



November 7, 2018

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

Re: Cboe Futures Exchange, LLC Rule Certification  
Submission Number CFE-2018-028

Dear Mr. Kirkpatrick:

Pursuant to Section 5c(c)(1) of the Commodity Exchange Act, as amended (“Act”), and §40.6(a) of the regulations promulgated by the Commodity Futures Trading Commission under the Act, Cboe Futures Exchange, LLC (“CFE”) hereby submits an updated CFE Fee Schedule for fees filed with the Commission (“Amendment”). The updated CFE Fee Schedule reflects fee changes required to be filed with the Commission that will become effective on or after November 23, 2018, on a date to be announced by the Exchange through the issuance of an Exchange notice.

The Amendment establishes a maker-taker fee structure for CFE Trading Privilege Holder (“TPH”) transactions in Weekly (Non-Standard) Cboe Volatility Index (“VX”) futures contracts that are single leg transactions. In general, this fee structure for TPH Weekly VX futures single leg transactions provides for a base transaction fee for TPH taker transactions that remove liquidity from the market and for no base transaction fee for TPH maker transactions that add liquidity to the market. This fee structure retains the current fee structure for TPH single leg transactions in Weekly VX futures for all TPH single leg taker transactions in Weekly VX futures. Specifically, the same fee levels that currently apply with respect to all TPH single leg transactions in Weekly VX futures will apply to all TPH single leg taker transactions in Weekly VX futures. The CFE Fee Schedule currently sets forth the types of transactions that are deemed taker transactions for which a taker fee applies in the context of Cboe Bitcoin (USD) (“XBT”) futures transactions. A taker fee will apply to the same types of TPH transactions in Weekly VX futures as is the case with XBT futures, except that a taker fee will be the default transaction fee if a spread order with Weekly VX futures legs trades against another spread order with Weekly VX futures legs. Similarly, the CFE Fee Schedule currently sets forth the types of transactions that are deemed maker transactions in XBT futures for which a maker fee applies. A maker fee will apply to the same types of TPH transactions in Weekly VX futures as is the case with XBT futures (except with respect to spread orders with Weekly VX futures legs as noted above). In particular, under the revised fee structure for TPH transactions in Weekly VX futures, a base maker fee of \$0.00 will apply to all TPH single leg maker transactions in Weekly VX futures.

CFE believes that the Amendment is consistent with Designated Contract Market Core Principles 2 (Compliance with Rules), 4 (Prevention of Market Disruption), 7 (Availability of General Information), 9 (Execution of Transactions), and 12 (Protection of Markets and Market

Participants) under Section 5 of the Act. The amended fees are equitable and do not unfairly discriminate, and the Amendment sets forth in a clear and transparent way the manner in which CFE applies its fees. CFE believes that the revised fee structure for TPH transactions in Weekly VX futures will incentivize TPHs to trade in Weekly VX futures by retaining the applicability to Weekly VX futures of the current two potential types of rebates that are available to TPHs based upon VX TPH trading volume and by further incentivizing TPHs to add liquidity to the Weekly VX futures market since TPHs will receive a lower base single leg fee rate if they add liquidity (i.e., a zero transaction fee) than if they remove liquidity. CFE believes that this will have a positive impact on the price discovery process by fostering additional liquidity, market size, and volume in Weekly VX futures traded on CFE's centralized market. All TPHs are obligated by CFE Rule 308 to comply with Exchange rules. CFE rules include a prohibition against wash trading, and CFE surveils for wash trading in Weekly VX futures. Exchange rules also include prohibitions against fraudulent, non-competitive, unfair, and abusive trading practices, and the Exchange monitors trading in Weekly VX futures for violative activity such as manipulative trading and market abuse.

CFE believes that the impact of the Amendment will be beneficial to the public and market participants. CFE is not aware of any substantive opposing views to the Amendment. CFE hereby certifies that the Amendment complies with the Act and the regulations thereunder. CFE further certifies that it has posted a notice of pending certification with the Commission and a copy of this submission on CFE's Web site (<http://cfe.cboe.com/aboutcfe/rules.aspx>) concurrent with the filing of this submission with the Commission.

