## Cboe Exchange, Inc.

Fees Schedule - [April 25] July 1, 2019

Specified Proprietary Index Options Rate Table - Underlying Symbol List A (34) and Sector Indexes (47)(41) (Also applies to GTH)(37) Options Transaction Fees (1)(3)(4)(7)(15)(32)(39) VIX Only **Transaction Fee Per Contract by Premium Price** SPX (incl SPXw) in GTH Only Origin **Products** Origin Code AIM Agency/Primary \$0.00 - \$0.10 \$0.11 - \$0.99 \$1.00+ AIM Contra (18) (19) \$0.40 OEX and XEO OEX Weeklys, XEO Weeklys and Sector \$0.30 Indexes (47) Customer (2) RUT, RLG, RLV, RUI, AWDE, FTEM, FXTM С \$0.18 and UKXM (40) See Rates to Left SPX (incl SPXW) \$0.35 \$0.44 VIX and VOLATILITY INDEXES \$0.10 \$0.25 \$0.45 See Rates to Left Clearing Trading Permit Holder Proprietary \$0.25 - See Choe Options Clearing Trading Permit Holder Proprietary Products Slice ing Scales Underlying Symbol List A (34) FL (11)(12)(16)(40) Sector Indexes (47) \$0.25 - Fees for Facilitations will be waived through [June 30] December 31, 2019 See Rates to Left SPX (incl SPXW)(41) See SPX Liquidity Provider Sliding Scale \$0.30 RUT Cboe Options Market-Maker/ DPM/LMM RLG, RLV, RUI, AWDE, FTEM, FXTM, UKXM, м \$0.20 (10)(38)(42)(43) OEX and XEO (40) VIX and VOLATILITY INDEXES (43)(45) \$0.05 \$0.23 See Rates to Left See Liquidity Provider Sliding Scale and Liquidity Provider Sliding Scale Adjustment Table Sector Indexes (47) Joint Back-Office (45) Broker-Dealer (16) (45) OEX, XEO, SPX (incl SPXW), VIX, Volatility \$0.40 Non-Trading Permit Holder Market Maker Indexes and Sector Indexes (47) Professional/Voluntary Professional (45) Broker-Dealer (16) BNWJ Non-Trading Permit Holder Market Maker RUT, RLG, RLV, RUI, AWDE, FTEM, FXTM \$0.25 Manual and AIM/ \$0.65 non-AIM Electronic (16) and UKXM (40) Professional/Voluntary Professional/Joint Back-Office \$0.45 RUT SPX (incl SPXW) (41) \$0.16 OEX, RLG, RLV, RUI, AWDE, FTEM, FXTM, Surcharge Fee (14) Index License (41) UKXM, XEO, VIX, VOLATILITY INDEXES (Also applies to FJLMBNW \$0.10 (excluding GVZ, VXEEM, VXEWZ and OVX) GTH)(37) and Sector Indexes (47)(40) (This surcharge is waived, through [June 30] December 31, 2019, for Sector Indexes (47) and for origin codes F and L for VIX transactions where the Product Research & Development - GVZ, VXEEM, VXEWZ and VIX Premium is ≤ \$0.10 and the related series has an expiration of seven (7) calendar days or less.) ovx CFJLMBN CFLEX Surcharge Fee (17)(40) \$0.10 (capped at \$250 per trade) w \$0.25 **Exotic Surcharge** SPX Only (15) \$0.21 Execution Surcharge (21) SPXW (electronic only) (Also applies to **CFJLBNW** \$0.10 Customer Priority Surcharge (31) (Also VIX (Maker non-turner) С \$0.20 \$0.00 applies to GTH)(37)

Trading Permit and Tier Appointment Fees (24)(25)(26)(37)(49) Origin Type of Trading Permit or Tier Appointment Origin Code Access Fee Notes Market-Maker Trading Permit \$5,000 per month See Market-Maker Trading Permit Sliding Scale Market-Maker Trading Permit - GTH \$1,000 per month The fee is waived for the first Market-Maker Trading Permit through [June] September 30, 2019. М **RUT Tier Appointment** \$1,000 per month \$3,000 per month **SPX Tier Appointment** Cboe Options Market-Floor Broker SPX Surcharge \$3,000 per month Maker/DPM/LMM/ VIX Tier Appointment \$2,000 per month М Floor Broker \$2,000 per month Floor Broker VIX Surcharge \$9,000 per month Floor Broker Trading Permit See Floor Broker Trading Permit Sliding Scale **Electronic Access Permit** \$1,600 per month **Electronic Access Permit - GTH** The fee is waived for the first Electronic Access Permit through [June]September 30, 2019. \$500 per month

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Tradi	ng Permit Holder Bandwidth Packets	Amount Per Packet	
Quotir	ng and Order Entry Bandwidth Packet	\$2,750 per month	
Quoting and Order Entry Bandwidth Packet - GTH (37)		\$500 per month	
Oudes Fator	1st - 5th Packet	\$1,600 per month	
Order Entry Bandwidth Packet	6th - 8th Packet	\$800 per month	
	9th - 13th Packet	\$400 per month	
Fees for Trading Permit Holders	14th Packet and Each Additional Packet	\$200 per month	
Permit Holders	Order Entry Bandwidth Packet - GTH (37)	\$250 per month	
Sponsor	ed User Order Entry Bandwidth Packets	Amount Per Packet Per Assigned Sponsored User	
Fees for Order Entry	1st - 6th Packet	\$1,600 per month	
Bandwidth Packet(s)	7th - 9th Packet	\$800 per month	
Assigned to Sponsored	10th - 14th Packet	\$400 per month	
User	15th Packet and Each Additional Packet	\$200 per month	

