commission merchants qualified to handle customer business.

The Exchange further certifies that, concurrent with this filing, a copy of this submission was posted on the Exchange's website and may be accessed at (<https://www.theice.com/futures-us/regulation#rule-filings>).

If you have any questions or need further information, please contact me at 212-748-4021 or at [jason.fusco@theice.com](mailto:jason.fusco@theice.com).

Sincerely,



Jason V. Fusco  
Assistant General Counsel  
Market Regulation

Enc.  
cc: Division of Market Oversight

## **EXHIBIT A**

**\*\*The prices used in the example below were selected to explain the function of the contract and do not reflect the current value of the referenced index\*\***

### **EXAMPLE:**

#### **August 24, 2021 (Trade Date)**

1. Trader A wants to buy 50 September 21 (“U21”) MSCI Emerging Market Index (“EM”) quarterly futures contracts priced against the cash index close on August 27, 2021.
2. Trader A places a bid of +0.400 index points to buy 50 Front Month MSCI Emerging Markets TIC+ futures contracts for the Eligible Contract Date of August 27, 2021.
3. Trader B hits trader A’s bid, resulting in a trade of 50 Front Month EM TIC+ futures at 0.400.
4. Trader A is long 50 Front Month EM TIC+ futures for the Eligible Contract Date of August 27, 2021 at \$0.400.  
Trader B is short 50 Front Month EM TIC+ futures for the Eligible Contract Date of August 27, 2021 at \$0.400.

#### **August 27, 2021 (Eligible Contract Date)**

1. Both Traders A and B carry their respective 50 lot Front Month TIC+ contracts positions to expiration.
2. The daily settlement price for U21 EM quarterly futures contracts is 1000.000
3. The daily closing price of the cash EM Index is 999.000

#### **Final Settlement**

1. The FSV for the Front Month EM TIC+ contracts for the Eligible Contract Date of August 27, 2021 is 1.000 (Daily Settlement Price of the U21 EM quarterly futures minus the EM Index cash closing price).
2. Traders A is assigned a 50 lot long position in the U21 EM quarterly futures contracts at a price of 1000.000.
3. Traders B is assigned a 50 lot short position in the U21 EM quarterly futures contracts at a price of 1000.000.
4. In the cash settlement of the Front Month EM TIC+ contracts, A receives and B pays the 1.000 final settlement value minus the traded premium of 0.400.

In simple terms, trading participants will receive a futures position in the related MSCI quarterly futures contract, supplemented by the cash settlement payment (which represents the difference between the futures price and the cash closing index price). They will get a payoff equivalent to the closing price of the related MSCI index plus/minus the premium or discount traded.

## EXHIBIT A

### MSCI Emerging Market Index Future TIC+

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|----------------------------------|--|
| <b>Description</b>               | The MSCI Emerging Market Index TIC+ future (“EM TIC”) is a daily contract on the MSCI Emerging Market Index Future contract (MME) which trades at a premium or discount to the MSCI Emerging Market Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |  |
| <b>Contract Symbol</b>           | TPM  |
| <b>Parent Contract</b>           | MSCI Emerging Market Index Future contract (MME)   |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract  |
| <b>Settlement Method</b>         | 1 EM TIC contract expires into the Parent Contract Month of the MSCI Emerging Market Index Future contract (MME)   |
| <b>Contract Size</b>             | USD 50 per index point   |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.200 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Emerging Market Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Contract Month futures contract on the Final Settlement Day.   |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |
| <b>Second Month contract</b>     |  |
| <b>Contract Symbol</b>           | SPM  |
| <b>Parent Contract</b>           | MSCI Emerging Market Index Future contract (MME)   |

|                                  |  |
|----------------------------------|--|
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract |
| <b>Settlement Method</b>         | 1 EM TIC contract expires into the Parent Contract Month of the MSCI Emerging Market Index Future contract (MME)   |
| <b>Contract Size</b>             | USD 50 per index point   |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.200 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Emerging Market Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.   |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI EAFE Index Future TIC+**

|                                  |  |
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| <b>Description</b>               | The MSCI EAFE Index TIC+ future ("EAFE TIC") is a daily contract on the MSCI EAFE Index Future contract (MFS) which trades at a premium or discount to the MSCI EAFE Index closing index price on the Eligible Contract Date.                    |
| <b>Front Month contract</b>      |  |
| <b>Contract Symbol</b>           | TPF  |
| <b>Parent Contract</b>           | MSCI EAFE Index Future contract (MFS)  |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract                                      |
| <b>Settlement Method</b>         | 1 EAFE TIC contract expires into the Parent Contract Month of the month MSCI EAFE Index Future contract (MFS)  |
| <b>Contract Size</b>             | USD 50 per index point   |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.200 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EAFE TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI EAFE Index closing index level on Last Trading Day on the Eligible Contract Date   |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.   |
| <b>Block Enabled</b>             | Yes, same min. threshold as parent contract  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |
| <b>Second Month contract</b>     |  |
| <b>Contract Symbol</b>           | SPF  |
| <b>Parent Contract</b>           | MSCI EAFE Index Future contract (MFS)  |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract |
| <b>Settlement Method</b>         | 1 EAFE TIC contract expires into the Parent Contract Month of the MSCI EAFE Index Future contract (MFS)  |
| <b>Contract Size</b>             | USD 50 per index point   |

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| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.200 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EAFE TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI EAFE Index closing index level on Last Trading Day on the Eligible Contract Date                                       |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Block Enabled</b>             | Yes, same min. threshold as parent contract  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |



**MSCI World NTR USD Index Future TIC+**

|                                  |   |
|----------------------------------|---|
| <b>Description</b>               | The MSCI World NTR USD Index TIC+ future ("World TIC") is a daily contract on the MSCI World NTR Index Future contract (MWS) which trades at a premium or discount to the MSCI World NTR USD Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |   |
| <b>Contract Symbol</b>           | TPW   |
| <b>Parent Contract</b>           | MSCI World NTR Index Future contract (MWS)  |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract   |
| <b>Settlement Method</b>         | 1 World TIC contract expires into the Parent Contract Month of the MSCI World NTR Index Future contract (MWS)   |
| <b>Contract Size</b>             | USD 10 per index point  |
| <b>Currency</b>                  | USD   |
| <b>Price Quotation</b>           | Index points, to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 1.00 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.   |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the World TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI World NTR Index closing index level on Last Trading Day on the Eligible Contract Date   |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.  |
| <b>Contract Series</b>           | 5 Eligible Contract Dates   |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day  |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.  |
| <b>MIC Code</b>                  | IFUS  |
| <b>Clearing Venue</b>            | ICUS  |
| <b>Second Month contract</b>     |   |
| <b>Contract Symbol</b>           | SPW   |
| <b>Parent Contract</b>           | MSCI World NTR USD Index Future contract (MWS)  |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract      |
| <b>Settlement Method</b>         | 1 World TIC contract expires into the Parent Contract Month of the MSCI World NTR Index Future contract (MWS)   |

|                                  |  |
|----------------------------------|--|
| <b>Contract Size</b>             | USD 10 per index point   |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 1.000 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the World TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI World NTR Index closing index level on Last Trading Day on the Eligible Contract Date                                  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI Emerging Market (EM) Asia NTR USD Index Future TIC+**

|                                  |   |
|----------------------------------|---|
| <b>Description</b>               | The MSCI EM Asia NTR USD Index TIC+ future ("EM Asia TIC") is a daily contract on the MSCI EM Asia NTR Index Future contract (ASN) which trades at a premium or discount to the MSCI EM Asia NTR Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |   |
| <b>Contract Symbol</b>           | TPS   |
| <b>Parent Contract</b>           | MSCI EM Asia NTR Index Future contract (ASN)  |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract   |
| <b>Settlement Method</b>         | 1 EM Asia TIC contract expires into the Parent Contract Month of the MSCI EM Asia NTR Index Future contract (ASN)   |
| <b>Contract Size</b>             | USD 100 per index point   |
| <b>Currency</b>                  | USD   |
| <b>Price Quotation</b>           | Index points, to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.200 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative   |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.   |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM Asia TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI EM Asia NTR Index closing index level on Last Trading Day on the Eligible Contract Date   |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.  |
| <b>Contract Series</b>           | 5 Eligible Contract Dates   |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day  |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.  |
| <b>MIC Code</b>                  | IFUS  |
| <b>Clearing Venue</b>            | ICUS  |
| <b>Second Month contract</b>     |   |
| <b>Contract Symbol</b>           | SPS   |
| <b>Parent Contract</b>           | MSCI EM Asia NTR Index Future contract (ASN)  |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract          |
| <b>Settlement Method</b>         | 1 EM Asia TIC contract expires into the Parent Contract Month of the MSCI EM Asia NTR Index Future contract (ASN)   |

|                                  |  |
|----------------------------------|--|
| <b>Contract Size</b>             | USD 100 per index point  |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.200 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM Asia TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI EM Asia NTR Index closing index level on Last Trading Day on the Eligible Contract Date                                |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI Emerging Market NTR USD Index Future TIC+**

|                                  |  |
|----------------------------------|--|
| <b>Description</b>               | The MSCI Emerging Market NTR USD Index TIC+ future ("EM NTR TIC") is a daily contract on the MSCI Emerging Market NTR Index Future contract (MMN) which trades at a premium or discount to the MSCI Emerging Market NTR Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |  |
| <b>Contract Symbol</b>           | TPN  |
| <b>Parent Contract</b>           | MSCI Emerging Market NTR Index Future contract (MMN)   |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract  |
| <b>Settlement Method</b>         | 1 EM NTR TIC contract expires into the Parent Contract Month of the MSCI Emerging Market NTR Index Future contract (MMN)   |
| <b>Contract Size</b>             | USD 100 per index point  |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.100 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM NTR TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Emerging Market NTR Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.   |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |
| <b>Second Month contract</b>     |  |
| <b>Contract Symbol</b>           | SPN  |
| <b>Parent Contract</b>           | MSCI Emerging Market NTR Index Future contract (MMN)   |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract                                 |
| <b>Settlement Method</b>         | 1 EM NTR TIC contract expires into the Parent Contract Month of the MSCI Emerging Market NTR Index Future contract (MMN)   |
| <b>Contract Size</b>             | USD 100 per index point  |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.100 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM NTR TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Emerging Market NTR Index closing index level on Last Trading Day on the Eligible Contract Date                        |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI Emerging Market Latin America NTR Index Future TIC+**

|                                  |  |
|----------------------------------|--|
| <b>Description</b>               | The MSCI Emerging Market Latin America NTR Index TIC+ future (“EM Latam NTR TIC”) is a daily contract on the MSCI Emerging Market Latin America NTR Index Future contract (MML) which trades at a premium or discount to the MSCI Emerging Market Latin America NTR Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |  |
| <b>Contract Symbol</b>           | TPT  |
| <b>Parent Contract</b>           | MSCI Emerging Market Latin America NTR Index Future contract (MML)   |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract  |
| <b>Settlement Method</b>         | 1 Emerging Market Latin America NTR TIC contract expires into the Parent Contract Month of the MSCI Emerging Market Latin America NTR Index Future contract (MML)  |
| <b>Contract Size</b>             | USD 100 per index point  |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.100 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM Latam NTR TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Emerging Market Latin America NTR Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.   |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |
| <b>Second Month contract</b>     |  |
| <b>Contract Symbol</b>           | SPT  |
| <b>Parent Contract</b>           | MSCI Emerging Market Latin America NTR Index Future contract (MML)   |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract   |

|                                  |  |
|----------------------------------|--|
| <b>Settlement Method</b>         | 1 Emerging Market Latin America NTR TIC contract expires into the Parent Contract Month of the MSCI Emerging Market Latin America NTR Index Future contract (MML)                |
| <b>Contract Size</b>             | USD 100 per index point  |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.100 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM Latam NTR TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Emerging Market Latin America NTR Index closing index level on Last Trading Day on the Eligible Contract Date          |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates.   |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |



**MSCI Emerging Market EMEA NTR Index Future TIC+**

|                                  |  |
|----------------------------------|--|
| <b>Description</b>               | The MSCI Emerging Market EMEA NTR Index TIC+ future (“EM EMEA NTR TIC”) is a daily contract on the MSCI Emerging Market EMEA NTR Index Future contract (MMM) which trades at a premium or discount to the MSCI Emerging Market EMEA NTR Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |  |
| <b>Contract Symbol</b>           | TPR  |
| <b>Parent Contract</b>           | MSCI Emerging Market EMEA NTR Index Future contract (MMM)  |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract  |
| <b>Settlement Method</b>         | 1 EM EMEA NTR TIC contract expires into the Parent Contract Month of the MSCI Emerging Market EMEA NTR Index Future contract (MMM)   |
| <b>Contract Size</b>             | USD 100 per index point  |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.100 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM EMEA NTR TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Emerging Market EMEA NTR Index closing index level on Last Trading Day on the Eligible Contract Date   |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.   |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |
| <b>Second Month contract</b>     |  |
| <b>Contract Symbol</b>           | SPR  |
| <b>Parent Contract</b>           | MSCI Emerging Market EMEA NTR Index Future contract (MMM)  |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract   |
| <b>Settlement Method</b>         | 1 EM EMEA NTR TIC contract expires into the Parent Contract Month of the MSCI Emerging Market EMEA NTR Index Future contract (MMM)   |
| <b>Contract Size</b>             | USD 100 per index point  |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.100 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM EMEA NTR TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Emerging Market EMEA NTR Index closing index level on Last Trading Day on the Eligible Contract Date                   |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI USA GTR Index Future TIC+**

|                                  |  |
|----------------------------------|--|
| <b>Description</b>               | The MSCI USA GTR Index TIC+ future ("USA TIC") is a daily contract on the MSCI USA GTR Index Future contract (USS) which trades at a premium or discount to the MSCI USA GTR Index closing index price on the Eligible Contract Date.            |
| <b>Front Month contract</b>      |  |
| <b>Contract Symbol</b>           | TPU  |
| <b>Parent Contract</b>           | MSCI USA GTR Index Future contract (USS)   |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract                                      |
| <b>Settlement Method</b>         | 1 USA TIC contract expires into the Parent Contract Month of the MSCI USA GTR Index Future contract (USS)  |
| <b>Contract Size</b>             | USD 5 per index point  |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 2.000 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the USA TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI USA GTR Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates.   |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.   |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |
| <b>Second Month contract</b>     |  |
| <b>Contract Symbol</b>           | SPU  |
| <b>Parent Contract</b>           | MSCI USA GTR Index Future contract (USS)   |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract |
| <b>Settlement Method</b>         | 1 USA TIC contract expires into the Parent Contract Month of the MSCI USA GTR Index Future contract (USS)  |
| <b>Contract Size</b>             | USD 5 per index point  |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB -2.000 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative   |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the USA TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI USA GTR Index closing index level on Last Trading Day on the Eligible Contract Date                                    |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI Pacific Index Future TIC+**