The Amendment is attached and is marked to show additions in double-underlined text and deletions in ~~stricken~~ text. Footnotes in the updated CFE Fee Schedule for fees filed with the Commission will be re-numbered accordingly based on any footnote numbering changes. The updated CFE Fee Schedule for fees filed with the Commission does not reflect the fee changes set forth in CFE Rule Certification Submission Number CFE-2018-023 dated October 22, 2018 since those fee changes are not yet in effect. CFE will update its Fee Schedule to reflect those fee changes and the fee changes set forth in the Amendment when each set of fee changes becomes effective.

Questions regarding this submission may be directed to Arthur Reinstein at (312) 786-7570 or Nicole Gordon at (312) 786-8109. Please reference our submission number CFE-2018-028 in any related correspondence.

Cboe Futures Exchange, LLC

/s/ Matthew McFarland

By: Matthew McFarland  
Managing Director

**CFE Fee Schedule<sup>1, 2</sup>**  
**For Fees Filed with the Commodity Futures Trading Commission**  
**Effective [September 10] \_\_\_\_\_, 2018**

1.a. Transaction Fees in Cboe Volatility Index (Standard) (VX) Futures<sup>3</sup>: Per Contract Side

A. CFE TPH Permit Holder \$1.10  
 (This rate may be reduced by rebates based upon a TPH's Percentage of VX TPH Volume and Average Daily VX TPH Volume as specified below)<sup>4</sup>

<u>Tier</u>	<u>Percentage of VX TPH Volume for Applicable Month</u>	<u>Rebate Per Contract Side</u>
1	≥ 0.25%	\$0.08 Rebate
2	≥ 0.50%	\$0.13 Rebate
3	≥ 1.00%	\$0.22 Rebate
4	≥ 2.00%	\$0.29 Rebate
5	≥ 5.00%	\$0.33 Rebate
6	≥ 10.00%	\$0.37 Rebate
7	≥ 20.00%	\$0.42 Rebate

<u>Tier</u>	<u>Average Daily VX TPH Volume for Applicable Month</u>	<u>Rebate Per Contract Side</u>
1	≥ 500	\$0.03 Rebate
2	≥ 1,000	\$0.06 Rebate
3	≥ 2,000	\$0.09 Rebate
4	≥ 5,000	\$0.12 Rebate
5	≥ 10,000	\$0.14 Rebate
6	≥ 25,000	\$0.16 Rebate
7	≥ 50,000	\$0.18 Rebate
8	≥ 100,000	\$0.20 Rebate

B. Customer \$1.40  
 C. Customer Day Trade<sup>5</sup> 55% of generally applicable transaction fee  
 D. Block Trade<sup>6</sup> \$1.00  
 (Fee is in addition to other applicable transaction fees)

1.b. Transaction Fees in Weekly (Non-Standard) Cboe Volatility Index (VX) Futures<sup>7</sup>: Per Contract Side

A. CFE TPH Permit Holder

1. <u>Taker Fee<sup>8</sup></u>	<u>\$1.10</u>
2. <u>Maker Fee<sup>9</sup></u>	<u>\$0.00</u>

B. Customer \$1.40  
 C. Customer Day Trade<sup>5</sup> 55% of generally applicable transaction fee  
 D. Block Trade<sup>6</sup> \$1.00  
 (Fee is in addition to other applicable transaction fees)

1.c. CFE TPH Permit Holder Rebates in Cboe Volatility Index (Standard) (VX) Futures and Weekly (Non-Standard) Cboe Volatility Index (VX) Futures<sup>8</sup>

<u>Tier</u>	<u>Percentage of VX TPH Volume for Applicable Month</u>	<u>Rebate Per Contract Side</u>
<u>1</u>	<u>&gt; 0.25%</u>	<u>\$0.08 Rebate</u>
<u>2</u>	<u>&gt; 0.50%</u>	<u>\$0.13 Rebate</u>
<u>3</u>	<u>&gt; 1.00%</u>	<u>\$0.22 Rebate</u>
<u>4</u>	<u>&gt; 2.00%</u>	<u>\$0.29 Rebate</u>
<u>5</u>	<u>&gt; 5.00%</u>	<u>\$0.33 Rebate</u>
<u>6</u>	<u>&gt; 10.00%</u>	<u>\$0.37 Rebate</u>
<u>7</u>	<u>&gt; 20.00%</u>	<u>\$0.42 Rebate</u>

