

**Exhibit 5**

New text is underlined;  
Deleted text is in [brackets]

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**MIAX Options Fee Schedule**

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**1) Transaction Fees****a) Multiply-Listed Options Exchange Fees**

i) - x) No Change.

xi) Marketing Fee[SPIKES<sup>△</sup>]

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Simple and Complex Fees <sup>#</sup>						
Origin	Simple/Complex <sup>¥</sup> Maker	Simple/Complex <sup>¥</sup> Taker	Simple Opening	Combination <sup>~!</sup>	Simple Large Trade Discount Threshold+	Complex Large Trade Discount Threshold+
<i>Priority Customer</i>	\$0.00	\$0.00	\$0.00	\$0.00	0	0
<i>Market Maker</i>	\$0.00	\$0.20*	\$0.15	\$0.01	First 10,000 contracts	First 25,000 contracts
<i>Non-MIAX Market Maker</i>	\$0.10	\$0.25	\$0.15	\$0.01	First 10,000 contracts	First 25,000 contracts
<i>Broker- Dealer</i>	\$0.10	\$0.25	\$0.15	\$0.01	First 10,000 contracts	First 25,000 contracts
<i>Firm Proprietary</i>	\$0.00	\$0.20*	\$0.15	\$0.01	First 10,000 contracts	First 25,000 contracts
<i>Public Customer that is Not a Priority Customer</i>	\$0.10	\$0.25	\$0.15	\$0.01	First 10,000 contracts	First 25,000 contracts

<sup>△</sup> SPIKES is a "Proprietary Product." The term "Proprietary Product" means a class of options that is listed exclusively on the Exchange. See MIAX Rule 100.

\* Taker fees for options with a premium price of \$0.10 or less will be charged \$0.05 per contract.

- ~ A “SPIKES Combination” is a purchase (sale) of a SPIKES call option and sale (purchase) of a SPIKES put option having the same expiration date and strike price.
- ! The SPIKES Combination portion of a SPIKES Combination Order will be charged at the Combination rate and other legs will be charged at the Complex rate. All fees are per contract per leg.
- + Tied to Single Order/Quote ID. For any single order/quote, no fee shall apply to the number of contracts executed above the Simple or Complex Large Trade Discount Threshold. This discount does not apply to Priority Customer orders, Maker orders, SPIKES Opening orders, and the Surcharge. The Complex Large Trade Discount does not apply to SPIKES Combination Orders.
- ¥ For quotes/orders in a Complex Auction, Priority Customer Complex Orders will receive the Complex Maker rate. Origins that are not a Priority Customer will be charged the applicable Complex Taker rate.

### Market Turner Incentive Program

The term “Market Turner” means a Market Maker simple quote (not eQuote) that establishes and maintains the new MIAX best bid (the “MBB”) or the MIAX best offer (“MBO”) in a SPIKES option. Under the Market Turner Incentive Program, the Exchange will pay a per contract rebate to the Market Turner for each contract that executes as the MBB (MBO). The amount of the rebate shall be (i) \$0.20 per executed contract, for options having a premium price greater than \$0.10, or (ii) \$0.05 per executed contract, for options having a premium price of \$0.10 or less.

PRIME and cPRIME Fees <sup>#</sup>						
Origin	Initiating	Contra	Responder	Break-up	PRIME Large Trade Discount Threshold <sup>^</sup>	cPRIME Large Trade Discount Threshold <sup>◇</sup>
<i>Priority Customer</i>	\$0.00	\$0.20	\$0.25	(\$0.15)	First 10,000 contracts	First 25,000 contracts
<i>Market Maker</i>	\$0.10	\$0.20	\$0.25	(\$0.15)	First 10,000 contracts	First 25,000 contracts
<i>Non-MIAX Market Maker</i>	\$0.10	\$0.20	\$0.25	(\$0.15)	First 10,000 contracts	First 25,000 contracts
<i>Broker-Dealer</i>	\$0.10	\$0.20	\$0.25	(\$0.15)	First 10,000 contracts	First 25,000 contracts
<i>Firm Proprietary</i>	\$0.10	\$0.20	\$0.25	(\$0.15)	First 10,000 contracts	First 25,000 contracts
<i>Public Customer that is Not a Priority Customer</i>	\$0.10	\$0.20	\$0.25	(\$0.15)	First 10,000 contracts	First 25,000 contracts