Bandwidth packet fees are non-refundable and are assessed through the integrated billing system during the first week of the following month. If a bandwidth packet is issued during a calendar month after the first trading day of the month, the bandwidth packet fee for that calendar month is prorated based on the remaining trading days in the calendar month. Bandwidth packets will be renewed automatically for the next month unless the Trading Permit Holder submits written notification to the Registration Services Department by the last business day of the prior month to cancel the bandwidth packet effective at or prior to the end of the applicable month. For GTH, the fee is waived for the first Quoting and Order Entry Bandwidth Packet and the first Order Entry Bandwidth Packet through [June] September 30, 2019.

Notes

Cboe Command Connectivity Charges (28) (Also applies to GTH)(37)		Assessed to TPHs and non-TPHs		
Description	Fee	Frequency	Notes	
Network Access Port (1 Gbps)	\$1,500	Monthly	Separate Network Access Port fees are assessed for unicast (orders, quotes) and multicast (market data) connectivity (i.e., if a  TPH uses the 1 Gbps Network Access Port for unicast and multicast connectivity, the TPH will be charged \$3,000 per month.) If	
Network Access Port (10 Gbps)	\$5,000	Monthly	TPH uses the same port for RTH and GTH, the TPH will not be charged twice for that port.	
Network Access Port (1Gbps) (Disaster Recovery)	\$2,000	Monthly	Disaster Recovery Network Access Ports may be used to connect to the Disaster Recovery Systems of C2, Cboe BZX, Cboe BYX, Cboe EDGX, Cboe EDGA and CFE. Market participants will only be assessed a single fee for any Disaster Recovery Network Access Port that accesses these exchanges, If a market participant maintains two Disaster Recovery Network Access Ports of the	
Network Access Port (10 Gbps) (Disaster Recovery)	\$6,000	Monthly	same size in order to receive unicast and multicast connectivity, that market participant will only be assessed a single fee (e.g., i a TPH uses one 1 Gbps Disaster Recovery Network Access Port to receive only unicast traffic and one 1 Gbps Disaster Recovery Network Access Port to receive only multicast traffic, the TPH will be charged \$2,000 per month).	
CMI Login ID	\$750	Monthly	will be waived through [June]September 30, 2019, if the CMI and/or FIX Login ID is related to a waived GTH Trading Permit	
FIX Login ID	\$750	Monthly		

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MSCI LMM Incentive Program Mid Term Expiring Near Term Long Term 61 days to 270 days Origin Origin Code **Premium Level** 7 days or less 8 days to 60 days 271 days or Greater Width Size Width Size Width Size Width Size \$0.00 - \$5.00 \$3.00 \$1.50 20 \$2.50 15 \$5.00 10 \$5.01 - \$15.00 \$6.00 \$3.00 15 \$5.00 10 \$10.00 3 7 \$15.01 - \$50.00 \$15.00 2 \$7.50 10 \$10.00 7 \$20.00 5 LMM Μ \$50.01 - \$100.00 \$25.00 \$15.00 \$20.00 \$30.00 5 3 \$40.00 \$100.01 - \$200.00 \$25.00 3 \$35.00 3 \$48.00 2 Greater than \$200.01 \$60.00 \$40.00 \$50.00 \$72.00

For MXEA and MXEF, if the appointed LMM provides continuous electronic quotes during Regular Trading Hours that meet or exceed the above heightened quoting standards in at least 90% of the MXEA and MXEF series 80% of the time in a given month, the LMM will receive a payment for that month in the amount of \$40,000 per class for the month of February 2019, and \$20,000 per class, per month thereafter. The Exchange may consider other exceptions to this quoting standard based on demonstrated legal or regulatory requirements or other mitigating circumstances. This program will be in place through [June 30]December 31, 2019.

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Footnotes:					
Footnote Number	Description				
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11	The Clearing Trading Permit Holder Fee Cap in all products except Underlying Symbol List A (34) excluding binary options (the "Fee Cap") and Sector Indexes (47), the Cboe Options Proprietary Products Sliding Scale for Clearing Trading Permit Holder Proprietary Orders (the "Proprietary Products Sliding Scale")[,] and the Clearing Trading Permit Holder Affiliates of a Clearing Trading Permit Holder Affiliate of a Clearing Trading Permit Holder Affiliate for Subsidiary of a Clearing Trading Permit Holder Affiliates of a Clearing Trading Permit Holder Affiliate for Subsidiary of a Clearing Trading Permit Holder that is registered as a United States or foreign broker-dealer and that is not a Cboe Options Trading Permit Holder Affiliate for Subsidiary of a Clearing Trading Permit Holder Affiliate for Subsidiary of a Clearing Trading Permit Holder Affiliate for Subsidiary of a Clearing Trading Permit Holder Affiliate for Subsidiary of a Clearing Trading Permit Holder Affiliate for Subsidiary of a Clearing Trading Permit Holder Affiliate for Subsidiary of Su				
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40	All transaction fees for RLG, RLV, RUI, AWDE, FTEM, FXTM and UKXM are waived through [June 30] December 31, 2019.				
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43	The DPM appointed for an entire month in UKXM will receive a payment of \$5,000 per month through [June 30]December 31, 2019.				

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