<u>Tier</u>	<u>Average Daily VX TPH Volume for Applicable Month</u>	<u>Rebate Per Contract Side</u>
<u>1</u>	<u>&gt; 500</u>	<u>\$0.03 Rebate</u>
<u>2</u>	<u>&gt; 1,000</u>	<u>\$0.06 Rebate</u>
<u>3</u>	<u>&gt; 2,000</u>	<u>\$0.09 Rebate</u>
<u>4</u>	<u>&gt; 5,000</u>	<u>\$0.12 Rebate</u>
<u>5</u>	<u>&gt; 10,000</u>	<u>\$0.14 Rebate</u>
<u>6</u>	<u>&gt; 25,000</u>	<u>\$0.16 Rebate</u>
<u>7</u>	<u>&gt; 50,000</u>	<u>\$0.18 Rebate</u>
<u>8</u>	<u>&gt; 100,000</u>	<u>\$0.20 Rebate</u>

1.bd. Transaction Fees in Cboe Russell 2000 Volatility Index (VU) Futures and Cboe/CBOT 10-Year U.S. Treasury Note Volatility Index (VXTY) Futures:

	<u>Per Contract Side</u>
A. CFE TPH Permit Holder	\$1.10
B. Customer	\$1.40
C. Block Trade	\$1.00

(Fee is in addition to other applicable transaction fees)

1.ee. Transaction Fees in S&P 500 Variance (VA) Futures:

	<u>By contract side per 1,000 Vega Notional</u>
• <u>Standard Transactions</u>	
A. CFE TPH Permit Holder	\$4.00
B. Customer	\$8.00
C. Block Trade	\$1.00

(Fee is in addition to other applicable transaction fees. Block Trades are not permitted in stub positions in S&P 500 Variance Futures)

1.ef. Transaction Fees in Cboe Bitcoin (USD) (XBT) Futures Per Contract Side

A. CFE TPH Permit Holder	
1. Taker Fee <sup>9</sup>	\$0.25
2. Maker Fee <sup>10</sup>	\$0.00
3. Market Turner Credit <sup>11</sup>	\$0.15 Credit
B. Customer	
1. Taker Fee <sup>8</sup>	\$1.00
2. Maker Fee <sup>9</sup>	\$0.80
3. Market Turner Fee <sup>10</sup>	\$0.65

1. <u>eg.</u>	Transaction Fees in Cboe® iBoxx® iShares® Bond (CB) Index Futures*	Per Contract Side
	B. Customer	\$1.00
	C. Block Trade	\$1.00
	(Fee is in addition to other applicable transaction fees)	
	*iBoxx® is a service mark IHS Markit Limited. iShares® is a registered trademark of BlackRock Fund Advisors and its affiliates.	

CFE assesses the Transaction Fees set forth above to the Clearing Member for the execution that is identified on the trade record for the applicable transaction, regardless of whether the trade is given up to another Clearing Member for clearing and regardless of whether a different Clearing Member has been identified as the designated Clearing Member under the Integrated Billing System by the CFE TPH that executed the trade.

2.	<u>Trading Permit Fees:</u> <sup>12</sup>	<u>Amount</u> <sup>13</sup>
	A. Clearing Member	\$100/month
	B. Proprietary Trading/Pool Manager/ Pooled Investment Vehicle	\$600/month
	C. Retail Brokerage/Executing Brokerage	\$700/month
3.	<u>Applications Fees:</u>	<u>Amount</u>
	A. Individual <sup>14</sup>	\$500
	B. Organization <sup>13</sup>	\$1,000
	C. Investigation Fee <sup>15</sup>	\$135/Investigation