- # An Index License Surcharge (“Surcharge”) of \$0.075 will apply to any contract that is executed by an Origin except Priority Customer. The Surcharge applies per contract side per leg. The Surcharge will be waived for the “Waiver Period” which, for purposes of this Section 1)a)xi) of the Fee Schedule, means the period of time from the launch of trading of SPIKES options until such time that the Exchange submits a filing to terminate the Waiver Period. The Exchange will issue a Regulatory Circular announcing the end of the Waiver Period at least fifteen (15) days prior to the termination of the Waiver Period and effective date of such Surcharge.

- ^ The transaction fee for SPIKES PRIME will be capped at 10,000 contracts from a single order, for the Agency Side and Contra Side independently. Contracts greater than the threshold will not be charged the transaction fee but will continue to be charged the Surcharge. Responder fees and Break-up Credits will not be capped.
- ◇ The transaction fee for SPIKES cPRIME will be capped at 25,000 contracts that are traded per strategy from a single order, for the Agency Side and for the Contra Side independently. Contracts greater than the threshold will not be charged the transaction fee but will continue to be charged the Surcharge. Responder fees and Break-up Credits will not be capped. The cPRIME Large Trade Discount does not apply to SPIKES Combination Orders.

For SPIKES in PRIME, MIAX will assess the Responder to PRIME Auction Fee to: (i) a PRIME AOC Response that executes against a PRIME Order, and (ii) a PRIME Participating Quote or Order that executes against a PRIME Order. MIAX will apply the PRIME Break-up credit to the EEM that submitted the PRIME Order for agency contracts that are submitted to the PRIME Auction that trade with a PRIME AOC Response or a PRIME Participating Quote or Order that trades with the PRIME Order.

For SPIKES in cPRIME, all fees and credits are per contract per leg for Complex and Combination volume. Further, MIAX will assess the Responder to cPRIME Auction Fee to: (i) a cPRIME AOC Response that executes against a cPRIME Order, and (ii) a cPRIME Participating Quote or Order that executes against a cPRIME Order. MIAX will apply the cPRIME Break-up credit to the EEM that submitted the cPRIME Order for agency contracts that are submitted to the cPRIME Auction that trade with a cPRIME AOC Response or a cPRIME Participating Quote or Order that trades with the cPRIME Order.

<b>Combinations in cPRIME</b>				
<b>Origin</b>	<b>Initiating</b>	<b>Contra</b>	<b>Responder</b>	<b>Break-up</b>
<i>Priority Customer</i>	\$0.00	\$0.01	\$0.01	(\$0.01)
<i>Market Maker</i>	\$0.01	\$0.01	\$0.01	(\$0.01)
<i>Non-MIAX Market Maker</i>	\$0.01	\$0.01	\$0.01	(\$0.01)
<i>Broker-Dealer</i>	\$0.01	\$0.01	\$0.01	(\$0.01)
<i>Firm Proprietary</i>	\$0.01	\$0.01	\$0.01	(\$0.01)
<i>Public Customer that is Not a Priority Customer</i>	\$0.01	\$0.01	\$0.01	(\$0.01)

<b>SPIKES Settlement Day SPY Opening Auction Fees</b>	
<b>Origin</b>	<b>SPY Opening Quotes/Orders<sup>H</sup></b>
<i>Priority Customer</i>	\$0.00
<i>Market Maker</i>	\$0.03
<i>Non-MIAX Market Maker</i>	\$0.06
<i>Broker-Dealer</i>	\$0.06
<i>Firm Proprietary</i>	\$0.03

<i>Public Customer that is Not a Priority Customer</i>	\$0.06
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- ⌘ These fees will be charged to each side of all trades occurring in the SPY opening in the expiration month used to determine SPIKES settlement on settlement day only; in lieu of any other fees in the Fee Schedule.]

