



CFE Fee Schedule^{1, 2}
Effective April 5, 2018

1.a.	<u>Transaction Fees in Cboe Volatility Index (VX) Futures, Cboe Russell 2000 Volatility Index (VU) Futures, and Cboe/CBOT 10-Year U.S. Treasury Note Volatility Index (VXTY) Futures:</u>	<u>Per Contract Side</u>
	A. CFE TPH Permit Holder ³	
	1. Cboe Options trading permit holder ⁴	\$0.90
	2. Non-Cboe Options trading permit holder	\$1.00
	B. Customer	\$1.40
	C. Day Trade ⁵	55% of generally applicable transaction fee/No Day Trade discount for VXTY futures
	D. Block Trade ⁶ (Fee is in addition to other applicable transaction fees)	\$1.00
	E. CFE Regulatory Fee	\$0.04
1.b.	<u>Transaction Fees in S&P 500 Variance (VA) Futures:</u>	<u>By contract side per 1,000 Vega Notional</u>
	• <u>Standard Transactions</u>	
	A. CFE TPH Permit Holder ³	
	1. Cboe Options trading permit holder	\$4.00
	2. Non-Cboe Options trading 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)	
	D. CFE Regulatory Fee	\$0.04
	• <u>Stub Transactions</u>	
	E. All CFE TPH Permit Holders and Customers	\$0.25 per variance unit, capped at a maximum of \$8.00 per stub transaction
	F. CFE Regulatory Fee	\$0.04 per stub transaction
1.c.	<u>Transaction Fees in Cboe Bitcoin (USD) (XBT) Futures</u>	<u>Per Contract Side</u>
	A. CFE TPH Permit Holder ²	
	1. Cboe Options trading permit holder	\$0.25
	2. Non-Cboe Options trading permit holder	\$0.25
	B. Customer	\$0.50
	C. Block Trade	\$0.50
	(Fee is in addition to other applicable transaction fees)	

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:⁷</u>	<u>Amount⁸</u>
	A. Clearing Member	\$100/month
	B. Proprietary Trading/Pool Manager/ Pooled Investment Vehicle	\$600/month

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	C. Retail Brokerage/Executing Brokerage	\$700/month
3.	<u>Applications Fees:</u>	<u>Amount</u>
	A. Cboe Options trading permit holder	Waived
	B. Individual Non-Cboe Options trading permit holder ⁹	\$500
	C. Organization Non-Cboe Options trading permit holder ⁹	\$1,000
	D. Investigation Fee ¹⁰	\$135/Investigation
4.	<u>Direct Data Access Fee:</u> ¹¹	<u>Amount</u>
	CFE Data	\$2,000/Direct Source/month
5.	<u>Market Data Distribution Fees:</u>	<u>Amount</u>
	A. Internal Distribution ¹²	\$175/month
	B. External Distribution (includes Bulk Data, TV Display, News Service, and other external distribution) ¹³	\$225/month
	C. External Distribution – TV Display Only ¹⁴	\$100/month
6.	<u>Bulk Data Feed Distribution Fees:</u> ¹⁵	<u>Amount</u>
	A. Per Subscriber	\$50/Data Feed/Distributor/month
	B. Unlimited Subscribers	\$15,000/Unlimited Data Feeds/month
7.	<u>Device/Authorized User Fees:</u> ^{16, 17}	<u>Amount</u>
	A. CFE Surface Quote (TOP) ¹⁸	
	1. Professional User/Device	\$ 8.00/Device/Authorized User/month
	2. Non-Professional User/Device	\$ 1.50/Device/Authorized User/month
	B. CFE Book Depth (PITCH) ¹⁹	
	1. Professional User/Device	\$16.00/Device/Authorized User/month
	2. Non-Professional User/Device	\$ 3.00/Device/Authorized User/month
	C. Non-Professional User/Device Enterprise ²⁰	\$5,000/month
	D. TV Display Feed ²¹	\$300/Broadcast Feed/month
	E. News Service Data ²²	\$100/month
	F. Service Facilitator Recipient ²³	\$175/month
8.	<u>Physical Port Fees:</u> ²⁴	<u>Amount</u>
	A. 1 Gb Network Access Port	\$1,500/Physical Port/month
	B. 10 Gb Network Access Port	\$2,500/Physical Port/month
9.	<u>Disaster Recovery Physical Port Fees:</u> ²⁵	<u>Amount</u>
	A. 1 Gb Network Access Port (400 S. LaSalle St.)	\$250/Physical Port/month
	B. 10 Gb Network Access Port (400 S. LaSalle St.)	\$250/Physical Port/month
10.	<u>Logical Port Fees:</u>	<u>Amount</u>
	A. Order Entry Logical Ports	
	1. First Port	\$400/Port/month
	2. Ports 2-4	\$800/Port/month
	3. Ports 5-25	\$1,200/Port/month
	4. Ports 26 and above	\$0/Port/month