|                                  |  |
|----------------------------------|--|
| <b>Description</b>               | The MSCI Pacific Index TIC+ future ("Pacific TIC") is a daily contract on the MSCI Pacific Index Future contract (MPA) which trades at a premium or discount to the MSCI Pacific Index closing index price on the Eligible Contract Date.        |
| <b>Front Month contract</b>      |  |
| <b>Contract Symbol</b>           | TPP  |
| <b>Parent Contract</b>           | Front month MSCI Pacific Index Future contract (MPA)   |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract                                      |
| <b>Settlement Method</b>         | 1 Pacific TIC contract expires into the Parent Contract Month of the MSCI Pacific Index Future contract (MPA)  |
| <b>Contract Size</b>             | USD 10 per index point   |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 1.000 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the Pacific TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Pacific Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.   |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |
| <b>Second Month contract</b>     |  |
| <b>Contract Symbol</b>           | SPP  |
| <b>Parent Contract</b>           | MSCI Pacific Index Future contract (MPA)   |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract |
| <b>Settlement Method</b>         | 1 Pacific TIC contract expires into the Parent Contract Month of the second month MSCI Pacific Index Future contract (MPA)   |
| <b>Contract Size</b>             | USD 10 per index point   |
| <b>Currency</b>                  | USD  |

|                                  |  |
|----------------------------------|--|
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB -1.000 Index points<br>Blocks - 0.001 points<br>Price may be positive or negative   |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the Pacific TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Pacific Index closing index level on Last Trading Day on the Eligible Contract Date                                    |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI Europe NTR USD Index Future TIC+**

|                                  |   |
|----------------------------------|---|
| <b>Description</b>               | The MSCI Europe NTR USD Index TIC+ future ("Europe TIC") is daily contract on the MSCI Europe NTR Index Future contract (EU9) which trades at a premium or discount to the MSCI Europe NTR USD Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |   |
| <b>Contract Symbol</b>           | TPE   |
| <b>Parent Contract</b>           | MSCI Europe NTR Index Future contract (EU9)   |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract   |
| <b>Settlement Method</b>         | 1 Europe TIC contract expires into the Parent Contract Month of the MSCI Europe NTR Index Future contract (EU9)   |
| <b>Contract Size</b>             | USD 10 per index point  |
| <b>Currency</b>                  | USD   |
| <b>Price Quotation</b>           | Index points, to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 1.000 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative   |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.   |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the Europe TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Europe NTR Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.  |
| <b>Contract Series</b>           | 5 Eligible Contract Dates   |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day  |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.  |
| <b>MIC Code</b>                  | IFUS  |
| <b>Clearing Venue</b>            | ICUS  |
| <b>Second Month contract</b>     |   |
| <b>Contract Symbol</b>           | SPE   |
| <b>Parent Contract</b>           | MSCI Europe NTR Index Future contract (EU9)   |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract        |
| <b>Settlement Method</b>         | 1 Europe TIC contract expires into the Parent Contract Month of the MSCI Europe NTR Index Future contract (EU9)   |
| <b>Contract Size</b>             | USD 10 per index point  |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 1.000 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the Europe TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Europe NTR Index closing index level on Last Trading Day on the Eligible Contract Date                                 |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |



**MSCI ACWI NTR USD Index Future TIC+**

|                                  |   |
|----------------------------------|---|
| <b>Description</b>               | The MSCI ACWI NTR USD Index TIC+ future ("ACWI TIC") is a daily contract on the MSCI ACWI NTR USD Index Future contract (MMW) which trades at a premium or discount to the MSCI ACWI NTR Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |   |
| <b>Contract Symbol</b>           | TPA   |
| <b>Parent Contract</b>           | MSCI ACWI NTR USD Index Future contract (MMW)   |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract                                       |
| <b>Settlement Method</b>         | 1 ACWI TIC contract expires into the Parent Contract Month of the MSCI ACWI NTR Index Future contract (MMW)   |
| <b>Contract Size</b>             | USD 200 per index point   |
| <b>Currency</b>                  | USD   |
| <b>Price Quotation</b>           | Index points, to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.050 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative   |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.   |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the ACWI TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI ACWI NTR Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.  |
| <b>Contract Series</b>           | 5 Eligible Contract Dates.  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day  |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.  |
| <b>MIC Code</b>                  | IFUS  |
| <b>Clearing Venue</b>            | ICUS  |
| <b>Second Month contract</b>     |   |
| <b>Contract Symbol</b>           | SPA   |
| <b>Parent Contract</b>           | MSCI ACWI NTR Index Future contract (MMW)   |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract  |
| <b>Settlement Method</b>         | 1 ACWI TIC contract expires into the Parent Contract Month of the MSCI ACWI NTR Index Future contract (MMW)   |
| <b>Contract Size</b>             | USD 200 per index point   |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.050 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the ACWI TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI ACWI NTR Index closing index level on Last Trading Day on the Eligible Contract Date                                   |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates.   |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI Japan NTR USD Index Future TIC+**

|                                  |   |
|----------------------------------|---|
| <b>Description</b>               | The MSCI Japan NTR USD Index TIC+ future ("Japan TIC") is a daily contract on the MSCI Japan NTR Index Future contract (JPP) which trades at a premium or discount to the MSCI Japan NTR Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |   |
| <b>Contract Symbol</b>           | TPJ   |
| <b>Parent Contract</b>           | MSCI Japan NTR Index Future contract (JPP)  |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract                                       |
| <b>Settlement Method</b>         | 1 Japan TIC contract expires into the Parent Contract Month of the MSCI Japan NTR Index Future contract (JPP)   |
| <b>Contract Size</b>             | USD 10 per index point  |
| <b>Currency</b>                  | USD   |
| <b>Price Quotation</b>           | Index points, to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 1.000 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative   |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.   |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the Japan TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Japan NTR Index closing index level on Last Trading Day on the Eligible Contract Date   |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.  |
| <b>Contract Series</b>           | 5 Eligible Contract Dates   |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day  |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.  |
| <b>MIC Code</b>                  | IFUS  |
| <b>Clearing Venue</b>            | ICUS  |
| <b>Second Month contract</b>     |   |
| <b>Contract Symbol</b>           | SPJ   |
| <b>Parent Contract</b>           | MSCI Japan NTR Index Future contract (JPP)  |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract  |
| <b>Settlement Method</b>         | 1 Japan TIC contract expires into the Parent Contract Month of the MSCI Japan NTR Index Future contract (JPP)   |
| <b>Contract Size</b>             | USD 10 per index point  |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 1.000 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the Japan TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Japan NTR Index closing index level on Last Trading Day on the Eligible Contract Date                                  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI Emerging Market ESG Leaders Index Future TIC+**

|                                  |  |
|----------------------------------|--|
| <b>Description</b>               | The MSCI Emerging Market ESG Leaders Index TIC+ future ("EM ESG TIC") is a daily contract on the MSCI Emerging Market ESG Leaders Index Future contract (LFM) which trades at a premium or discount to the MSCI Emerging Market ESG Leaders Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |  |
| <b>Contract Symbol</b>           | TPG  |
| <b>Parent Contract</b>           | MSCI Emerging Market ESG Leaders Index Future contract (LFM)   |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract  |
| <b>Settlement Method</b>         | 1 EM ESG TIC contract expires into the Parent Contract Month of the MSCI Emerging Market ESG Leaders Index Future contract (LFM)   |
| <b>Contract Size</b>             | USD 25 per index point   |
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.200 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM ESG TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Emerging Market ESG Leaders Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.   |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |
| <b>Second Month contract</b>     |  |
| <b>Contract Symbol</b>           | SPG  |
| <b>Parent Contract</b>           | MSCI Emerging Market ESG Leaders Index Future contract (LFM)   |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract   |
| <b>Settlement Method</b>         | 1 EM ESG TIC contract expires into the Parent Contract Month of the MSCI Emerging Market ESG Leaders Index Future contract (LFM)   |
| <b>Contract Size</b>             | USD 25 per index point   |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.200 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EM ESG TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Emerging Market ESG Leaders Index closing index level on Last Trading Day on the Eligible Contract Date                |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI EAFE ESG Leaders Index Future TIC+**

|                                  |   |
|----------------------------------|---|
| <b>Description</b>               | The MSCI EAFE ESG Leaders Index TIC+ future ("EAFE ESG TIC") is a daily contract on the MSCI EAFE ESG Leaders NTR Index Future contract (LFG) which trades at a premium or discount to the MSCI EAFE ESG Leaders NTR Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |   |
| <b>Contract Symbol</b>           | TPH   |
| <b>Parent Contract</b>           | MSCI EAFE ESG Leaders NTR Index Future contract (LFG)   |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract   |
| <b>Settlement Method</b>         | 1 EAFE ESG TIC contract expires into the Parent Contract Month of the MSCI EAFE ESG Leaders NTR Index Future contract (LFG)   |
| <b>Contract Size</b>             | USD 200 per index point   |
| <b>Currency</b>                  | USD   |
| <b>Price Quotation</b>           | Index points, to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.050 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative   |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.   |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EAFE ESG TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI EAFE ESG Leaders NTR Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.  |
| <b>Contract Series</b>           | 5 Eligible Contract Dates   |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day  |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.  |
| <b>MIC Code</b>                  | IFUS  |
| <b>Clearing Venue</b>            | ICUS  |
| <b>Second Month contract</b>     |   |
| <b>Contract Symbol</b>           | SPH   |
| <b>Parent Contract</b>           | MSCI EAFE ESG Leaders NTR Index Future contract (LFG)   |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract                              |
| <b>Settlement Method</b>         | 1 EAFE ESG TIC contract expires into the Parent Contract Month of the MSCI EAFE ESG Leaders NTR Index Future contract (LFG)   |
| <b>Contract Size</b>             | USD 200 per index point   |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.050 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the EAFE ESG TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI EAFE ESG Leaders NTR Index closing index level on Last Trading Day on the Eligible Contract Date                       |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |



**MSCI Europe ESG Leaders NTR USD Index Future TIC+**

|                                  |   |
|----------------------------------|---|
| <b>Description</b>               | The MSCI Europe ESG Leaders Index TIC+ future ("Europe ESG TIC") is a daily contract on the MSCI Europe ESG Leaders Index Future contract (LFU) which trades at a premium or discount to the MSCI Europe ESG Leaders Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |   |
| <b>Contract Symbol</b>           | TPX   |
| <b>Parent Contract</b>           | MSCI Europe ESG Leaders Index Future contract (LFU)   |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract   |
| <b>Settlement Method</b>         | 1 Europe ESG TIC contract expires into the Parent Contract Month of the MSCI Europe ESG Leaders Index Future contract (LFU)   |
| <b>Contract Size</b>             | USD 200 per index point   |
| <b>Currency</b>                  | USD   |
| <b>Price Quotation</b>           | Index points, to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.050 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative   |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.   |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the Europe ESG TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Europe ESG Leaders Index closing index level on Last Trading Day on the Eligible Contract Date  |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.  |
| <b>Contract Series</b>           | 5 Eligible Contract Dates.  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day  |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.  |
| <b>MIC Code</b>                  | IFUS  |
| <b>Clearing Venue</b>            | ICUS  |
| <b>Second Month contract</b>     |   |
| <b>Contract Symbol</b>           | SPX   |
| <b>Parent Contract</b>           | MSCI Europe ESG Leaders Index Future contract (LFU)   |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract                              |
| <b>Settlement Method</b>         | 1 Europe ESG TIC contract expires into the Parent Contract Month of the MSCI Europe ESG Leaders Index Future contract (LFU)   |
| <b>Contract Size</b>             | USD 200 per index point   |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.050 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the Europe ESG TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI Europe ESG Leaders Index closing index level on Last Trading Day on the Eligible Contract Date                         |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI USA ESG Leaders Index Future TIC+**

|                                  |   |
|----------------------------------|---|
| <b>Description</b>               | The MSCI USA ESG Leaders Index TIC+ future (“USA ESG TIC”) is a daily contract on the MSCI USA ESG Leaders GTR Index Future contract (LFA) which trades at a premium or discount to the MSCI USA ESG Leaders GTR Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |   |
| <b>Contract Symbol</b>           | TPY   |
| <b>Parent Contract</b>           | MSCI USA ESG Leaders GTR Index Future contract (LFA)  |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract   |
| <b>Settlement Method</b>         | 1 USA ESG TIC contract expires into the Parent Contract Month of the MSCI USA ESG Leaders GTR Index Future contract (LFA)   |
| <b>Contract Size</b>             | USD 100 per index point   |
| <b>Currency</b>                  | USD   |
| <b>Price Quotation</b>           | Index points, to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.100 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative   |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.   |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the USA ESG TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI USA ESG Leaders GTR Index closing index level on Last Trading Day on the Eligible Contract Date   |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.  |
| <b>Contract Series</b>           | 5 Eligible Contract Dates   |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day  |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.  |
| <b>MIC Code</b>                  | IFUS  |
| <b>Clearing Venue</b>            | ICUS  |
| <b>Second Month contract</b>     |   |
| <b>Contract Symbol</b>           | SPY   |
| <b>Parent Contract</b>           | MSCI USA ESG Leaders GTR Index Future contract (LFA)  |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract                          |
| <b>Settlement Method</b>         | 1 USA ESG TIC contract expires into the Parent Contract Month of the MSCI USA ESG Leaders GTR Index Future contract (LFA)   |
| <b>Contract Size</b>             | USD 100 per index point   |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.100 Index points, same as parent trading tick size<br>Blocks - 0.001 Index points, same as parent BIC tick size<br>Price may be positive or negative                    |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the USA ESG TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI USA ESG Leaders GTR Index closing index level on Last Trading Day on the Eligible Contract Date                        |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**MSCI World ESG Leaders Index Future TIC+**