MIAX will assess a Marketing Fee to all Market Makers for contracts, including mini options, they execute in their assigned classes in simple or complex order executions when the contra-party to the execution is a Priority Customer. The Marketing Fee in complex order executions will be assessed per contract (whether the transaction executes in a strategy match, complex auction, or by legging into the Book). MIAX will not assess a Marketing Fee to Market Makers for contracts executed: (i) as a PRIME or cPRIME Agency Order, or as a QCC or cQCC Order; (ii) when a PRIME Participating Quote or Order or a PRIME AOC Response trades against a PRIME Agency Order; or (iii) when a cPRIME Participating Quote or Order or a cPRIME AOC Response trades against a cPRIME Agency Order.

Members that are assigned as PLMMs and LMMs will have a Marketing Fee “pool” into which the Exchange will deposit the applicable per-contract Marketing Fee. For orders directed to PLMMs and LMMs, applicable Marketing Fees are allocated to the PLMM’s or LMM’s Marketing Fee “pool.” For non-directed orders, applicable Marketing Fees are allocated to the PLMM’s Marketing Fee “pool.” All Market Makers that participated in such transactions will pay the applicable Marketing Fee to the Exchange, which will allocate such funds to the Member that controls the distribution of the Marketing Fee “pool.” Each month the Member will submit written instructions to MIAX describing how MIAX is to distribute the Marketing Fees in the “pool” to Electronic Exchange Members identified by the Member.

Undispersed Marketing Fees will be reimbursed to Market Makers that contributed to the “pool” based upon their pro-rata portion of the entire amount of Marketing Fees collected on a three month rolling schedule.

<b>Amount of Marketing Fee Assessed</b>	<b>Option Classes</b>
<u>\$0.70 (per contract)</u>	<u>Simple and complex order transactions in Standard Option Classes that are not in the Penny Program</u>
<u>\$0.25 (per contract)</u>	<u>Simple and complex order transactions in Standard Option Classes that are in the Penny Program (a List of those Standard Option Classes in the Penny Program is available on the MIAX Website)</u>
<u>\$0.070 (per contract)</u>	<u>Simple and complex order transactions in Mini Options where the corresponding Standard Option is not in the Penny Program</u>
<u>\$0.025 (per contract)</u>	<u>Simple and complex order transactions in Mini Options where the corresponding Standard Option is in the Penny Program (a List of those Standard Option Classes in the Penny Program is available on the MIAX Website)</u>

## **b) Proprietary Products Exchange Fees[Marketing Fee]**

[MIAX will assess a Marketing Fee to all Market Makers for contracts, including mini options, they execute in their assigned classes in simple or complex order executions when the contra-party to the execution is a Priority Customer. The Marketing Fee in complex order executions will be assessed per contract (whether the transaction executes in a strategy match, complex auction, or by legging into the Book). MIAX will not assess a Marketing Fee to Market Makers for contracts executed: (i) as a PRIME or cPRIME Agency Order, or as a QCC or cQCC Order; (ii) when a PRIME Participating Quote or Order or a PRIME AOC Response trades against a PRIME Agency Order; or (iii) when a cPRIME Participating Quote or Order or a cPRIME AOC Response trades against a cPRIME Agency Order.

Members that are assigned as PLMMs and LMMs will have a Marketing Fee “pool” into which the Exchange will deposit the applicable per-contract Marketing Fee. For orders directed to PLMMs and LMMs, applicable Marketing Fees are allocated to the PLMM’s or LMM’s Marketing Fee “pool.” For non-directed orders, applicable Marketing Fees are allocated to the PLMM’s Marketing Fee “pool.” All Market Makers that participated in such transactions will pay the applicable Marketing Fee to the Exchange, which will allocate such funds to the Member that controls the distribution of the Marketing Fee “pool.” Each month the Member will submit written instructions to MIAX describing how MIAX is to distribute the Marketing Fees in the “pool” to Electronic Exchange Members identified by the Member.