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B.	Execution Drop Port	\$400/Port/month
C.	Order Drop Port	\$600/Port/month
D.	Purge Port	\$600/Port/month
E.	Spin Server Port	\$0/Port/month
F.	Gap Request (GRP) Port	\$0/Port/month
11.	<u>Co-Location Fee:</u>	<u>Amount</u>
	Co-location of Equipment Fee (per “U” – 1.75 inches (400 S. LaSalle St.) ²⁶)	\$50/per “U”/month
12.	<u>Other Market Data Services:</u> ²⁷	<u>Amount</u>
	A. C Level Reports ²⁸	\$0.00 to develop and/or generate \$0.00 for daily, weekly, or monthly subscription
	B. B Level Reports ^{29, 30}	\$0.00 to develop and/or generate \$100/month for monthly subscription and \$200/month for daily or weekly subscription
	C. A Level Reports ^{30, 31}	\$100 for first 5 man-hours and \$100/hour for each additional man-hour to develop and/or generate \$100/month for monthly subscription and \$200/month for daily or weekly subscription
13.	<u>Integrated Billing System:</u>	
	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.	

¹ CFE migrated the CFE trading system to Bats technology effective on February 25, 2018. The CFE fees that changed in connection with the migration were assessed starting on February 1, 2018 for the entire month of February 2018 to avoid assessing two different sets of fees for portions of February 2018. Any pre-migration fees that changed in connection with the migration were not assessed for February 2018. Starting with March 2018 invoices, CFE fees are invoiced at the beginning of each month for the previous month of service.

² 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. 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.

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³ A Trading Privilege Holder (“TPH”) is only eligible to receive a CFE TPH Permit Holder rate for transactions resulting from the execution of orders that are submitted with that TPH’s own EFID(s). Otherwise, the TPH’s transactions are subject to the Customer rate.

⁴ This rate is also assessed to any CFE TPH Permit holder that is not a Cboe Options trading permit holder but is majority owned by a Cboe Options trading permit holder.

⁵ In order for the Day Trade fee to be applicable with respect to transactions by or on behalf of an account of an ultimate account holder for a particular trading month in a CFE product eligible for the Day Trade fee, 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
VU futures	10,000 contracts in VU futures

For those transactions in a product above 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 VA futures and VXTY 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 a particular CFE product 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(s) for which Day Trade fee rebates are requested, 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 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

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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.

⁶ Block Trade fees for Trade at Settlement (“TAS”) transactions executed as Block Trades are capped at \$500.00 per trading day for each TPH.

⁷ 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.

⁸ Subject to note 1, 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). However, no physical port fee will be assessed for March 2018 for any physical port for the legacy CFE trading platform that is terminated on or prior to March 29, 2018 in a form and manner prescribed by CFE.

⁹ A Non-Cboe Options 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.

¹⁰ This fee is assessed for each investigation that is conducted of any Trading Privilege Holder applicant; any executive officer or authorized signatory of an applicant; and any executive officer or authorized signatory added by an existing Trading Privilege Holder.

¹¹ This fee is payable by all Trading Privilege Holders and other parties that receive CFE data through a direct connection to CFE or through a connection to CFE provided by an approved extranet service provider. This fee is not payable by a party acting solely as an approved extranet service provider. This fee is charged for each direct data feed source. A direct data feed source can be either CFE physical ports or an approved extranet service provider. For example, if a party receives CFE market data directly over four physical ports where CFE is the source and separately from two physical ports provided by an approved extranet service provider, this fee is assessed twice for the applicable month for those two sources.