|                                  |   |
|----------------------------------|---|
| <b>Description</b>               | The MSCI World ESG Leaders Index TIC+ future ("World ESG TIC") is a daily contract on the MSCI World ESG Leaders NTR Index Future contract (LFW) which trades at a premium or discount to the MSCI World ESG Leaders NTR Index closing index price on the Eligible Contract Date. |
| <b>Front Month contract</b>      |   |
| <b>Contract Symbol</b>           | TPZ   |
| <b>Parent Contract</b>           | MSCI World ESG Leaders NTR Index Future contract (LFW)  |
| <b>Parent Contract Month</b>     | The first listed contract month of the Parent Contract, except that on the last trading day of that contract month the Parent Contract Month shall be the next listed contract month of the Parent Contract   |
| <b>Settlement Method</b>         | 1 World ESG TIC contract expires into the Parent Contract month of the MSCI World ESG Leaders NTR Index Future contract (LFW)   |
| <b>Contract Size</b>             | USD 200 per index point   |
| <b>Currency</b>                  | USD   |
| <b>Price Quotation</b>           | Index points, to three decimal places   |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.050 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative   |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.   |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the World ESG TIC contract references the closing index level.  |
| <b>Final Settlement Price</b>    | Difference between the Parent Contract settlement price and the MSCI World ESG Leaders NTR Index closing index level on Last Trading Day, rounded to the nearest minimum price movement for BIC trades in parent contract   |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.  |
| <b>Contract Series</b>           | 5 Eligible Contract Dates   |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day.  |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day  |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.  |
| <b>MIC Code</b>                  | IFUS  |
| <b>Clearing Venue</b>            | ICUS  |
| <b>Second Month contract</b>     |   |
| <b>Contract Symbol</b>           | SPZ   |
| <b>Parent Contract</b>           | MSCI World ESG Leaders NTR Index Future contract (LFW)  |
| <b>Parent Contract Month</b>     | The second listed contract month of the Parent Contract, except that on the last trading day of the first listed contract month of the Parent Contract the Parent Contract Month shall be the third listed contract month of the Parent Contract                                  |
| <b>Settlement Method</b>         | 1 World ESG TIC contract expires into the Parent Contract Month of the MSCI World ESG Leaders NTR Index Future contract (LFW)   |
| <b>Contract Size</b>             | USD 200 per index point   |

|                                  |  |
|----------------------------------|--|
| <b>Currency</b>                  | USD  |
| <b>Price Quotation</b>           | Index points, to three decimal places  |
| <b>Minimum Price Fluctuation</b> | CLOB - 0.050 Index points<br>Blocks - 0.001 Index points<br>Price may be positive or negative  |
| <b>Last Trading Day</b>          | Trading shall cease at 18:00 hours (EST) on the Eligible Contract Date.  |
| <b>Eligible Contract Date</b>    | The Eligible Contract Date is the date on which the World ESG TIC contract references the closing index level.   |
| <b>Final Settlement Price</b>    | The Parent Contract Month settlement price minus the MSCI World ESG Leaders NTR Index closing index level on Last Trading Day on the Eligible Contract Date                      |
| <b>Futures Deliverable Price</b> | The settlement price of the Parent Contract Month on the Eligible Contract Date.   |
| <b>Contract Series</b>           | 5 Eligible Contract Dates  |
| <b>Deliverable Instruments</b>   | All parties with open positions at expiry will establish equivalent long or short futures positions in the Parent Futures Contract futures contract on the Final Settlement Day. |
| <b>Final Settlement Day</b>      | Final Settlement Day will be the business day after the Last Trading Day   |
| <b>Final Payment Dates</b>       | Two Clearing House Business Days following the Last Day in the determination period.   |
| <b>MIC Code</b>                  | IFUS   |
| <b>Clearing Venue</b>            | ICUS   |

**EXHIBIT B**

**ICE Futures U.S.<sup>®</sup>, Inc.**

**MSCI INDEX DAILY TIC+ DAILY FUTURES**

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**ICE Futures U.S.<sup>®</sup>, Inc.**  
**CHAPTER 27**

**MSCI INDEX TIC+ DAILY FUTURES**

**27.1 Scope of Chapter**

This chapter is limited in application to trading of MSCI Index TIC+ Daily Futures Contracts. The procedures for trading, clearing, settlement, and any other matters not specifically covered herein shall be governed by the general Rules of the Exchange.

Each MSCI Index referenced in this chapter is subject to change by MSCI, Inc. as set forth in the MSCI Global Investable Market Indices Methodology: *Index Construction Objectives, Guiding Principles and Methodology for the MSCI Global Investable Market Indices* as that document is amended, updated and replaced from time-to-time. Pursuant to the terms of the license granted by MSCI to the Exchange, under certain circumstances, the Exchanges may become responsible for maintaining, changing or amending the index upon which the Futures specified in this Chapter is valued.

The terms and conditions of the Futures Contracts specified in this Chapter are deemed to include any relevant governmental, regulatory or court decree or order as recognized by the Exchange in a Notice to Members.

**27.2 Eligible Contract Dates**

**Contract Dates**

In the absence of any other provisions in the respective Sub-Chapter for a particular MSCI Index TIC+ Futures Contract and unless determined otherwise by the Exchange, each Business Day on which ICE Futures U.S., Inc. monthly futures contracts are listed for trading shall be an Eligible Contract Date for MSCI Index TIC+ Daily Futures Contracts. The number of Eligible Contract Dates open for trading at a given time shall be determined by the Exchange.

**27.3 Related MSCI Monthly Futures Contract**

For each MSCI TIC+ Daily Futures Contract, the Related Monthly Futures Contract is the ICE Futures U.S. listed futures contract as specified in the sub-chapter corresponding to the MSCI TIC+ Daily Futures Contract.

**27.4 Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract:** the Related MSCI Monthly Futures Contract Month is the first listed contract month of the Related MSCI Monthly Futures Contract, except on the last trading day of that contract month of the Related MSCI Monthly Futures Contract in which case it will be the next listed contract month of the Related MSCI Monthly Futures Contract.
- (2) **Second Month TIC+ Futures Contract:** the Related MSCI Monthly Futures Contract Month is the next listed contract month of the Related MSCI Monthly Futures Contract after the Related MSCI Monthly Futures Contract Month of the Front Month Contract.



### **27.5 Underlying MSCI Index**

For each MSCI TIC+ Daily Futures Contract, the Underlying MSCI Index shall be the MSCI Index that is the underlying index for the Related MSCI Monthly Futures Contract.

### **27.3 Trading Hours**

The Trading Hours for all MSCI Index TIC+ Futures Contract shall be as determined by the Exchange.

### **27.4 Last Trading Day**

In the absence of any other provisions in the respective Sub-Chapter for a particular MSCI Index TIC+ Daily Futures Contract, the last day of trading for each MSCI Index TIC+ Index Futures Contract Eligible Contract Date shall be the Eligible Contract Date, and trading in such contract shall end at 6:00 pm NY local time on the Last Trading Day.

### **27.5 Settlement Procedures**

(a) At expiration of an MSCI Index TIC+ Daily Futures Contract Date, all outstanding Long positions in the Contract Date shall be converted into an equivalent Long position in the Related MSCI Monthly Futures Contract Month and all outstanding Short positions in the Contract Date shall be converted into an equivalent Short position in the Related MSCI Monthly Futures Contract Month.

(b) The price of the positions in the Related MSCI Monthly Futures Contract Month established as per paragraph (a) of this Rule shall be equal to the settlement price of the Related MSCI Monthly Futures Contract on the last trading day of the expiring MSCI TIC+ Contract.

#### **(c) Settlement**

MSCI Index TIC+ Daily Futures Contracts open at the termination of trading shall be cash settled as set forth in paragraph (e) of this Rule using a Final Settlement Value calculated as set forth in paragraph (d) of this Rule.

#### **(d) Final Settlement Value**

The Final Settlement Value for each expiring Contract Date shall be equal to the settlement price of the Related MSCI Monthly Futures Contract minus the end of day value of the Underlying MSCI Index on the last trading day of the expiring MSCI TIC+ Daily Futures Contract Date.

#### **(e) Final Settlement Payment**

Payment in final settlement of an MSCI Index TIC+ Daily Futures Contract will be made in accordance with the Clearing Organization Rules on the second Business Day following the termination of trading by Clearing Members with open positions at the time of termination of trading of the MSCI Index TIC+ Futures Contract. The amount of the final settlement payment to be made or received will be calculated based on the final settlement value as a normal variation payment.

## **27.6 Trading Halts on Underlying Securities Exchanges**

(a) This Rule shall apply to Exchange Index Daily Futures Contracts based on any the following MSCI USA Indexes: MSCI USA Index, MSCI USA Value Index, MSCI USA Growth Index, MSCI USA Small Cap Index, MSCI USA GTR Index, MSCI USA ESG Leaders GTR Index, MSCI USA Climate Change NTR Index and MSCI USA Minimum Volatility GTR Index.

(b) On any Business Day when a general trading halt occurs on the New York Stock Exchange, Inc. (“NYSE”) pursuant to NYSE Rule 7.12, or similar rule of another relevant national securities exchange which is the primary securities market for the index underlying an Exchange MSCI Index Contract, trading in the relevant Exchange MSCI Index Daily Futures Contract shall be halted. Trading of the Exchange contracts shall resume 10 minutes after the trading halt in the equities market commences, in the case where trading in the primary securities market is scheduled to resume on the same Business Day as the halt occurs. If trading in the applicable primary securities market is not scheduled to resume on the same Business Day as the trading halt in that market occurred, then trading in the relevant Exchange MSCI Index Daily Futures Contract shall resume at the regular opening time for such contract on the next Business Day.

## **27.7 Notice Regarding MSCI**

The MSCI Index Daily TIC+ Futures are not sponsored, endorsed, sold or promoted by MSCI Inc. (“MSCI”), any affiliate of MSCI or any other party involved in, or related to, making or compiling any Indexes. The MSCI Index Daily Futures have not been passed on by MSCI, any of its affiliates or any other party involved in, or related to, making or compiling any Indexes as to their legality or suitability with respect to any person or entity. MSCI, its affiliates and any other party involved in, or related to, making or compiling the MSCI Indexes do not guarantee the originality, accuracy and/or completeness of the MSCI Indexes or any data included therein. Neither MSCI, any of its affiliates nor any other party involved in, or related to, making or compiling the MSCI Indexes makes any express or implied warranties, and expressly disclaims all warranties of merchantability and fitness for a particular purpose or use with respect to the related Futures Contract, the MSCI Index or any data included therein. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any other party involved in, or related to, making or compiling the MSCI Indexes have any liability for any direct, special, punitive, indirect, or consequential damages, claims, losses or expenses relating to any futures or options contracts or caused by any errors or delays in calculating or disseminating the MSCI Indexes. Neither MSCI, any of its affiliates nor any other party involved in, or related to, making or compiling the MSCI Indexes has any obligation to take the needs of the issuers of the Contracts, the owners of the MSCI Index Futures or the Exchange into consideration in determining, composing or calculating any MSCI Indexes. Neither MSCI its affiliates nor any other party involved in, or related to, making or compiling the MSCI Indexes is responsible for or have participated in the determination of the timing of, prices at, or quantities of the MSCI Index Daily Futures to be issued or in the determination or calculation of the equation by which the MSCI Index Daily Futures are redeemable for cash.

**27.A.001 MSCI EAFE INDEX TIC+ DAILY FUTURES**

**Related MSCI Monthly Futures Contract**

MSCI EAFE Index Futures Contract (contract symbol MFS)

**Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPF.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPF.**

**Trading Unit**

The unit of trading shall be \$50.00 times the MSCI EAFE Index.

**Price Increments**

The minimum price fluctuation for the MSCI EAFE Index Daily Futures shall be 0.200 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.05 per contract.

**27.A.002 MSCI EMERGING MARKETS INDEX TIC+ DAILY FUTURES**

**Related MSCI Monthly Futures Contract**

MSCI Emerging Markets Index Futures Contract (contract symbol MME)

**Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPM.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPM.**

**Trading Unit**

The unit of trading shall be \$50 times the MSCI Emerging Markets Index.

**Price Increments**

The minimum price fluctuation for the MSCI Emerging Markets Index TIC+ Daily Futures shall be 0.200 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.05 per contract.

**27.A.003 MSCI EMERGING MARKETS NTR USD INDEX TIC+ DAILY FUTURES**

**Related MSCI Monthly Futures Contract**

MSCI Emerging Markets NTR Index Futures Contract (contract symbol MMN)

**Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPN.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPN.**

**Trading Unit**

The unit of trading shall be \$10 times the MCI Emerging Markets NTR Index.

**Price Increments**

The minimum price fluctuation for the MSCI Emerging Markets NTR USD Index TIC+ Daily Future shall be 0.100 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.10 per contract.

**27.A.004 MSCI ACWI NTR INDEX TIC+ DAILY FUTURES**

**Related MSCI Monthly Futures Contract**

MSCI ACWI NTR Index Futures Contract (contract symbol MMW)

**Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPA.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPA.**

**Trading Unit**

The unit of trading shall be \$200.00 times the MSCI ACWI NTR Index.

**Price Increments**

The minimum price fluctuation for the MSCI ACWI NTR Index TIC+ Daily Futures Contracts shall be 0.050 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.20 per contract.

**27.A.005 MSCI EMERGING MARKETS (EM) ASIA NTR INDEX TIC+ DAILY FUTURES**

**Related MSCI Monthly Futures Contract**

MSCI EM ASIA NTR Index Futures Contract (contract symbol ASN)

**Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPS.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPS.**

**Trading Unit**

The unit of trading shall be \$100.00 times the MSCI EM Asia NTR Index.

**Price Increments**

The minimum price fluctuation for the MSCI Emerging Markets (EM )Asia NTR Index TIC+ Daily Futures Contract shall be 0.200 Index Points, which is \$20.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.10 per contract.

**27.A.006 MSCI EMERGING MARKETS EMEA NTR INDEX TIC+ DAILY FUTURES**

**Related MSCI Monthly Futures Contract**

MSCI Emerging Markets EMEA NTR Index Futures Contract (contract symbol MMM)

**Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPR.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPR.**

**Trading Unit**

The unit of trading shall be \$100.00 times the MSCI Emerging Markets EMEA NTR Index.