13. Integrated Billing System:  
Every Trading Privilege Holder must designate a Clearing Member for the payment by means of the integrated billing system (“IBS”) of the Trading Privilege Holder’s Exchange fees designated by the Exchange (other than for Transaction Fees) and vendor fees for Exchange-related services designated by the Exchange. The designated Clearing Member shall pay to the Exchange on a timely basis any amount that is not disputed pursuant to IBS procedures by the Trading Privilege Holder that is directly involved. Such payments shall be collected by the Exchange against the designated Clearing Member’s account at the Clearing Corporation. Exchange Transaction Fees are also assessed pursuant to the IBS to the Clearing Member for the execution that is identified on the trade record for the applicable transaction. The Clearing Corporation shall have no liability in connection with forwarding to the Exchange payments drafted pursuant to the IBS.

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<sup>1</sup> CFE fees are invoiced at the beginning of each month for the previous month of service.

<sup>2</sup> Any potential billing errors relating to fees assessed by CFE must be brought to the attention of CFE’s Accounting Department within 90 days from the invoice date. All fees assessed shall be deemed final and non-refundable after 90 days from the invoice date if notice of a potential billing error is not provided within that time frame. Notwithstanding the foregoing, the Exchange will not provide any refund with respect to transaction fees that are billed at a higher rate because an incorrect Customer Type Indicator (“CTI”) code was included in an order or transaction report submission. The Exchange is not precluded from assessing fees more than 90 days after they were incurred if those fees were required to be paid pursuant to the CFE Fee Schedule in effect at the time the fees were incurred.

<sup>3</sup> Fees in Section 1.a. are applicable to VX futures contracts with a VX or VXT ticker symbol (“Standard VX Futures”). CFE TPH Permit Holder fees in Section 1.a. are subject to the rebate schedule in Section 1.c.

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~~4 Trading Privilege Holder (“TPH”) transactions in VX futures that qualify as VX TPH Volume are assessed the base TPH transaction fee rate for VX futures less any applicable rebate(s) from the two rebate schedules for TPH VX futures transactions. For this purpose, VX TPH Volume includes all TPH transaction volume in VX futures for which the applicable CTI code is 1, 2, or 3, including Trade at Settlement (“TAS”) transactions in VX futures under the ticker symbol VXT with one of those CTI codes and Block Trades and Exchange of Contract for Related Position transactions in VX futures with one of those CTI codes. There are two potential types of rebates for VX TPH Volume. A TPH may receive both rebates, one of the two rebates, or neither of the two rebates for a particular calendar month depending on whether the TPH qualifies for neither, one, or both of the rebates for that calendar month. A TPH may qualify for the first rebate based upon VX TPH Volume of the TPH during the applicable calendar month as a percentage of the total VX TPH Volume of all TPHs during the applicable calendar month. A TPH may qualify for the second rebate based upon the average daily VX TPH Volume of the TPH during the applicable calendar month. The amount of each rebate is based upon the tier level of the VX TPH Volume and the tier level of the average daily VX TPH Volume of the TPH for the applicable calendar month. Only the highest tier level within each rebate schedule for which a TPH qualifies for the applicable calendar month is applied for that calendar month. The VX futures transaction fee rate for a TPH for a calendar month (as determined by the base TPH transaction fee rate for VX futures minus any applicable rebate(s)) is applied, per contract side, to all of the TPH’s VX TPH Volume for the applicable calendar month.~~

<sup>5</sup> Only customer transactions in VX futures may qualify for the Day Trade fee. In order for the Day Trade fee to be applicable with respect to transactions in VX futures by or on behalf of an account of an ultimate account holder for a particular trading month, the ultimate account holder’s account must meet the applicable monthly trading volume threshold below in that trading month:

<u>Contract</u>	<u>Monthly Trading Volume Threshold</u>
VX futures	20,000 contracts in VX futures

For those transactions in VX futures in excess of the monthly trading volume threshold, CFE will rebate 45% of the generally applicable transaction fees that are assessed for those contract purchases and sales by or on behalf of the ultimate account holder’s account that qualify as Day Trades. Transactions in VU futures, VA futures, VXTY futures, XBT futures, and CB Index futures do not qualify as Day Trades. The rebate shall occur at the end of the applicable trading month for those Day Trades that qualify for the rebate during the applicable trading month.