¹² This fee is payable by a recipient that is not a Trading Privilege Holder and that receives a CFE market data feed directly from CFE or through an approved extranet service provider for the recipient’s own internal use and the internal use of its affiliates.

¹³ This fee is payable by all Distributors whether they receive a CFE market data feed directly from CFE or from another CFE Distributor. This fee covers redistribution of real-time or delayed market data by a Distributor and its affiliates that are authorized under a single CFE market data agreement. This fee also covers any internal use that is covered by the Internal Distribution fee, and Distributors that pay the External Distribution fee are not required to pay the Internal Distribution fee for that internal use. This fee is waived through June 2018 for any Distributor that has its principal place of business in a country in the Asia-Pacific Region as designated by CFE, first began or begins to receive CFE market data during the time period from January 2012 through June 2018, and did not previously receive CFE market data. (The term “Distributor” does not include an Independent Software Vendor that distributes CFE market data only to Trading Privilege Holders that have been identified by the Independent Software Vendor to CFE as

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receiving CFE market data from that Independent Software Vendor (a “Non-Distributor ISV”) or an approved extranet service provider.)

This fee is waived for Distributors in the CFE Non-Professional Market Data Fee Waiver Program for European and Middle Eastern Retail Firms in accordance with the following provisions of the Program. A Distributor must satisfy the following requirements in order to participate in the Program: (i) the Distributor has its principal place of business in a country in Europe or the Middle East, as designated by CFE; (ii) at least 70% of the Distributor’s market data subscribers are domiciled in countries in Europe and the Middle East, as designated by CFE; (iii) the Distributor has directly signed a market data agreement with CFE; and (iv) the Distributor has signed up for the Program in a form and manner prescribed by CFE. This fee is waived for the first six months after a Distributor that satisfies the above requirements signs up for the Program. The Distributor is eligible to continue to receive the waiver of this fee under the Program for any future month if the number of contracts traded on CFE during that month which are attributable to the Distributor, in a form and manner designated by CFE, exceeds 5,000 contracts. The Program will be in effect through December 2018.

¹⁴ This fee is payable by a recipient that directly or indirectly receives from CFE a real-time or delayed CFE market data feed for display by television broadcast. The External Distribution – TV Display Only Fee is waived for parties that pay an Internal Distribution Fee or External Distribution Fee for the same time period.

¹⁵ A Distributor or other party that provides production or disaster recovery bulk data feeds is responsible for reporting and paying the Bulk Data Feed Distribution fees to CFE. The Per Subscriber rate applies unless the Distributor has elected to pay the Unlimited Subscriber rate. A bulk data feed is a stream of current data transmitted to a third party’s computer system where the third party controls access or entitlement. Bulk Data Feed Distribution fees are in addition to Device/Authorized User Fees and other fees applicable to Distributor-controlled data distribution.

¹⁶ These fees are payable by each Distributor (whether receiving CFE market data directly from CFE or from another CFE Distributor) and each other Person receiving CFE market data directly from CFE, except that these fees are not payable by Non-Distributor ISVs and approved extranet service providers. These fees are based either on the number of Devices or the number of Authorized Users to which the recipient externally and/or internally distributes CFE market data, except that the Non-Professional User/Device Enterprise rate allows for distribution to an unlimited number of Non-Professional Users as further described in note 21. Distributors that externally or internally distribute only delayed data are not obligated to pay these fees, and other Persons that internally distribute only delayed data are not obligated to pay these fees. These fees are not assessed for particular data uses as may be designated by CFE.

¹⁷ Device/Authorized User fees are waived through June 2018 for CFE Surface Quote (TOP) and CFE Book Depth (PITCH) data that is distributed to any Person (including any Distributor) that has its principal place of business in the “Asia-Pacific Region” (as defined in note 13), first began or begins to receive CFE market data during the time period from 2015 through June 2018, and did not previously receive CFE market data. For Devices/Authorized Users to be eligible for this fee waiver, the Distributor or other Person that would otherwise be required to pay fees with respect to the Devices/Authorized Users must include them in its regular reporting to CFE, identify them as eligible for the waiver, and provide other information sufficient to enable CFE to verify that they are eligible for the waiver.