Undispersed Marketing Fees will be reimbursed to Market Makers that contributed to the “pool” based upon their pro-rata portion of the entire amount of Marketing Fees collected on a three month rolling schedule.

Amount of Marketing Fee Assessed	Option Classes
\$0.70 (per contract)	Simple and complex order transactions in Standard Option Classes that are not in the Penny Program
\$0.25 (per contract)	Simple and complex order transactions in Standard Option Classes that are in the Penny Program (a List of those Standard Option Classes in the Penny Program is available on the MIAX Website)
\$0.070 (per contract)	Simple and complex order transactions in Mini Options where the corresponding Standard Option is not in the Penny Program
\$0.025 (per contract)	Simple and complex order transactions in Mini Options where the corresponding Standard Option is in the Penny Program (a List of those Standard Option Classes in the Penny Program is available on the MIAX Website)

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**i) SPIKES<sup>△</sup>**

Simple and Complex Fees <sup>#</sup>						
Origin	Simple/Complex <sup>¥</sup> Maker	Simple/Complex <sup>¥</sup> Taker	Simple Opening	Combination <sup>~!</sup>	Simple Large Trade Discount Threshold+	Complex Large Trade Discount Threshold+

<u>Priority Customer</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>0</u>	<u>0</u>
<u>Market Maker</u>	<u>\$0.00</u>	<u>\$0.20*</u>	<u>\$0.15</u>	<u>\$0.01</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>
<u>Non-MIAX Market Maker</u>	<u>\$0.10</u>	<u>\$0.25</u>	<u>\$0.15</u>	<u>\$0.01</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>
<u>Broker-Dealer</u>	<u>\$0.10</u>	<u>\$0.25</u>	<u>\$0.15</u>	<u>\$0.01</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>
<u>Firm Proprietary</u>	<u>\$0.00</u>	<u>\$0.20*</u>	<u>\$0.15</u>	<u>\$0.01</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>
<u>Public Customer that is Not a Priority Customer</u>	<u>\$0.10</u>	<u>\$0.25</u>	<u>\$0.15</u>	<u>\$0.01</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>

△ SPIKES is a “Proprietary Product.” The term “Proprietary Product” means a class of options that is listed exclusively on the Exchange. See MIA X Rule 100.

\* Taker fees for options with a premium price of \$0.10 or less will be charged \$0.05 per contract.

~ A “SPIKES Combination” is a purchase (sale) of a SPIKES call option and sale (purchase) of a SPIKES put option having the same expiration date and strike price.

! The SPIKES Combination portion of a SPIKES Combination Order will be charged at the Combination rate and other legs will be charged at the Complex rate. All fees are per contract per leg.

+ Tied to Single Order/Quote ID. For any single order/quote, no fee shall apply to the number of contracts executed above the Simple or Complex Large Trade Discount Threshold. This discount does not apply to Priority Customer orders, Maker orders, SPIKES Opening orders, and the Surcharge. The Complex Large Trade Discount does not apply to SPIKES Combination Orders.

¥ For quotes/orders in a Complex Auction, Priority Customer Complex Orders will receive the Complex Maker rate. Origins that are not a Priority Customer will be charged the applicable Complex Taker rate.

### **Market Turner Incentive Program**

The term “Market Turner” means a Market Maker simple quote (not eQuote) that establishes and maintains the new MIA X best bid (the “MBB”) or the MIA X best offer (“MBO”) in a SPIKES option. Under the Market Turner Incentive Program, the Exchange will pay a per contract rebate to the Market Turner for each contract that executes as the MBB (MBO). The amount of the rebate shall be (i) \$0.20 per executed contract, for options having a premium price greater than \$0.10, or (ii) \$0.05 per executed contract, for options having a premium price of \$0.10 or less.