A Day Trade consists of two or more transactions on CFE on the same trading day in which a market participant buys and sells, or sells and buys, a particular number of contracts in VX futures for a particular contract month. For example, if a market participant bought 10 December VX futures contracts and sold 10 December VX futures contracts on the same trading day, those transactions would constitute a Day Trade and would result in a rebate equal to 45% of the generally applicable transaction fee for all 20 contracts. Similarly, if a market participant sold 10 March VX futures contracts and bought 15 March VX futures contracts on the same trading day, those transactions would constitute a Day Trade with respect to the 10 contracts sold and with respect to 10 of the 15 contracts bought. In this example, the rebate would be equal to 45% of the generally applicable transaction fee for 20 of the 25 contracts.

Determination of monthly trading volume and Day Trade fee rebates are made with respect to transactions by or on behalf of the account of an ultimate account holder and transactions by or on behalf of different ultimate account holders or different accounts of the same ultimate account holder may not be aggregated for purposes of meeting the monthly trading volume threshold or receiving Day Trade fee rebates. Day Trade fee rebates are made to the Clearing Member that is originally assessed the generally applicable transaction fees for the Day Trade transactions at the time they occur through the payment of the rebates to that Clearing Member.

In order to be eligible for the Day Trade fee, market participants are required to provide a written notification to CFE in a form and manner prescribed by CFE with the following information: (i) a request to have the Day Trade fee apply to transactions by or on their behalf, (ii) the CFE product for which Day Trade fee rebates are requested (i.e., VX futures), and (iii) the account(s) in which Day Trades will occur. Other than as provided in the following paragraph, the application of the Day Trade fee to a market participant for a product or account begins at the start of the next trading month following receipt of this notification by CFE. Market participants shall also provide any supplemental documentation requested by CFE to substantiate that contract purchases and sales qualify as Day Trades in order for Day Trade fee rebates to apply to those transactions. Failure to promptly provide notice of any changes to information provided to CFE for purposes of

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receiving Day Trade fee rebates, including account number changes and additions, and supplemental documentation requested by CFE may result in ineligibility for the applicable rebates.

In the event that a market participant's account is transferred from a Clearing Member to an affiliated Clearing Member or from a Clearing Member to an unaffiliated Clearing Member in connection with a transaction or agreement between the Clearing Members involving the transfer of accounts between the Clearing Members, the following shall be applicable: The account at the new Clearing Member will be treated as the same account as the account at the original Clearing Member for purposes of the Day Trade fee during the trading month in which the transfer occurs, provided that the market participant provides a written notification to CFE in a form and manner prescribed by CFE of the change in account prior to the end of that trading month.

For any account that was enrolled in the Day Trade Fee Program for which a different account number was provided in the account field in order submissions to CFE in connection with the migration of the CFE System to Bats technology, CFE shall provide Day Trade rebates for that account in the amount that would have been rebated had the account number previously identified to CFE under the Program for that account been provided in the account field in those order submissions. In order to receive these Day Trade rebates, a market participant shall provide any representations and supplemental documentation requested by CFE in order to substantiate that the market participant is entitled to Day Trade rebates under this paragraph.

<sup>6</sup> Block Trade fees for Trade at Settlement ("TAS") transactions in VX futures executed as Block Trades are capped at \$500.00 per trading day for each TPH.

<sup>7</sup> Fees in Section 1.b. are applicable to Weekly (Non-Standard) VX futures contracts with a VX or VXT ticker symbol followed by a number denoting the specific week of the calendar year in which the contract expires ("Weekly VX Futures"). CFE TPH Permit Holder fees in Section 1.b. are subject to the rebate schedule in Section 1.c.