Non-Professional User/Device fees are waived for Distributors in the CFE Non-Professional Market Data Fee Waiver Program for European and Middle Eastern Retail Firms (as described in note 13) for the first six months after a Distributor that satisfies the qualification requirements for the Program signs up for the Program. The Distributor is eligible to continue to receive the waiver of Non-Professional User/Device fees under the Program for any future month if the number of contracts traded on CFE during that month which are attributable to the Distributor, in a form and manner designated by CFE, exceeds 5,000 contracts. The Program will be in effect through December 2018.

¹⁸ CFE Surface Quote (TOP) includes top of book quotations, last sale execution information, and other CFE market data in a form and manner made available by CFE.

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¹⁹ CFE Book Depth (PITCH) includes depth of book quotations, last sale execution information, and other CFE market data in a form and manner made available by CFE.

²⁰ If a Distributor elects in a form and manner prescribed by CFE to be subject to the Non-Professional User/Device Enterprise rate, the Non-Professional User/Device Enterprise rate will be applicable for an unlimited number of Non-Professional Users instead of the Non-Professional User Device/Authorized User rates.

²¹ A broadcast feed is news programming that is produced for television viewing. The same or substantially the same broadcast feed (i.e., the same or substantially similar programming content) is considered to be a single broadcast feed (for purposes of calculating fees) regardless of whether it is distributed via multiple technologies (cable, satellite, on-air, etc.) or made available on multiple television channels. For example, a national news program that is displayed daily on a number of on-air, satellite, or cable channels is a single broadcast feed; a news program that is separately produced and does not incorporate substantial portions of the national news program is a separate broadcast feed.

²² The News Service Data fee is payable by a news media company for the company and its affiliates to receive real-time market data designated by CFE, and on a display-only basis, to display it on one or more websites and transmit it to authorized devices of subscribers.

²³ The Service Facilitator Recipient fee is payable by a Distributor with respect to each of its Service Facilitators. The Service Facilitator fee does not apply to a third-party service company that pays a CFE Market Data Distribution fee under Section 5A, 5B, or 5C of this Fee Schedule.

²⁴ A physical port may be either a 1 gigabit per second port or a 10 gigabit per second port. Any party that directly connects to CFE is required to have a redundant physical port. These physical ports may not be used to access other exchanges affiliated with CFE through the same physical port.

²⁵ The Disaster Recovery Physical Port fees are applicable to physical ports at CFE's disaster recovery site at 400 South LaSalle Street in Chicago. These physical ports may be either a 1 gigabit per second port or a 10 gigabit per second port. These physical ports may be used to access certain other exchanges affiliated with CFE through the same physical port at CFE's disaster recovery site at 400 South LaSalle Street in Chicago. Parties that connect to the CFE disaster recovery system via the Cboe point of presence at 350 East Cermak Road in Chicago are also able to access over the same physical port the disaster recovery system of any exchange affiliated with CFE that utilizes Bats technology. However, parties that access the CFE disaster recovery system via 350 East Cermak Road are required to pay the applicable Bats technology platform Physical Port fees instead of the CFE Disaster Recovery Physical Port fees.

²⁶ The Co-Location Fee is applicable to co-location at 400 South LaSalle Street in Chicago and is charged in increments of 4 "U" (7 inches), which means that the minimum monthly Co-Location Fee is \$200.

²⁷ See the DataShop website at <https://datashop.cboe.com> for information regarding historical CFE market data made available by Cboe LiveVol, LLC and associated fees. See the Cboe website at <https://cboe.com/index/licensing-data/licensing> for information regarding derived data licensing.

²⁸ C Level Exchange Data Reports are standard reports regularly generated and run by the Exchange and made available on a daily, weekly, or monthly basis that do not require historical data generation, customization beyond a standard format (PDF, HTML, etc.) or distribution frequency (daily, weekly, monthly, etc.), or specialized development.

²⁹ B Level Exchange Data Reports are initial report requests (or enhancements to existing subscriptions) that require less than one man-hour to develop and/or generate.

³⁰ Fees will be estimated in advance, and estimates will be provided to the requester. If the estimate changes once creation of the report begins, a revised estimate will be provided to the requester.

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³¹ A Level Exchange Data Reports are initial report requests (or enhancements to existing subscriptions) that require one or more man-hours to develop and/or generate.