**Price Increments**

The minimum price fluctuation for the MSCI Emerging Markets EMEA NTR Index TIC+ Daily Futures shall be 0.100 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.10 per contract.

**27.A.007 MSCI EMERGING MARKETS LATIN AMERICA NTR INDEX TIC+ DAILY FUTURES**

**Related MSCI Monthly Futures Contract**

MSCI Emerging Markets Latin America NTR Index Futures Contract (contract symbol MML)

**Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPT.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPT.**

**Trading Unit**

The unit of trading shall be \$100.00 times the MSCI Emerging Markets Latin America NTR Index.

**Price Increments**

The minimum price fluctuation for the MSCI Emerging Markets (EM) Latin America NTR Index TIC+ Daily Futures shall be 0.100 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.10 per contract.

**27.A.008 MSCI PACIFIC NTR INDEX TIC+ DAILY FUTURES**

**Related MSCI Monthly Futures Contract**

MSCI Pacific NTR Index Futures Contract (contract symbol MPA)

**Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPP.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPP.**

**Trading Unit**

The unit of trading shall be \$10.00 times the MSCI Pacific NTR Index.

**Price Increments**

The minimum price fluctuation for the MSCI Pacific NTR Index TIC+ Daily Futures shall be 1.00 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.01 per contract.

## **27.A.009 MSCI WORLD NTR INDEX TIC+ DAILY FUTURES**

### **Related MSCI Monthly Futures Contract**

MSCI World NTR Index Futures Contract (contract symbol MWS)

### **Related MSCI Monthly Futures Contract Month**

- (1) Front Month TIC+ Futures Contract Symbol: TPW.**
- (2) Second Month TIC+ Futures Contract Symbol: SPW.**

### **Trading Unit**

The unit of trading shall be \$10.00 times the MSCI World NTR Index.

### **Price Increments**

The minimum price fluctuation for the MSCI World NTR Index TIC+ Daily Futures shall be 1.000 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.01 per contract.

## **27.A.010 MSCI EUROPE NTR INDEX TIC+ DAILY FUTURES**

### **Related MSCI Monthly Futures Contract**

MSCI Europe NTR Index Futures Contract (contract symbol EU9)

### **Related MSCI Monthly Futures Contract Month**

- (1) Front Month TIC+ Futures Contract Symbol: TPE.**
- (2) Second Month TIC+ Futures Contract Symbol: SPE.**

### **Trading Unit**

The unit of trading shall be \$10.00 times the MSCI Europe NTR Index.

### **Price Increments**

The minimum price fluctuation for the MSCI Europe NTR Index TIC+ Daily Futures shall be 1.000 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.01 per contract.

**27.A.011 MSCI USA GTR INDEX TIC+ DAILY FUTURES**

**Related MSCI Monthly Futures Contract**

MSCI USA GTR Index Futures Contract (contract symbol USS)

**Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPU.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPU.**

**Trading Unit**

The unit of trading shall be \$5.00 times the MSCI USA GTR Index.

**Price Increments**

The minimum price fluctuation for the MSCI USA GTR Index TIC+ Daily Futures shall be 2.000 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.005 per contract.

**27.A.012 MSCI WORLD ESG LEADERS NTR INDEX TIC+ DAILY FUTURES**

**Related MSCI Monthly Futures Contract**

MSCI World ESG Leaders NTR Index Futures Contract (contract symbol LFW)

**Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPZ.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPZ.**

**Trading Unit**

The unit of trading shall be \$200.00 times the MSCI World ESG Leaders NTR Index.

**Price Increments**



The minimum price fluctuation for the MSCI World ESG Leaders NTR Index TIC+ Daily Futures shall be 0.050 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.20 per contract.

## **27.A.013 MSCI EAFE ESG LEADERS NTR INDEX TIC+ DAILY FUTURES**

### **Related MSCI Monthly Futures Contract**

MSCI EAFE ESG Leaders NTR Index Futures Contract (contract symbol LFG)

### **Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPH.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPH.**

### **Trading Unit**

The unit of trading shall be \$200.00 times the MSCI EAFE ESG Leaders NTR Index.

### **Price Increments**

The minimum price fluctuation for the MSCI EAFE ESG Leaders NTR Index TIC+ Daily Futures shall be 0.050 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.20 per contract.

## **27.A.014 MSCI EUROPE ESG LEADERS NTR INDEX TIC+ DAILY FUTURES**

### **Related MSCI Monthly Futures Contract**

MSCI Europe ESG Leaders NTR Index Futures Contract (contract symbol LFU)

### **Related MSCI Monthly Futures Contract Month**

- (1) **Front Month TIC+ Futures Contract Symbol: TPX.**
- (2) **Second Month TIC+ Futures Contract Symbol: SPX.**

### **Trading Unit**

The unit of trading shall be \$200.00 times the MSCI Europe ESG Leaders NTR Index.

### **Price Increments**

The minimum price fluctuation for the MSCI Europe ESG Leaders NTR Index TIC+ Daily Futures shall be 0.050 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.20 per contract.

### **27.A.015 MSCI EMERGING MARKETS ESG LEADERS NTR INDEX TIC+ DAILY FUTURES**

#### **Related MSCI Monthly Futures Contract**

MSCI Emerging Markets ESG Leaders NTR Index Futures Contract (contract symbol LFM)

#### **Related MSCI Monthly Futures Contract Month**

- (1) Front Month TIC+ Futures Contract Symbol: TPG.**
- (2) Second Month TIC+ Futures Contract Symbol: SPG.**

#### **Trading Unit**

The unit of trading shall be \$25.00 times the MSCI Emerging Markets ESG Leaders NTR Index.

### **Price Increments**

The minimum price fluctuation for the MSCI Emerging Markets ESG Leaders NTR Index TIC+ Daily Futures shall be 0.200 Index Points, which is \$5.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.025 per contract.

### **27.A.016 MSCI USA ESG LEADERS GTR INDEX TIC DAILY FUTURES**

#### **Related MSCI Monthly Futures Contract**

MSCI USA ESG Leaders GTR Index Futures Contract (contract symbol LFA)

#### **Related MSCI Monthly Futures Contract Month**

- (1) Front Month TIC+ Futures Contract Symbol: TPY.**
- (2) Second Month TIC+ Futures Contract Symbol: SPY.**

### **Trading Unit**

The unit of trading shall be \$100.00 times the MSCI USA ESG Leaders GTR Index.

### **Price Increments**

The minimum price fluctuation for the MSCI USA ESG Leaders GTR Index TIC+ Daily Futures shall be 0.100 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.50 per contract.

### **27.A.017 MSCI JAPAN NTR INDEX TIC DAILY FUTURES Related MSCI Monthly Futures Contract**

MSCI Japan NTR Index Futures Contract (contract symbol JPP)

#### **Related MSCI Monthly Futures Contract Month**

**(1) Front Month TIC+ Futures Contract Symbol: TPJ.**

**(2) Second Month TIC+ Futures Contract Symbol: SPJ.**

### **Trading Unit**

The unit of trading shall be \$10.00 times the MSCI Japan NTR Index.

### **Price Increments**

The minimum price fluctuation for the MSCI Japan NTR Index TIC+ Daily Futures shall be 1.000 Index Points, which is \$10.00 per contract. Contracts shall not be made on any other price basis except for Block Trades, for which the minimum price fluctuation shall be 0.001 Index Points, or \$0.01 per contract.

## Exhibit C



### ICE Futures U.S., Inc. Reasonability Limits and No Cancellation Ranges - As of September 2021

The ICE Futures U.S. Error Policy includes Reasonability Limit (“RL”), No Cancellation Range (“NCR”) and Calendar Spread Stop Limit Order (“CSLOR”) levels for futures and options contracts. The levels shown below are subject to change without prior notification.

#### ICE Futures U.S. – Energy Division No Cancellation Ranges (Maximum Number of Ticks from Market Value expressed as Price Difference)

| Financial Gas Products  | Day  | Spread  | Month             | Spread                        | Season                     | Spread  | Calendar              | Spread  |
|---|--|---------|-------------------|-------------------------------|----------------------------|---------|-----------------------|---------|
| Henry Hub   | 0.04   | 0.04    | 0.04              | 0.04                          | 0.04                       | 0.04    | 0.04                  | 0.04    |
| Non-Henry Fixed Price   | 0.05   | 0.05    | 0.05              | 0.05                          | 0.05                       | 0.05    | 0.05                  | 0.05    |
| UK Natural Gas  | 0.04   | 0.04    | 0.04              | 0.04                          | 0.04                       | 0.04    | 0.04                  | 0.04    |
| Index   |  |         | 0.02              | 0.02                          | 0.02                       | 0.02    | 0.02                  | 0.02    |
| Index Bidweek (Prompt Month only)                                 |  |         | 0.04              | 0.04                          |                            |         |                       |         |
| EIA Financial Weekly Index  | 10 BCF   | 10 BCF  | 10 BCF            | 10 BCF                        | 10 BCF                     | 10 BCF  | 10 BCF                | 10 BCF  |
| EIA End of Draw / Storage Index                                   | 250 BCF  | 250 BCF | 250 BCF           | 250 BCF                       | 250 BCF                    | 250 BCF | 250 BCF               | 250 BCF |
| Financial LNG   | 0.15   | 0.15    | 0.15              | 0.15                          | 0.15                       | 0.15    | 0.15                  | 0.15    |
| Basis   | 20% of Basis/Spread FMV up to 0.05   |         |                   |                               | Min/Max Range = 0.02/0.05  |         |                       |         |
| Fin Natural Gas Combos  | 20% of Combo FMV up to 0.05*   |         |                   |                               | Min/Max Range = 0.01/0.05* |         |                       |         |
| *   | Single full month Henry Hub GDD/LD1 spread will reference the Combo NCR listed above |         |                   |                               |                            |         |                       |         |
| Options   | 20% of Premium FMV up to 0.05  |         |                   |                               | Min/Max Range = 0.005/0.05 |         |                       |         |
| Financial Power Products  | BalDay/<br>NextDay/<br>BalWeek   | Spread  | Weekly &<br>Balmo | Spread                        | Month &<br>Season          | Spread  | Quarter &<br>Calendar | Spread  |
| PJM WHRT, Indiana RT, Nepoch DA                                   | 5.00   | 5.00    | 2.00              | 2.00                          | 0.60                       | 0.60    | 0.40                  | 0.40    |
| All other contracts   | 5.00   | 5.00    | 2.00              | 2.00                          | 1.00                       | 1.00    | 0.60                  | 0.60    |
| Post Daily LMP Publish  | 0.05   | 0.05    |                   |                               |                            |         |                       |         |
| Capacity Resp. Reserve  |  |         |                   |                               | 1.00                       | 1.00    | 0.60                  | 0.60    |
| In-City or Rest of State Cap.                                     |  |         |                   |                               | 1.00                       | 1.00    | 0.60                  | 0.60    |
| Non-Spinning Reserve  |  |         |                   |                               | 1.00                       | 1.00    | 1.60                  | 0.60    |
| Regulation  |  |         |                   |                               | 1.00                       | 1.00    | 0.60                  | 0.60    |
| Heat Rate   |  |         |                   |                               | 0.30                       |         | 0.30                  |         |
| DART  |  |         |                   |                               | 0.60                       |         | 0.40                  |         |
| Daily Load Forecast   | 5,000 MW   |         |                   |                               |                            |         |                       |         |
| Options   | 20% of Premium FMV up to 5.00  |         |                   |                               | Min/Max Range = 0.50/5.00  |         |                       |         |
| US Environmental Products   |  |         | Month             | Option                        |                            |         | Min/Max Range         |         |
| RGGI  |  |         | 0.10              | 20% of Premium FMV up to 0.10 |                            |         | 0.05/0.10             |         |
| CAR-CRT, CFI-US, REC-NJ, TX REC, MD REC, PA AEC, PJM TRI-QEC, CCO |  |         | 0.25              | 20% of Premium FMV up to 0.25 |                            |         | 0.05/0.25             |         |
| CCA   |  |         | 0.25              | 20% of Premium FMV up to 0.25 |                            |         | 0.01/0.25             |         |

|   |       |                                |            |
|---|-------|--------------------------------|------------|
| CCA Trade at Auction Settlement Contracts               | 0.05  | N/A                            | N/A        |
| SFI   | 0.50  | 20% of Premium FMV up to 0.50  | 0.05/0.50  |
| CT & MA REC, NEPOOL REC                                 | 1.00  | 20% of Premium FMV up to 1.00  | 0.05/1.00  |
| CSAPR SO2 & NOX   | 10.00 | 20% of Premium FMV up to 10.00 | 0.50/10.00 |
| MA, MD, NJ & PA SAEC, MA SREC Carve Out; CAIR NOX, LCFS | 5.00  | 20% of Premium FMV up to 5.00  | 0.50/5.00  |