<sup>8</sup> Transaction fees for Trading Privilege Holder ("TPH") transactions in VX futures that qualify as VX TPH Volume are subject to two rebate schedules. For this purpose, VX TPH Volume includes all TPH transaction volume in VX futures for which the applicable CTI code is 1, 2, or 3, including Trade at Settlement ("TAS") transactions in VX futures with one of those CTI codes and Block Trades and Exchange of Contract for Related Position transactions in VX futures with one of those CTI codes. VX TPH Volume includes TPH transaction volume both in Standard VX Futures and in Weekly VX Futures. There are two potential types of rebates for VX TPH Volume. A TPH may receive both rebates, one of the two rebates, or neither of the two rebates for a particular calendar month depending on whether the TPH qualifies for neither, one, or both of the rebates for that calendar month. A TPH may qualify for the first rebate based upon VX TPH Volume of the TPH during the applicable calendar month as a percentage of the total VX TPH Volume of all TPHs during the applicable calendar month. A TPH may qualify for the second rebate based upon the average daily VX TPH Volume of the TPH during the applicable calendar month. The amount of each rebate is based upon the tier level of the VX TPH Volume and the tier level of the average daily VX TPH Volume of the TPH for the applicable calendar month. Only the highest tier level within each rebate schedule for which a TPH qualifies for the applicable calendar month is applied for that calendar month. If a TPH qualifies for one or both types of rebates for a calendar month, the amount of the TPH's VX TPH Volume during the calendar month is multiplied by the sum of any applicable rebate(s) from the two rebate schedules to arrive at a total TPH VX transaction fee rebate amount for the calendar month for that TPH.

<sup>9</sup> A taker fee applies if a participant's simple order trades against a resting simple order. In the case of a Spread Order, (i) a taker fee applies if a participant's Spread Order in XBT futures trades against a resting Spread Order in XBT futures; (ii) a taker fee is the default transaction fee that applies if a participant's Spread Order with Weekly VX futures legs trades against another Spread Order with Weekly VX futures legs; and (iii) a taker fee is the default transaction fee that applies if a participant's Spread Order in VX futures or XBT futures trades against any simple orders regardless of whether or not the simple orders were resting. A taker fee is also the default transaction fee that applies with respect to (i) any order executed as part of a single price opening during a CFE System opening process conducted at any time during a Business Day, (ii) any Block Trade, and (iii) any Exchange of Contract for Related Position transaction.

<sup>10</sup> A maker fee applies if a participant's simple order resting in the order book is traded against by another simple order. In the case of a Spread Order, a maker fee applies if a participant's Spread Order in XBT futures resting in the order book is traded against by another Spread Order in XBT futures. [However, the] Additionally, a maker fee does not apply if the taker fee or market turner credit or fee is applicable.

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<sup>11</sup> A market turner credit or fee applies if a participant's simple order that is resting in the order book was first in time at the best price and is traded against by another order. A simple order is evaluated for market turner status upon receipt of the order by the CFE System and upon any modification to the order that causes the CFE System to re-evaluate the priority of the order (such as an increase to the quantity of the order or a change to the price of the order). If at the time of this evaluation the price of the order is better than the best price of any other orders resting in the order book on the same side of the market, the order will receive or retain market turner status. Once an order has received market turner status, that status will remain with the order for the life of the order (as long as the order is not modified in a manner that causes the CFE System to re-evaluate its priority, at which point its market turner status would be re-evaluated as well). Thus, for example, if a simple order receives market turner status at its price level and the order is not modified, the order would retain market turner status at that price level if the prevailing price on that side of the market became better than the price of the order and then moved back to the price level of the order. However, the market turner credit or fee does not apply to any Spread Orders or if the taker fee is applicable.

<sup>12</sup> A TPH shall be entitled to obtain a single Trading Permit. A Pool Manager may obtain a single Trading Permit for the Pool Manager and all of the Pools approved under Rule 305A for which it acts as Pool Manager. If there is more than one Pool Manager for a Pool or Pools, the Pool Managers for the Pool(s) may obtain a single Trading Permit for the Pool Managers and all of the Pools approved under Rule 305A for which they act as Pool Manager. The monthly fee for a Trading Permit is based on the capacity or capacities of the TPH on CFE. There are three categories of capacities specified in the CFE Fee Schedule. If a TPH has capacities in multiple categories, the TPH is assessed the monthly Trading Permit fee for each category. If a TPH has capacities in the same category, the monthly Trading Permit fee for that category covers all capacities in that category and the TPH is not assessed an additional monthly Trading Permit fee for that category.