| Oil and NGL Futures   | Code | Unit | NCR 1-6M | Spread  | NCR 7M+ | Spread  |
|---|------|------|----------|---------|---------|---------|
| Crude Diff – Argus LLS vs WTI 1st Line Future   | ARK  | bbl  | \$0.200  | \$0.200 | \$0.500 | \$0.500 |
| Argus Mars vs WTI Trade Month Future  | ARW  | bbl  | \$0.200  | \$0.200 | \$0.500 | \$0.500 |
| Crude Diff – Argus WTS vs WTI Trade Month Future  | AVT  | bbl  | \$0.200  | \$0.200 | \$0.500 | \$0.500 |
| Crude Diff – WTI 1st Line vs Brent 1st Line Future  | BTD  | bbl  | \$0.200  | \$0.200 | \$0.200 | \$0.200 |
| Fuel Oil Diff – New York 1% Fuel Oil (Platts) vs USGC HSFO (Platts) Future                            | FOD  | bbl  | \$0.150  | \$0.100 | \$0.200 | \$0.150 |
| Fuel Oil Outright – New York 1% Fuel Oil Future   | FOW  | bbl  | \$0.200  | \$0.100 | \$0.300 | \$0.200 |
| Fuel Oil Crack – USGC HSFO (Platts) vs Brent 1st Line Future  | GCS  | bbl  | \$0.200  | \$0.150 | \$0.300 | \$0.200 |
| Gasoline Diff – Group 3 Sub-octane Gasoline (Platts) vs RBOB Gasoline 1st Line Future                 | GDL  | gal  | \$0.008  | \$0.008 | \$0.008 | \$0.008 |
| Gasoline Diff – Gulf Coast CBOB 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future | GDM  | gal  | \$0.008  | \$0.008 | \$0.008 | \$0.008 |
| Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barge Future                | GDO  | MT   | \$0.750  | \$0.500 | \$1.500 | \$1.000 |
| Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barges Mini Future          | GDQ  | MT   | \$0.750  | \$0.500 | \$1.500 | \$1.000 |
| Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in Bbls)    | GOE  | bbl  | \$0.150  | \$0.100 | \$0.200 | \$0.150 |
| Diesel Diff – Gulf Coast ULSD vs Heating Oil 1st Line Future  | GOH  | gal  | \$0.008  | \$0.005 | \$0.008 | \$0.008 |
| Fuel Oil Crack – USGC HSFO (Platts) vs WTI 1st Line Future  | GUF  | bbl  | \$0.200  | \$0.150 | \$0.300 | \$0.200 |
| Heating Oil Crack – Heating Oil 1st Line vs Brent 1st Line Future (in Bbls)                           | HBT  | bbl  | \$0.250  | \$0.100 | \$0.300 | \$0.200 |
| Jet Fuel Diff – Gulf Coast Jet Fuel vs Heating Oil 1st Line Future                                    | JHO  | gal  | \$0.008  | \$0.005 | \$0.008 | \$0.008 |
| Crude Diff – Argus WTI Midland vs WTI 1st Line Future   | MLT  | bbl  | \$0.200  | \$0.200 | \$0.500 | \$0.500 |
| Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in MTs)     | NVV  | MT   | \$0.750  | \$0.500 | \$1.500 | \$1.000 |
| Crude Outright – WTI 1st Line Future  | R    | bbl  | \$0.300  | \$0.200 | \$0.300 | \$0.200 |
| Fuel Oil Outright – USGC HSFO (Platts) Future   | RBO  | bbl  | \$0.200  | \$0.100 | \$0.300 | \$0.200 |
| Gasoline Crack – RBOB Gasoline 1st Line vs Brent 1st Line Future (in Bbls)                            | RBR  | bbl  | \$0.300  | \$0.200 | \$0.400 | \$0.300 |
| Heating Oil Arb – Heating Oil 1st Line vs Low Sulphur Gasoil 1st Line Future (in Bbls)                | ULM  | bbl  | \$0.008  | \$0.005 | \$0.008 | \$0.008 |

|   |     |      |         |         |         |         |
|---|-----|------|---------|---------|---------|---------|
| Gasoline Diff – Gulf Coast Unl 87 Gasoline Prompt Pipeline<br>(Platts) vs RBOB Gasoline 1st Line Future | UM1 | bbbl | \$0.250 | \$0.200 | \$0.200 | \$0.200 |
|---|-----|------|---------|---------|---------|---------|

For any Oil or NGL future not listed above the following NCR's are applied:

| Contract             | NCR 1-6M | Spread | NCR 7M+ | Spread |
|----------------------|----------|--------|---------|--------|
| Oil (Barrels or lbs) | 0.2500   | 0.2000 | 0.2000  | 0.2000 |
| Oil (MT)             | 0.7500   | 0.5000 | 1.5000  | 1.0000 |
| Oil (Gallons)        | 0.0080   | 0.0080 | 0.0080  | 0.0080 |
| Oil (RIN)            | 0.0200   | 0.0200 | 0.0200  | 0.0200 |

  

| Contract                          | Pricing Month | Month  | Spread | Quarters | Spread | Calendar | Spread |
|-----------------------------------|---------------|--------|--------|----------|--------|----------|--------|
| NGL (North American) (Gallons) ** | 0.0025        | 0.0050 | 0.0050 | 0.0050   | 0.0050 | 0.0050   | 0.0050 |
| Olefins                           | N/A           | 0.0050 | 0.0050 | 0.0050   | 0.0050 | 0.0050   | 0.0050 |
| Aromatics                         | N/A           | 0.0100 | 0.0100 | 0.0100   | 0.0100 | 0.0100   | 0.0100 |
| LPG (International) (MT)**        | 1.00          | 5.00   | 5.00   | 5.00     | 5.00   | 5.00     | 5.00   |

\*\*For all trades executed after five US business days into the current pricing month, the pricing month NCR shall be applied.

| Oil and NGL Options      | No Cancellation Range | Minimum Value NCR - Conversions and Reversals | Maximum Value |
|--------------------------|-----------------------|---|---------------|
| Natural Gas Liquids      | 25% of premium        | 0.0050  | 0.0250        |
| LPG (International) (MT) | 25% of premium        | 0.0625  | 0.3125        |
| All Other Oil Options    | 25% of premium        | 0.1000  | 1.00          |
| WTI Options              | 25% of premium        | 0.1000  | 1.00          |
| Gasoil Options           | 25% of premium        | 0.1000  | 10.00         |
| Heating Oil Options      | 25% of premium        | 0.0010  | 0.0200        |

The preferred resolution for option trades, excluding Conversions and Reversals, executed greater than 3 \* NCR from fair market value is Trade Cancellation.

User Defined Strategies (UDS) will be evaluated on the basis of the strategy unless there are implied deals in which case each leg of the UDS will be evaluated independently.

### ICE Futures U.S. – Energy Division Reasonability Limit Levels

| Gas Products                      | RL        | Reasonability Limit Exceptions   |
|-----------------------------------|-----------|--|
| Henry Hub                         | \$0.15    | N/A  |
| UK Natural Gas                    | \$0.08    |  |
| EIA Financial Weekly Index        | 50 BCF    |  |
| EIA End of Draw/Storage Index     | 1,000 BCF |  |
| Financial LNG                     | \$0.30    |  |
| Fixed Price (not including Henry) | \$2.00    | <p><b>Reasonability Limit: \$5.00</b><br/>                     Dominion South Swing (DSS)<br/>                     Lebanon Swing (LBN)</p> <p><b>Reasonability Limit: \$10.00</b><br/>                     Algonquin Citygates Swing (ALS)<br/>                     Chicago Swing (CSS)<br/>                     NNG Demarc Swing (DES)<br/>                     Iroquois (Into) Swing (Platts) (IRS)<br/>                     Iroquois-Z2 Swing (Platts) (IZS)<br/>                     NNG Ventura Swing (NNS)</p> |

|       |        |  |
|-------|--------|--|
|       |        | <p>NWP Sumas Basis (NSS)<br/> PG&amp;E Citygate Swing (PIG)<br/> Transco Zone 6 (non NY) Swing (TPS)<br/> TETCO M3 Swing (TSS)<br/> Transco Zone 6 (NY) Swing (ZSS)</p>  |
| Basis | \$2.00 | <p><b>Reasonability Limit: \$5.00</b><br/> Dominion South Basis (DOM)<br/> <b>Reasonability Limit: \$10.00</b><br/> Algonquin Citygates Basis (ALQ)<br/> NNG Demarc Basis (DEM)<br/> Chicago Basis (DGD)<br/> Union Dawn Basis (DWN)<br/> Iroquois (Into) Basis (Platts) (IRB)<br/> Iroquois-Z2 Basis (Platts) (IZB)<br/> PG&amp;E Citygate Basis (PGE)<br/> TETCO M3 Basis (TMT)<br/> Transco Zone 6 (non NY) Basis (TPB)<br/> Transco Zone 6 (NY) Basis (TZS)</p>  |
| Index | \$0.10 | <p><b>Reasonability Limit: \$10.00</b><br/> AB NIT Index (AIS)<br/> Algonquin Citygates Index (ALI)<br/> ANR SW (Oklahoma) Index (AOI)<br/> ANR SE (Louisiana) Index (API)<br/> CG-Mainline Index (CGI)<br/> Chicago Index (CIS)<br/> CIG Rockies Index (CRC)<br/> Enable Gas Index (CTI)<br/> NNG Demarc Index (DEI)<br/> Dominion South Index (DIS)<br/> PG&amp;E Citygate Index (EIS)<br/> Florida Gas Zone 3 Index (FTI)<br/> Henry Index (HIS)<br/> Iroquois (Into) Index (Platts) (IRI)<br/> Iroquois-Z2 Index (Platts) (IZI)<br/> NGPL Midcont Index (MCI)<br/> Malin Index (MIS)<br/> TETCO M3 Index (MTI)<br/> NWP Sumas Index (NIS)<br/> Michcon Index (NMI)<br/> NNG Ventura Index (NNI)<br/> Transco Zone 6 (NY) Index (NSI)<br/> NGPL TXOK Index (NTI)<br/> NGPL STX Index (NXI)<br/> ONEOK Gas Transpiration Index (ONI)<br/> Southern Star TX OK KS Index (OUI)<br/> EP Permian Index (PEI)<br/> Panhandle Index (PIS)<br/> NWP Rockies Index (RSI)<br/> Socal Citygate Index (SCI)<br/> HSC Index (SHS)<br/> Transco Station 65 (Zone 3) Index (SIA)<br/> Socal Border Index (SIS)<br/> EP San Juan Index (SNI)<br/> Sonat Index (SOI)<br/> TETCO STX Index (SXI)<br/> TETCO ELA Index (TEI)<br/> Tennessee 500L Index (TFI)<br/> TGT Zone 1 Index (TGI)<br/> TCO Index (TIS)<br/> Transco Zone 6 (non NY) Index (TPI)<br/> Transco Station 85 (Zone 4) Index (TRI)<br/> TETCO WLA Index (TWI)<br/> Tennessee Zone 0 Index (TZI)<br/> Waha Index (WAI)</p> |



| Power Products                    | RL        | Reasonability Limit Exceptions  |
|-----------------------------------|-----------|---|
| Financial Power                   | \$20.00   | N/A   |
| Capacity Responsive Reserve       | \$10.00   | N/A   |
| In-City or Rest of State Capacity | \$10.00   | N/A   |
| Non-Spinning Reserve              | \$10.00   | N/A   |
| Regulation                        | \$10.00   | N/A   |
| All Daily Power Contracts         | \$100.00  | ERCOT North 345KV Real-Time Peak Daily Fixed Price (END) and ERCOT North 345KV Hub Real-Time Peak Daily Mini Fixed Price (ERA) - \$200.00 |
| All Daily Load Forecast           | 20,000 MW | N/A   |

| U.S. Environmental Products  | RL                          | Reasonability Limit Exceptions |
|--|-----------------------------|--------------------------------|
| RGGI   | \$0.50                      | N/A                            |
| CAR-CRT, CFI-US, REC-NJ, CCA; TX REC; PJM TRI-QEC, MD REC, PA AEC, CCO | \$1.25                      |                                |
| CCA Trade at Auction Settlement Contracts                              | ETS - \$0.25/Block - \$0.50 |                                |
| SFI  | \$2.50                      |                                |
| CT & MA REC, MD & PA SAEC, NEPOOL Rec                                  | \$5.00                      |                                |
| CSAPR SO2 & NOX  | \$30.00                     |                                |
| MA & NJ SREC, MA SREC Carve Out, CAIR NOX (Annual and Ozone), LCFS     | \$15.00                     |                                |

| Contract  | Code | Unit | RL     |
|---|------|------|--------|
| Crude Diff – Argus ANS vs Brent 1st Line Future   | ABL  | bbl  | \$3.00 |
| Crude Diff – Argus WTI Houston vs WTI Trade Month Future  | ACM  | bbl  | \$3.00 |
| Crude Outright – Argus WTI Cushing Trade Month Future   | ACT  | bbl  | \$3.00 |
| Crude Diff – Argus WTS vs WTI 1st Line Average Price Option   | AFH  | bbl  | \$3.00 |
| Crude Diff – Argus WTI Houston vs WTI 1st Line Average Price Option                                   | AIL  | bbl  | \$3.00 |
| Crude Outright – Argus LLS Future   | ARH  | bbl  | \$3.00 |
| Crude Diff – Argus LLS vs Brent 1st Line Future   | ARI  | bbl  | \$3.00 |
| Crude Diff – Argus LLS vs Dated Brent (Platts) Future   | ARJ  | bbl  | \$3.00 |
| Crude Diff – Argus LLS vs WTI 1st Line Future   | ARK  | bbl  | \$3.00 |
| Crude Diff – Argus LLS vs WTI Trade Month Average Price Option  | ARL  | bbl  | \$3.00 |
| Crude Outright – Argus Mars Future  | ARM  | bbl  | \$3.00 |
| Crude Diff – Argus Mars vs Brent 1st Line Future  | ARN  | bbl  | \$3.00 |
| Crude Diff – Argus Mars vs WTI 1st Line Average Price Option  | ARO  | bbl  | \$3.00 |
| Crude Diff - Argus WCS (Houston) Crude Oil Trade Month Future   | ARV  | bbl  | \$3.00 |
| Argus Mars vs WTI Trade Month Future  | ARW  | bbl  | \$3.00 |
| Crude Diff – Argus WTS vs WTI Trade Month Future  | AVT  | bbl  | \$3.00 |
| Crude Diff – Argus Bakken (Clearbrook) Crude Oil Future   | BAK  | bbl  | \$3.00 |
| Crude Diff – WTI 1st Line vs Brent 1st Line Future  | BTD  | bbl  | \$3.00 |
| Crude Diff – Argus WCS (Cushing) Crude Oil Trade Month Future   | CSH  | bbl  | \$3.00 |
| Fuel Oil Diff – New York 1% Fuel Oil (Platts) vs USGC HSFO (Platts) Future                            | FOD  | bbl  | \$2.00 |
| Fuel Oil Outright – New York 1% Fuel Oil Future   | FOW  | bbl  | \$2.00 |
| Fuel Oil Crack – USGC HSFO (Platts) vs Brent 1st Line Future  | GCS  | bbl  | \$0.75 |
| Gasoline Diff – Group 3 Sub-octane Gasoline (Platts) vs RBOB Gasoline 1st Line Future                 | GDL  | gal  | \$0.05 |
| Gasoline Diff – Gulf Coast CBOB 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future | GDM  | gal  | \$0.05 |
| Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barge Future                | GDO  | MT   | \$5.00 |
| Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barges Mini Future          | GDQ  | MT   | \$5.00 |
| Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in Bbls)    | GOE  | bbl  | \$0.50 |
| Diesel Diff – Gulf Coast ULSD vs Heating Oil 1st Line Future  | GOH  | gal  | \$0.02 |
| Fuel Oil Crack – USGC HSFO (Platts) vs WTI 1st Line Future  | GUF  | bbl  | \$0.75 |
| Heating Oil Crack – Heating Oil 1st Line vs Brent 1st Line Future (in Bbls)                           | HBT  | bbl  | \$0.75 |

|  |     |     |        |
|--|-----|-----|--------|
| Jet Fuel Diff – Gulf Coast Jet Fuel vs Heating Oil 1st Line Future                                   | JHO | gal | \$0.02 |
| Crude Diff – Argus WTI Midland vs WTI 1st Line Future  | MLT | bbl | \$3.50 |
| Crude Diff – Argus WTI Houston vs Argus WTI Midland Trade Month Future                               | MSN | bbl | \$3.00 |
| Crude Diff – Argus WTI Midland vs Argus WTS Trade Month Future                                       | MST | bbl | \$3.00 |
| Crude Diff – Argus WTI Midland vs WTI Trade Month Future   | MSV | bbl | \$3.50 |
| Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in MTs)    | NVV | MT  | \$1.00 |
| Crude Outright – WTI 1st Line Future   | R   | bbl | \$0.75 |
| Fuel Oil Outright – USGC HSFO (Platts) Future  | RBO | bbl | \$2.00 |
| Gasoline Crack – RBOB Gasoline 1st Line vs Brent 1st Line Future (in Bbls)                           | RBR | bbl | \$0.75 |
| Crude Diff - ICE WCS 1b Index Future   | TDX | bbl | \$3.00 |
| Crude Diff - ICE LSB 1a Index Future   | TML | bbl | \$3.00 |
| ICE WCS Cushing 1a Index Trade Month Future  | TMQ | bbl | \$3.00 |
| Crude Diff - ICE SW 1a Index Future  | TMR | bbl | \$3.00 |
| Crude Diff - ICE UHC 1a Index Future   | TMU | bbl | \$3.00 |
| Crude Diff - ICE WCS 1a Index Future   | TMW | bbl | \$3.00 |
| Crude Diff - ICE UHC 1b Index Future   | UHB | bbl | \$3.00 |
| Heating Oil Arb – Heating Oil 1st Line vs Low Sulphur Gasoil 1st Line Future (in Bbls)               | ULM | bbl | \$0.02 |
| Gasoline Diff – Gulf Coast Unl 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future | UMI | bbl | \$0.05 |
| Natural Gasoline, OPIS Mt. Belvieu Non-TET vs. WTI 1 <sup>st</sup> Line Future                       | NGW | Bbl | \$2.10 |

**For any Oil or NGL Futures contracts not listed in the above table the following Reasonability Levels are applied:**

| Oil Products                       | RL                          |
|------------------------------------|-----------------------------|
| All Oil (Barrels or lbs) Contracts | \$1.25                      |
| All Oil (MT) Contracts             | \$3.75                      |
| All Oil (Gallons) Contracts        | \$0.050                     |
| All Oil (RIN) Contracts            | \$0.0400 / Block - \$0.1500 |
| NGL (North American) (Gallons)     | ETS \$0.05 / Block - \$0.12 |
| Olefins                            | \$0.025                     |
| Aromatics                          | \$0.050                     |
| LPG (International) (MT)           | \$25.00                     |

## ICE Futures U.S. Agricultural, Metal, Index and Currency Contracts NCR, RL and CSLOR Levels

| AG AND METAL FUTURES                          | RL                | NCR              | CSLOR           |
|---|-------------------|------------------|-----------------|
| Cocoa (CC)                                    | \$50.00 per ton   | \$25.00 per ton  | \$10.00 per ton |
| Coffee "C" <sup>®</sup> (KC)                  | \$.0375 per lb.   | \$.0080 per lb.  | \$.0040 per lb. |
| Cotton No. 2 <sup>®</sup> (CT)                | \$.0200 per lb.   | \$.0075 per lb.  | \$.0030 per lb. |
| FCOJ (OJ)                                     | \$.0225 per lb.   | \$.0100 per lb.  | \$.0075 per lb. |
| Sugar No. 11 <sup>®</sup> (SB)                | \$.0050 per lb.   | \$.0020 per lb.  | \$.0010 per lb. |
| Sugar No. 16 (SF)                             | \$.0300 per lb.   | \$.0050 per lb.  | \$.0050 per lb. |
| Canola (RS)                                   | \$18.00 per tonne | \$6.00 per tonne | \$600 per tonne |
| Daily (AUD), 100 oz. (ZG) and mini Gold YG)   | \$8.00 per oz.    | \$4.00 per oz.   | \$2.00 per oz.  |
| Daily (HIO), 5000 oz. (ZI) & mini Silver (YI) | \$0.300 per oz.   | \$0.200 per oz.  | \$0.100 per oz. |

| INDEX FUTURES (in Index Points)   | RL      | NCR    | CSLOR  |
|---|---------|--------|--------|
| U.S. Dollar Index (DX)  | 0.500   | 0.200  | 0.100  |
| MICRO NYSE FANG+TM Index (FNG)  | 15.00   | 6.00   | 4.00   |
| MSCI World Low Carbon Leaders NTR Index (WLC), MSCI World Low Carbon Target NTR Index (WLT) MSCI EAFE Index (MFS), MSCI Emerging Markets Index (MME) and MSCI World Index (MWL) | 24.000  | 3.000  | 2.000  |
| MSCI EAFE NTR Index (MFU)   | 72.000  | 9.000  | 6.000  |
| MSCI Emerging Markets NTR Index (MMN)   | 8.000   | 1.000  | 0.500  |
| MSCI Emerging Markets Latin America Index (MLE), MSCI Emerging Market Ex China NTR Index (MMC) and MSCI Kokusai GTR Index (KKS)   | 30.000  | 5.000  | 2.500  |
| MSCI EM Asia NTR Index (ASN)  | 10.000  | 1.500  | 1.000  |
| MSCI ACWI NTR Index (MMW) and ACWI Ex-US NTR Index (AWN)  | 5.000   | 0.750  | 0.500  |
| MSCI Canada Index (MCL) and USA Index (MUN)   | 18.000  | 9.000  | 6.000  |
| MSCI Pan-Euro Index (MPP)   | 11.000  | 6.000  | 4.000  |
| MSCI Euro Index (MEU)   | 10.000  | 4.500  | 3.000  |
| MSCI USA Value Index (MCU)  | 20.000  | 10.500 | 7.000  |
| MSCI Europe Index (MCE), Europe Growth Index (MGE), and Europe Value Index (MPU)  | 1.250   | 0.500  | 0.250  |
| MSCI USA Growth Index (MRG)   | 30.000  | 15.000 | 10.000 |
| MSCI USA Small Cap Index (MUS)  | 22.500  | 3.000  | 2.000  |
| MSCI EM EMEA NTR Index (MMM) and EM NTR (EUR) Index (MMR)   | 5.000   | 1.000  | 0.750  |
| MSCI EM LatAm NTR Index (MML) and Mexico NTR Index (MXM)  | 12.000  | 1.000  | 0.750  |
| MSCI China Free NTR Index (\$50) (MCX)  | 9.000   | 1.300  | 1.000  |
| MSCI India NTR Index (MIN)  | 8.000   | 1.250  | 1.000  |
| MSCI Pacific NTR Index (MPA), Pacific ex-Japan Index (PAC), and Europe NTR Index (EU9)  | 120.000 | 15.000 | 10.000 |
| MSCI USA GTR Index (USS)  | 200.000 | 30.000 | 20.000 |
| MSCI North America NTR Index (NAA) and Canada GTR Index (CAD)   | 150.000 | 18.000 | 12.000 |
| MSCI World NTR Index (MWS)  | 100.000 | 12.000 | 8.000  |
| MSCI AC Asia-ex-Japan Index (ASI)   | 12.000  | 1.500  | 1.000  |

|   |         |        |        |
|---|---------|--------|--------|
| MSCI Japan ESG Select Leaders Index (JSL)   | 30.000  | 4.000  | 2.500  |
| MSCI Japan NTR Index (JPP)  | 75.000  | 10.000 | 7.000  |
| MSCI USA Minimum Volatility Index (MUV)   | 85.000  | 12.000 | 8.000  |
| MSCI World ESG Leaders NTR Index (LFW), EAFE ESG Leaders NTR (LFG) and Europe ESG Leaders NTR Index (LFU) | 3.200   | 0.400  | 0.300  |
| MSCI EM ESG Leaders NTR Index (LFM) and MSCI USA Climate Change NTR Index (MUC)                           | 32.000  | 4.000  | 3.000  |
| MSCI USA ESG Leader GTR Index (LFA)   | 6.500   | 0.800  | 0.600  |
| MSCI Australia NTR Index (AS7)  | 55.000  | 8.000  | 6.000  |
| MSCI Malaysia NTR Index (MYX)   | 3.000   | 0.400  | 0.300  |
| MSCI Thailand NTR Index (THG) and MSCI China Technology DR and P-Chip Index (CHT)                         | 18.000  | 2.500  | 1.800  |
| MSCI Hong Kong NTR Index (HKX)  | 550.000 | 70.000 | 45.000 |
| MSCI Europe Climate Change NTR Index (EU1) and MSCI World Climate Change NTR Index (WOW)                  | 18.000  | 2.000  | 1.500  |
| MSCI China NTR Index (CHH)  | 40.000  | 8.000  | 4.000  |
| MSCI USA Small Cap GTR Index (USC)  | 20.000  | 4.000  | 2.000  |
| MSCI Germany NTR Index (GEA)  | 100.000 | 20.000 | 10.000 |
| MSCI Italy NTR Index (ITH)  | 5.000   | 1.000  | 0.500  |
| ERIS CDX HY (HY5)   | 7500    | 2500   | 2500   |
| ERIS CDX IG (IG5)   | 3000    | 1500   | 1500   |

| <b>TIC+ Futures Contract</b>                              | <b>RL</b> | <b>NCR</b> | <b>CSLOR</b> |
|---|-----------|------------|--------------|
| MSCI Emerging Markets Index (TPM & SPM)                   | 12.000    | 3.000      | n/a          |
| MSCI EAFE Index (TPF & SPF)                               | 12.000    | 3.000      | n/a          |
| MSCI World NTR USD Index (TPW & SPW)                      | 50.000    | 12.000     | n/a          |
| MSCI EM Asia NTR USD Index (TPS & SPS)                    | 4.500     | 1.500      | n/a          |
| MSCI Emerging Markets NTR USD Index (TPM & SPN)           | 4.000     | 1.000      | n/a          |
| MSCI Emerging Markets Latin America NTR Index (TPT & SPT) | 15.000    | 5.000      | n/a          |
| MSCI Emerging Markets EMEA NTR Index (TPR & SPR)          | 2.500     | 1.000      | n/a          |
| MSCI USA GTR Index (TPU & SPU)                            | 100.000   | 30.000     | n/a          |
| MSCI Pacific NTR Index (TPP & SPP)                        | 60.000    | 15.000     | n/a          |
| MSCI Europe NTR USD Index (TPE & SPE)                     | 60.000    | 15.000     | n/a          |
| MSCI ACWI NTR USD Index (TPA & SPA)                       | 2.500     | 0.750      | n/a          |
| MSCI Japan NTR USD Index (TPJ & SPJ)                      | 35.000    | 10.000     | n/a          |
| MSCI Emerging Markets ESG Leaders Index (TPG & SPG)       | 16.000    | 4.000      | n/a          |
| MSCI EAFE ESG Leaders Index (TPH & SPH)                   | 1.600     | 0.400      | n/a          |
| MSCI Europe ESG Leaders Index (TPX & SPX)                 | 1.600     | 0.400      | n/a          |
| MSCI USA ESG Leaders Index (TPY & SPY)                    | 3.000     | 0.800      | n/a          |
| MSCI World ESG Leaders Index (TPZ & SPZ)                  | 1.600     | 0.400      | n/a          |

| <b>CURRENCY FUTURES</b> | <b>RL</b>            | <b>NCR</b>         | <b>CSLOR</b> |
|-------------------------|----------------------|--------------------|--------------|
| Sterling-US dollar (MP) | 100 ticks/100 points | 50 ticks/50 points | 25 points    |
| Zloty-US dollar (PLN)   | “                    | “                  | “            |
| Zloty-Euro (PLE)        | “                    | “                  | “            |

|                                   |                        |                      |            |
|-----------------------------------|------------------------|----------------------|------------|
| Turkish lira-US dollar (TRM)      | “                      | “                    | “          |
| Turkish lira-Euro (ETR)           | “                      | “                    | “          |
| Yen-US dollar (KSN)               | 1200 ticks/1200 points | 600 ticks/600 points | 300 points |
| Sterling-Norway (PK)              | 200 ticks/5000 points  | 60 ticks/1500 points | 750 points |
| Sterling-SA Rand (PZ)             | “                      | “                    | “          |
| Sterling-Sweden (PS)              | “                      | “                    | “          |
| Euro-Sweden (RK) Euro-Norway (OL) | “                      | “                    | “          |
| Euro-SA Rand (YZ)                 | “                      | “                    | “          |
| US\$-SA Rand (ZR)                 | “                      | “                    | “          |
| Norway-Yen (KY)                   | “                      | “                    | “          |
| Sweden-Yen(KJ)                    | “                      | “                    | “          |
| Mexican peso-US dollar (KMP)      | “                      | “                    | “          |
| All Other Currency Pairs          | 200 ticks/1000 points  | 60 ticks/300 pts.    | 150 points |
| Bakkt™ Bitcoin (USD) Monthly      | 750.00                 | 300.00               | 200.00     |

| No-Cancellation Ranges for Ag and USDX Option Contracts<br>(based on Theoretical Values shown)   |                |                |                |                |                |                |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
| Theoretical Value*   | Cotton         | FCOJ           | Cocoa          | Coffee         | Sugar          | USDX           |
| .01 - .20  | .20 pts        | .20 pts        | 10 pts         | .15 pts        | .10 pts        | .100 pts       |
| .21 - 2.00   | .40 pts        | .75 pts        | 20 pts         | .50 pts        | .15 pts        | .150 pts       |
| 2.01 - 5.00  | .50 pts        | 1.00 pts       | 25 pts         | .75 pts        | .20 pts        | .200 pts       |
| 5.01 - 10.00   | .60 pts        | 1.50 pts       | 25 pts         | 1.50 pts       | .25 pts        | .250 pts       |
| 10.01 - above  | .80 pts        | 2.00 pts       | 25 pts         | 2.00 pts       | .25 pts        | .250 pts       |
| <b>RL</b>  | <b>3 x NCR</b> | <b>3 x NCR</b> | <b>3 x NCR</b> | <b>3 x NCR</b> | <b>3 x NCR</b> | <b>3 x NCR</b> |
| <i>*Note that for Cocoa options (which do not trade in decimal points) the respective Theoretical Value Ranges are “1 to 20 points, 21 to 200 points, 201 to 500 points, 501 to 1000 points, and 1001 points and above.</i>                          |                |                |                |                |                |                |
| <i>NCR and Reasonability Limits are for both outright options and User Defined Spread trades, including hedged trades; for purposes of NCR and RL levels, UDS and hedged UDS are treated as a package and not by the individual legs of the UDS.</i> |                |                |                |                |                |                |
| <i>In the case of price adjustment, Market Supervision will adjust to fair value minus/plus the NCR.</i>   |                |                |                |                |                |                |

NOTE: Market Supervision staff has the authority to expand the No Cancellation Range and Reasonability Limit for a product to two (2) times the levels shown above in volatile market conditions and without prior notice.