<sup>13</sup> A monthly or quarterly fee under the CFE Fee Schedule will be prorated for the initial month or quarter in which it is applicable, with the exception of Device/Authorized User fees which are not prorated for any month in which they are applicable. A monthly or quarterly fee under the CFE Fee Schedule is not prorated for the final month or quarter in which it is applicable (unless that final month or quarter is the same as the initial month or quarter in which the fee is applicable).

<sup>14</sup> A Trading Permit Holder application fee is not applicable if a former Trading Privilege Holder applies for reinstatement as a Trading Privilege Holder within 30 days of termination as a Trading Privilege Holder.

<sup>15</sup> This fee is assessed for each investigation that is conducted of any Trading Privilege Holder applicant; any executive officer, authorized signatory, or administrator of an applicant; and any executive officer, authorized signatory, or administrator added by an existing Trading Privilege Holder.

The iBoxx<sup>®</sup> iShares<sup>®</sup> \$ High Yield Corporate Bond Index and the iBoxx<sup>®</sup> iShares<sup>®</sup> \$ Investment Grade Corporate Bond Index (the "Indexes") referenced herein are the property of Markit Indices Limited ("Index Sponsor") and have been licensed for use in connection with Cboe<sup>®</sup> iBoxx<sup>®</sup> iShares<sup>®</sup> \$ High Yield Corporate Bond Index Futures and Cboe<sup>®</sup> iBoxx<sup>®</sup> iShares<sup>®</sup> \$ Investment Grade Corporate Bond Index Futures. Each party to a Cboe<sup>®</sup> iBoxx<sup>®</sup> iShares<sup>®</sup> \$ High Yield Corporate Bond Index Futures or Cboe<sup>®</sup> iBoxx<sup>®</sup> iShares<sup>®</sup> \$ Investment Grade Corporate Bond Index Futures transaction acknowledges and agrees that the transaction is not sponsored, endorsed or promoted by the Index Sponsor. The Index Sponsor makes no representation whatsoever, whether express or implied, and hereby expressly disclaims all warranties (including, without limitation, those of merchantability or fitness for a particular purpose or use), with respect to the Indexes or any data included therein or relating thereto, and in particular disclaims any warranty either as to the quality, accuracy and/or completeness of the Indexes or any data included therein, the results obtained from the use of the Indexes and/or the composition of the Indexes at any particular time on any particular date or otherwise and/or the creditworthiness of any entity, or the likelihood of the occurrence of a credit event or similar event (however defined) with respect to an obligation, in the Indexes at any particular time on any particular date or otherwise. The Index Sponsor shall not be liable (whether in negligence or otherwise) to the parties or any other person for any error in the Indexes, and the Index Sponsor is under no obligation to advise the parties or any person of any error therein.

The Index Sponsor makes no representation whatsoever, whether express or implied, as to the advisability of purchasing or selling Cboe<sup>®</sup> iBoxx<sup>®</sup> iShares<sup>®</sup> \$ High Yield Corporate Bond Index Futures or Cboe<sup>®</sup> iBoxx<sup>®</sup> iShares<sup>®</sup> \$ Investment Grade Corporate Bond Index Futures, the ability of the Indexes to track relevant markets' performances, or otherwise



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relating to the Indexes or any transaction or product with respect thereto, or of assuming any risks in connection therewith. The Index Sponsor has no obligation to take the needs of any party into consideration in determining, composing or calculating the Indexes. No party purchasing or selling Cboe® iBoxx® iShares® \$ High Yield Corporate Bond Index Futures or Cboe® iBoxx® iShares® \$ Investment Grade Corporate Bond Index Futures, nor the Index Sponsor, shall have any liability to any party for any act or failure to act by the Index Sponsor in connection with the determination, adjustment, calculation or maintenance of the Indexes.

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