### No Cancellation Range and Reasonability Level for Canola Options

|                         | No Cancellation Range  | Reasonability Limit  |
|-------------------------|--|--|
| Outright Options        | 30% from fair value as determined by the Exchange, with a minimum of \$1.00 and a maximum of \$4.00. Options with a value of less than \$1.00 are \$0.00.    | 40% from fair value as determined by the Exchange, with a minimum of \$2.00. |
| Calendar Spread Options | 30% from fair value as determined by the Exchange and with a minimum of \$1.00 and a maximum of \$4.00. Options with a value of less than \$1.00 are \$0.00. | None.  |

### No Cancellation Ranges and Reasonability Levels for Metal Options:

The NCR shall be 20% of the option premium, subject to a minimum of 50 ticks and a maximum of 250 ticks. The RL shall be three times the NCR of the option.

### **No Cancellation Ranges and Reasonability Levels for Bakkt Bitcoin (USD) Monthly Futures Options:**

The NCR shall be 30% of the option premium, subject to a minimum of \$25 and a maximum of \$200. The RL shall be 40% of fair value as determined by the Exchange.

### **No Cancellation Range for Option Conversions and Option Boxes:**

Option Conversions and Option Boxes will be subject to the lowest NCR stated for the market in which they are traded.

A long Option Conversion shall be defined as combining long calls, short puts and short futures. A short Option Conversion shall be defined as combining long puts, long futures and short calls. The Option conversion must contain the same expiry, strikes prices and quantity.

An Option Box shall be defined as combining a position that is long a call and short a put in strike 1 and long a put and short a call in strike 2. The Option Box must contain the same expiry and quantity in both strike 1 and strike 2 for both calls and puts.

The Exchange reserves the right to consider all alleged error trade situations on their individual merits and may therefore amend these policies in light of the circumstances of each case. The full Error Policy can be found in IFUS Electronic Trading Rules, on the web at: [https://www.theice.com/publicdocs/rulebooks/futures\\_us/--Appendix\\_1\\_Error\\_Trade\\_Policy.pdf](https://www.theice.com/publicdocs/rulebooks/futures_us/--Appendix_1_Error_Trade_Policy.pdf).

The descriptions of Anchor Price, No Cancellation Range, Reasonability Limits and Calendar Spread Limit Order Range below are taken from the IFUS Error Policy.

#### **Anchor Price**

The Anchor Price is set by the Exchange and is based on the front contract month, however, when the front month nears expiration, the Anchor Price will be based on the delivery month with the most open interest. The determination as to when to shift the Anchor Price based on open interest will be made by the Exchange. The Anchor Price may be the previous night's settlement price, the opening call price or the last traded price. The Anchor Price of the second contract month and successive months onward is achieved by applying spread differentials against the front month Anchor Price.

#### **No Cancellation Range**

The Exchange determines parameters above or below an Exchange set anchor price for each Contract within which a trade alleged as an error trade may not be cancelled. Such parameters are known as a no cancellation range.

Trades within the no cancellation range will not, under most circumstances, be cancelled by the Exchange, whether as a result of error or otherwise, in order that market users can have confidence that traded levels will stand.

#### **Reasonability Limits**

The ETS maintains Reasonability Limits to prevent ‘fat finger’ type errors. These are hard limits above or below an Exchange set anchor price. Orders with bids above the Reasonability Limit or offers below the Reasonability Limit will not be accepted.

Each option order submitted to the electronic trading platform will be evaluated against a reasonability limit for the specific call or put option strike price. A reasonability limit range will be established around the theoretical premium value for each option call or put. The theoretical premium value will be calculated using the Black - Scholes model and will dynamically update throughout the day. The reasonability limit range will allow for entry of bids or offers within a calculated distance from the option’s current theoretical premium value. This Option Reasonability Range is the distance above/below the calculated option theoretical premium used to establish the reasonability limits. This range is determined by the Exchange and is subject to change without notice. For Options with little theoretical value (deep out-of-the money), a minimum premium price established by the Exchange will be used. If the theoretical price of the Option plus the Option Reasonability Range is less than the minimum premium, the minimum premium will be used as the Reasonability Limit. The Reasonability Limits for each Exchange Commodity Contract are flexible, to take into account prevailing market conditions, and may be changed at the discretion of the Exchange on an intraday basis, without advance notice, to take account of such conditions.

Reasonability Limits are applicable during the pre-open period for all IFUS futures contracts (except for Natural Gas, Power and Emissions contracts), at levels up to three times the levels shown in this document. Entry of new and revisions to existing option orders are not permitted during the pre-open period, and therefore Reasonability Limits are not applicable to IFUS option contracts during the pre-open.

### **Calendar Spread Limit Order Range**

The CSLOR is used to set the maximum difference between the stop and limit prices on a calendar spread Stop Limit order, and the limit price on a calendar spread Stop With Protection order.

# INTERVAL PRICE LIMIT FUNCTIONALITY

With IPL levels as of September 2021

IPL functionality acts as a temporary circuit breaker feature on the electronic platform, to diminish the likelihood and extent of short-term price spikes or aberrant market moves. While it is designed to be in force throughout each trading day, it is expected that the protections will be actively triggered only in the case of extreme price moves over very short periods of time. The IPL regime uses three customizable parameters for each futures product:

1. **IPL Recalculation Time:** A pre-set length of time during which the price of a contract month may not move up or down more than the IPL Amount (defined below) from the contract price at the start of the period. This starting price is referred to as the “anchor price”. The IPL Recalculation Time continuously resets for the length of time applicable to the particular futures contract.
2. **IPL Amount:** The maximum number of points that a contract month is permitted to move up or down during each IPL Recalculation Time for the contract. The anchor price plus/minus the IPL amount effectively creates an IPL range for the contract for the IPL Recalculation Time.
3. **IPL Hold Period:** When the platform determines that the next trade in the contract month will be at a price that is outside the active IPL range, the platform triggers a Hold Period, during which the price of the contract is not permitted to trade outside the IPL range that was in place at the start of the IPL Hold Period. The length of the Hold Period is pre-set. When a Hold Period is triggered, the platform will issue an alert notifying users that a Hold Period has begun and specifying the time the Hold Period will end.

IPL parameters can be changed over time based on market conditions.

Current IPL Recalculation Times, Amounts and Hold Period for all IFUS products are shown below:



**Agricultural and Metal contracts:**

| FUTURES CONTRACT                                | IPL Amount<br>(in points) | Recalc<br>Time<br>(in secs) | Hold<br>Period<br>(in secs) |
|---|---------------------------|-----------------------------|-----------------------------|
| Sugar No. 11 (SB)                               | 60                        | 15                          | 30                          |
| Cotton No. 2 (CT) and Coffee “C” (KC)           | 400                       | 15                          | 30                          |
| Cocoa (CC)                                      | 100                       | 15                          | 30                          |
| FCOJ (OJ)                                       | 500                       | 15                          | 30                          |
| Sugar No. 16 (SF)                               | 750                       | 15                          | 30                          |
| Canola (RS)                                     | 2400                      | 10                          | 30                          |
| Daily (AUD), Mini (YG) and 100 oz. Gold (ZG)    | 1000                      | 15                          | 30                          |
| Daily (HIO), Mini (YI) and 5000 oz. Silver (ZI) | 400                       | 15                          | 30                          |

**Stock and Financial Index Contracts:**

| FUTURES CONTRACT   | IPL Amount (in<br>Index Points) | Recalc Time<br>(in secs) | Hold Period<br>(in secs) |
|--|---------------------------------|--------------------------|--------------------------|
| MSCI World Low Carbon Leaders NTR Index (WLC), MSCI World Low Carbon Target NCR (WLT) MSCI EAFE Index (MFS) and World Index (MWL)  | 48.000                          | 5                        | 5                        |
| MSCI EAFE NTR Index (MFU)  | 144.000                         | 5                        | 5                        |
| MSCI Emerging Markets Index (MME)  | 30.000                          | 5                        | 5                        |
| MSCI Emerging Markets NTR Index (MMN) and EM Asia NTR Index (ASN)  | 12.000                          | 5                        | 5                        |
| MSCI EM Latin America Index (MLE), MSCI Kokusai GTR (KKS), MSCI Emerging Market ex China NTR Index (MMC), and USA Growth Index (MRG)   | 60.000                          | 5                        | 5                        |
| MSCI ACWI NTR Index (MMW), EM NTR (MMR) Index, ACWI Ex-US NTR Index (AWN), MSCI Malaysia NTR (MYY) and EMEA NTR Index (MMM), MSCI Italy NTR Index (ITH)  | 6.000                           | 5                        | 5                        |
| MSCI Thailand NTR (THG), MSCI Europe Climate Change Index (EU1), MSCI World Climate Change (WOW), MSCI China Technology DR and P-Chip Index (CHT), MSCI Canada Index (MCL) and USA Index (MUN) | 36.000                          | 5                        | 5                        |
| MSCI Pan-Euro Index (MPP)  | 22.000                          | 5                        | 5                        |
| MSCI Europe Index (MEU)  | 20.000                          | 5                        | 5                        |
| MSCI China Free NTR Index (\$50) (MCX) and India NTR Index (MIN)   | 10.000                          | 5                        | 5                        |
| MSCI ex-Japan NTR Index (ASI)  | 15.000                          | 5                        | 5                        |

|   |         |          |          |
|---|---------|----------|----------|
| MSCI Pacific NTR Index (MPA), Pacific ex-Japan Index (PAC), and Europe NTR Index (EU9)                    | 150.000 | 5        | 5        |
| MSCI USA GTR Index (USS)  | 300.000 | 5        | 5        |
| MSCI North America NTR Index (NAA) and Canada GTR Index (CAD)   | 180.000 | 5        | 5        |
| MSCI Europe Index (MCE), Europe Growth Index (MGE), and Europe Value Index (MPU)                          | 2.500   | 5        | 5        |
| MSCU USA Small Cap Index (MUS), USA Small Cap GTR Index (USC)   | 25.000  | 5        | 5        |
| MSCI World NTR Index (MWS)  | 120.000 | 5        | 5        |
| MSCI World ESG Leaders NTR Index (LFW), EAFE ESG Leaders NTR (LFG) and Europe ESG Leaders NTR Index (LFU) | 4.000   | 5        | 5        |
| MSCI EM ESG Leaders NTR Index (LFM), MSCI USA Value (MCU) and MSCI USA Climate Change NTR Index (MUC)     | 40.000  | 5        | 5        |
| MSCI USA ESG Leader GTR Index (LFA)   | 8.000   | 5        | 5        |
| MSCI Japan NTR Index (JPP)  | 90.000  | 5        | 5        |
| MSCI Japan ESG Select Leaders GTR Index (JSL)   | 35.000  | 5        | 5        |
| MSCI USA Minimum Volatility GTR Index (MUV)   | 120.000 | 5        | 5        |
| MSCI Hong Kong NTR Index (HKX)  | 750.000 | <u>5</u> | <u>5</u> |
| MSCI Australia NTR Index (AS7)  | 110.00  | <u>5</u> | <u>5</u> |
| MSCI China NTR Index (CHH)  | 50.000  | <u>5</u> | <u>5</u> |
| MSCI Germany NTR Index (GEA)  | 125.000 | <u>5</u> | <u>5</u> |
| MICRO NYSE FANG+™ Index (FNG) and MSCI USA Value Index (MCU)  | 4000    | 5        | 5        |
| ERIS CDX HY (HY5)   | 10000   | 5        | 5        |
| ERIS CDX IG (IG5)   | 5000    | 5        | 5        |

### **MSCI TIC+ CONTRACTS**

| <u>TIC+ Futures Contract</u>   | <u>IPL Amount (in Index Points)</u> | <u>Recalc Time (in secs)</u> | <u>Hold Time (in secs)</u> |
|--|-------------------------------------|------------------------------|----------------------------|
| <u>MSCI Emerging Markets Index (TPM &amp; SPM)</u>                   | <u>15.000</u>                       | <u>5</u>                     | <u>5</u>                   |
| <u>MSCI EAFE Index (TPF &amp; SPF)</u>                               | <u>24.000</u>                       | <u>5</u>                     | <u>5</u>                   |
| <u>MSCI World NTR USD Index (TPW &amp; SPW)</u>                      | <u>60.000</u>                       | <u>5</u>                     | <u>5</u>                   |
| <u>MSCI EM Asia NTR USD Index (TPS &amp; SPS)</u>                    | <u>6.000</u>                        | <u>5</u>                     | <u>5</u>                   |
| <u>MSCI Emerging Markets NTR USD Index (TPM &amp; SPN)</u>           | <u>6.000</u>                        | <u>5</u>                     | <u>5</u>                   |
| <u>MSCI Emerging Markets Latin America NTR Index (TPT &amp; SPT)</u> | <u>30.000</u>                       | <u>5</u>                     | <u>5</u>                   |
| <u>MSCI Emerging Markets EMEA NTR Index (TPR &amp; SPR)</u>          | <u>3.000</u>                        | <u>5</u>                     | <u>5</u>                   |

|  |                |          |          |
|--|----------------|----------|----------|
| <u>MSCI USA GTR Index (TPU &amp; SPU)</u>                      | <u>150.000</u> | <u>5</u> | <u>5</u> |
| <u>MSCI Pacific NTR Index (TPP &amp; SPP)</u>                  | <u>75.000</u>  | <u>5</u> | <u>5</u> |
| <u>MSCI Europe NTR USD Index (TPE &amp; SPE)</u>               | <u>75.000</u>  | <u>5</u> | <u>5</u> |
| <u>MSCI ACWI NTR USD Index (TPA &amp; SPA)</u>                 | <u>3.000</u>   | <u>5</u> | <u>5</u> |
| <u>MSCI Japan NTR USD Index (TPJ &amp; SPJ)</u>                | <u>45.000</u>  | <u>5</u> | <u>5</u> |
| <u>MSCI Emerging Markets ESG Leaders Index (TPG &amp; SPG)</u> | <u>20.000</u>  | <u>5</u> | <u>5</u> |
| <u>MSCI EAFE ESG Leaders Index (TPH &amp; SPH)</u>             | <u>2.000</u>   | <u>5</u> | <u>5</u> |
| <u>MSCI Europe ESG Leaders Index (TPX &amp; SPX)</u>           | <u>2.000</u>   | <u>5</u> | <u>5</u> |
| <u>MSCI USA ESG Leaders Index (TPY &amp; SPY)</u>              | <u>4.000</u>   | <u>5</u> | <u>5</u> |
| <u>MSCI World ESG Leaders Index (TPZ &amp; SPZ)</u>            | <u>2.000</u>   | <u>5</u> | <u>5</u> |

**Digital Currency contracts:**

| FUTURES CONTRACT                   | IPL Amount<br>(in \$) | Recalc<br>Time (in<br>secs) | Hold<br>Period (in<br>secs) |
|------------------------------------|-----------------------|-----------------------------|-----------------------------|
| Bakkt™ Bitcoin (USD) Monthly (BTM) | \$1,500               | 5                           | 5                           |

**USDX® and Currency Pair contracts:**

| FUTURES CONTRACT  | IPL Amount<br>(in points) | Recalc<br>Time (in<br>secs) | Hold<br>Period<br>(in secs) |
|---|---------------------------|-----------------------------|-----------------------------|
| USDX (DX)   | 500                       | 5                           | 2                           |
| Sterling-US dollar (MP)   | 750                       | 5                           | 5                           |
| Yen-US dollar (KSN)   | 3000                      | 5                           | 5                           |
| Zloty-US dollar (PLN), Zloty-euro (PLE), Turkish lira-US dollar (TRM) and Turkish lira-euro (ETR)   | 1500                      | 5                           | 5                           |
| Sterling-Norway (PK), Sterling-SA Rand (PZ), Sterling-Sweden (PS), Euro-Sweden (KRK), Euro-Norway KOL), Euro-SA Rand (YZ), US dollar-SA Rand (ZR), Norway-Yen (KY), Sweden-Yen (KJ) and Mex. peso-US Dollar (KMP) | 37500                     | 5                           | 5                           |
| All Other Currency Pairs  | 7500                      | 5                           | 5                           |

**Power and Emissions contracts:**

| FUTURES CONTRACT   | IPL Amount (in \$ terms) | IPL Exceptions (in \$ terms)  | Recalc Time (secs) | Hold Period (secs) |
|--|--------------------------|---|--------------------|--------------------|
| Financial Power  | \$30.00                  | N/A   | 3                  | 5                  |
| Capacity Responsive Reserve  | \$30.00                  | N/A   | 3                  | 5                  |
| In-City or Rest of State Cap.  | \$30.00                  | N/A   | 3                  | 5                  |
| Non-Spinning Reserve   | \$30.00                  | N/A   | 3                  | 5                  |
| Regulation   | \$30.00                  | N/A   | 3                  | 5                  |
| All Daily Power Contracts  | \$120.00                 | N/A   | 3                  | 5                  |
| All Daily Load Forecast  | 50,000 MW                | N/A   | 3                  | 5                  |
| All ERCOT Contracts  | \$100.00                 | All ERCOT Daily contracts - \$120.00<br>ERCOT North 345KV Real-Time Peak Daily Fixed Price (END) and ERCOT North 345KV Real-Time Peak Daily Mini Fixed Price (ERA) - \$500.00 | 3                  | 5                  |
| RGGI   | \$1.00                   | N/A   | 3                  | 5                  |
|  |                          |   |                    |                    |
| CAR-CRT, CFI-US, REC-NJ, CCA, TX REC, PJM TRI-QEC, MD REC, PA AEC, CCO | \$2.50                   | N/A   | 3                  | 5                  |
| CCA Trade At Auction Settlement Contracts                              | \$0.75                   | N/A   | 3                  | 5                  |
| SFI  | \$5.00                   | N/A   | 3                  | 5                  |
| CT & MA REC, MD & PA SAEC, NEPOOL REC                                  | \$10.00                  | N/A   | 3                  | 5                  |
| CSAPR SO2 & NOX  | \$60.00                  | N/A   | 3                  | 5                  |
| MA & NJ SREC, MA SREC Carve Out, CAIR NOX (Annual and Ozone), LCFS     | \$30.00                  | N/A   | 3                  | 5                  |

**Nat Gas contracts:**

| FUTURES CONTRACT              | IPL Amount (in \$ terms) | IPL Exceptions (in \$ terms) | Recalc Time (secs) | Hold Period (secs) |
|-------------------------------|--------------------------|------------------------------|--------------------|--------------------|
| Henry Hub                     | \$0.20                   | <u>N/A</u>                   | 3                  | 5                  |
| UK Natural Gas                | \$0.12                   | <u>N/A</u>                   | 3                  | 5                  |
| EIA Financial Weekly Index    | 75 BCF                   | <u>N/A</u>                   | 3                  | 5                  |
| EIA End of Draw/Storage Index | 2,500 BCF                | <u>N/A</u>                   | 3                  | 5                  |
| Financial LNG                 | \$0.60                   | <u>N/A</u>                   | 3                  | 5                  |

|                                  |        |  |   |   |
|----------------------------------|--------|--|---|---|
| Fixed Price<br>(excluding Henry) | \$4.00 | <u>IPL Amount: \$10.00</u><br>Dominion South Swing (DSS)<br>Lebanon Swing (LBN)<br><u>IPL Amount: \$12.00</u><br>Algonquin Citygates Swing (ALS)<br>Chicago Swing (CSS)<br>NNG Demarc Swing (DES)<br>Iroquois (Into) Swing (Platts) (IRS)<br>Iroquois-Z2 Swing (Platts) (IZS)<br>NNG Ventura Swing (NNS)<br>PG&E Citygate Swing (PIG)<br>Transco Zone 6 (non-NY) Swing (TPS)<br>TETCO M3 Swing (TSS)<br>Transco Zone 6 (NY) Swing (ZSS)  | 3 | 5 |
| Basis                            | \$4.00 | <u>IPL Amount: \$10.00</u><br>Dominion South Basis (DOM)<br><u>IPL Amount: \$12.00</u><br>Algonquin Citygates Basis (ALQ)<br>NNG Demarc Basis (DEM)<br>Chicago Basis (DGD)<br>Union Dawn Basis (DWN)<br>Iroquois (Into) Basis (Platts) (IRB)<br>Iroquois-Z2 Basis (Platts) (IZB)<br>PG&E Citygate Basis (PGE)<br>TETCO M3 Basis (TMT)<br>Transco Zone 6 (non NY) Basis (TPB)<br>Transco Zone 6 (NY) Basis (TZS)  | 3 | 5 |
| Index                            | \$0.20 | <u>IPL Amount: \$12.00</u><br>AB NIT Index (AIS)<br>Algonquin Citygates Index (ALI)<br>ANR SW (Oklahoma) Index (AOI)<br>ANR SE (Louisiana) Index (API)<br>CG-Mainline Index (CGI)<br>Chicago Index (CIS)<br>CIG Rockies Index (CRC)<br>Enable Gas Index (CTI)<br>NNG Demarc Index (DEI)<br>Dominion South Index (DIS)<br>PG&E Citygate Index (EIS)<br>Florida Gas Zone 3 Index (FTI)<br>Henry Index (HIS)<br>Iroquois (Into) Index (Platts)(IRI)<br>Iroquois-Z2 Index (Platts) (IZI)<br>NGPL Midcont Index (MCI) | 3 | 5 |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  | Malin Index (MIS)<br>TETCO M3 Index (MTI)<br>NWP Sumas Index (NIS)<br>Michcon Index (NMI)<br>NNG Ventura Index (NNI)<br>Transco Zone 6 (NY) Index (NSI)<br>NGPL TXOK Index (NTI)<br>NGPL STX Index (NXI)<br>ONEOK Gas Transportation Index (ONI)<br>Southern Star TX OK KS Index (OUI)<br>EP Permian Index (PEI)<br>Panhandle Index (PIS)<br>NWP Rockies Index (RSI)<br>Social Citygate Index (SCI)<br>HSC Index (SHS)<br>Transco Station 65 (Zone 3) Index (SIA)<br>Social Border Index (SIS)<br>EP San Juan Index (SNI)<br>Sonat Index (SOI)<br>TETCO STX Index (SXI)<br>TETCO ELA Index (TEI)<br>Tennessee 500L Index (TFI)<br>TGT Zone 1 Index (TGI)<br>TCO Index (TIS)<br>Transco Zone 6 (non-NY) Index (TPI)<br>Transco Station 85 (Zone 4) Index (TRI)<br>TETCO WLA Index (TWI)<br>Tennessee Zone 0 Index (TZI)<br>Waha Index (WAI) |  |  |
|--|--|--|--|--|

| Oil and NGL Products  | Commodity Code | Unit | IPL Amount (in \$ Terms) | Recalc Time (seconds) | Hold Period (seconds) |
|---|----------------|------|--------------------------|-----------------------|-----------------------|
| Crude Diff – Argus LLS vs WTI 1st Line Future   | ARK            | bbl  | \$6.00                   | 3                     | 5                     |
| Argus Mars vs WTI Trade Month Future  | ARW            | bbl  | \$6.00                   | 3                     | 5                     |
| Crude Diff – Argus WTS vs WTI Trade Month Future                                      | AVT            | bbl  | \$6.00                   | 3                     | 5                     |
| Crude Diff – WTI 1st Line vs Brent 1st Line Future                                    | BTD            | bbl  | \$6.00                   | 3                     | 5                     |
| Fuel Oil Diff – New York 1% Fuel Oil (Platts) vs USGC HSFO (Platts) Future            | FOD            | bbl  | \$4.00                   | 3                     | 5                     |
| Fuel Oil Outright – New York 1% Fuel Oil Future                                       | FOW            | bbl  | \$4.00                   | 3                     | 5                     |
| Fuel Oil Crack – USGC HSFO (Platts) vs Brent 1st Line Future                          | GCS            | bbl  | \$1.50                   | 3                     | 5                     |
| Gasoline Diff – Group 3 Sub-octane Gasoline (Platts) vs RBOB Gasoline 1st Line Future | GDL            | gal  | \$0.10                   | 3                     | 5                     |

|   |     |     |         |   |   |
|---|-----|-----|---------|---|---|
| Gasoline Diff – Gulf Coast CBOB 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future | GDM | gal | \$0.10  | 3 | 5 |
| Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barge Future                | GDO | MT  | \$10.00 | 3 | 5 |
| Gasoline Diff – RBOB Gasoline 1st Line vs Argus Eurobob Oxy FOB Rotterdam Barges Mini Future          | GDQ | MT  | \$10.00 | 3 | 5 |
| Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in Bbls)    | GOE | bbl | \$1.00  | 3 | 5 |
| Diesel Diff – Gulf Coast ULSD vs Heating Oil 1st Line Future  | GOH | gal | \$0.04  | 3 | 5 |
| Fuel Oil Crack – USGC HSFO (Platts) vs WTI 1st Line Future  | GUF | bbl | \$1.50  | 3 | 5 |
| Heating Oil Crack – Heating Oil 1st Line vs Brent 1st Line Future (in Bbls)                           | HBT | bbl | \$1.50  | 3 | 5 |
| Jet Fuel Diff – Gulf Coast Jet Fuel vs Heating Oil 1st Line Future                                    | JHO | gal | \$0.04  | 3 | 5 |
| Crude Diff – Argus WTI Midland vs WTI 1st Line Future   | MLT | bbl | \$1.00  | 3 | 5 |
| Fuel Oil Diff – USGC HSFO (Platts) vs Fuel Oil 3.5% FOB Rotterdam Barges (Platts) Future (in MTs)     | NVV | MT  | \$2.00  | 3 | 5 |
| Crude Outright – WTI 1st Line Future  | R   | bbl | \$1.50  | 3 | 5 |
| Fuel Oil Outright – USGC HSFO (Platts) Future   | RBO | bbl | \$4.00  | 3 | 5 |
| Gasoline Crack – RBOB Gasoline 1st Line vs Brent 1st Line Future (in Bbls)                            | RBR | bbl | \$1.50  | 3 | 5 |
| Heating Oil Arb – Heating Oil 1st Line vs Low Sulphur Gasoil 1st Line Future (in Bbls)                | ULM | bbl | \$0.04  | 3 | 5 |
| Gasoline Diff – Gulf Coast Unl 87 Gasoline Prompt Pipeline (Platts) vs RBOB Gasoline 1st Line Future  | UM1 | bbl | \$0.10  | 3 | 5 |
| Natural Gasoline, OPIS Mt. Belvieu Non-TET vs WTI 1 <sup>st</sup> Line Future                         | NGW | Bbl | \$4.00  | 3 | 5 |

**For any Oil Futures contracts not listed in the above table the following IPL Levels are applied:**

| Oil Products                       | IPL Amount (in \$ Terms) | Recalc Time (seconds) | Hold Period (seconds) |
|------------------------------------|--------------------------|-----------------------|-----------------------|
| All Oil (Barrels or lbs) Contracts | \$6.25                   | 3                     | 5                     |
| All Oil (MT) Contracts             | \$18.75                  | 3                     | 5                     |
| All Oil (Gallons) Contracts        | \$0.25                   | 3                     | 5                     |
| All Oil (RIN) Contracts            | \$0.0600                 | 3                     | 5                     |
| NGL (North American) (Gallons)     | \$0.125                  | 3                     | 5                     |
| Olefins                            | \$0.125                  | 3                     | 5                     |
| Aromatics                          | \$0.250                  | 3                     | 5                     |
| LPG (International) (MT)           | \$125.00                 | 3                     | 5                     |