<b><u>PRIME and cPRIME Fees#</u></b>						
<u>Origin</u>	<u>Initiating</u>	<u>Contra</u>	<u>Responder</u>	<u>Break-up</u>	<u>PRIME Large Trade Discount</u>	<u>cPRIME Large Trade Discount</u>

					<b>Threshold<sup>^</sup></b>	<b>Threshold<sup>◇</sup></b>
<i>Priority Customer</i>	<u>\$0.00</u>	<u>\$0.20</u>	<u>\$0.25</u>	<u>(\$0.15)</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>
<i>Market Maker</i>	<u>\$0.10</u>	<u>\$0.20</u>	<u>\$0.25</u>	<u>(\$0.15)</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>
<i>Non-MIAX Market Maker</i>	<u>\$0.10</u>	<u>\$0.20</u>	<u>\$0.25</u>	<u>(\$0.15)</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>
<i>Broker-Dealer</i>	<u>\$0.10</u>	<u>\$0.20</u>	<u>\$0.25</u>	<u>(\$0.15)</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>
<i>Firm Proprietary</i>	<u>\$0.10</u>	<u>\$0.20</u>	<u>\$0.25</u>	<u>(\$0.15)</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>
<i>Public Customer that is Not a Priority Customer</i>	<u>\$0.10</u>	<u>\$0.20</u>	<u>\$0.25</u>	<u>(\$0.15)</u>	<u>First 10,000 contracts</u>	<u>First 25,000 contracts</u>

# An Index License Surcharge (“Surcharge”) of \$0.075 will apply to any contract that is executed by an Origin except Priority Customer. The Surcharge applies per contract side per leg. The Surcharge will be waived for the “Waiver Period” which, for purposes of this Section 1)b) of the Fee Schedule, means the period of time from the launch of trading of SPIKES options until such time that the Exchange submits a filing to terminate the Waiver Period. The Exchange will issue a Regulatory Circular announcing the end of the Waiver Period at least fifteen (15) days prior to the termination of the Waiver Period and effective date of such Surcharge.

<sup>^</sup> The transaction fee for SPIKES PRIME will be capped at 10,000 contracts from a single order, for the Agency Side and Contra Side independently. Contracts greater than the threshold will not be charged the transaction fee but will continue to be charged the Surcharge. Responder fees and Break-up Credits will not be capped.

<sup>◇</sup> The transaction fee for SPIKES cPRIME will be capped at 25,000 contracts that are traded per strategy from a single order, for the Agency Side and for the Contra Side independently. Contracts greater than the threshold will not be charged the transaction fee but will continue to be charged the Surcharge. Responder fees and Break-up Credits will not be capped. The cPRIME Large Trade Discount does not apply to SPIKES Combination Orders.

For SPIKES in PRIME, MIAX will assess the Responder to PRIME Auction Fee to: (i) a PRIME AOC Response that executes against a PRIME Order, and (ii) a PRIME Participating Quote or Order that executes against a PRIME Order. MIAX will apply the PRIME Break-up credit to the EEM that submitted the PRIME Order for agency contracts that are submitted to the PRIME Auction that trade with a PRIME AOC Response or a PRIME Participating Quote or Order that trades with the PRIME Order.

For SPIKES in cPRIME, all fees and credits are per contract per leg for Complex and Combination volume. Further, MIAX will assess the Responder to cPRIME Auction Fee to: (i) a cPRIME AOC Response that executes against a cPRIME Order, and (ii) a cPRIME Participating Quote or Order that executes against a cPRIME Order. MIAX will apply the cPRIME Break-up credit to the EEM that submitted the cPRIME Order for agency contracts that are submitted to the cPRIME Auction that trade with a cPRIME AOC Response or a cPRIME Participating Quote or Order that trades with the cPRIME Order.

<b><u>Combinations in cPRIME</u></b>				
<b><u>Origin</u></b>	<b><u>Initiating</u></b>	<b><u>Contra</u></b>	<b><u>Responder</u></b>	<b><u>Break-up</u></b>

<i>Priority Customer</i>	<u>\$0.00</u>	<u>\$0.01</u>	<u>\$0.01</u>	<u>(\$0.01)</u>
<i>Market Maker</i>	<u>\$0.01</u>	<u>\$0.01</u>	<u>\$0.01</u>	<u>(\$0.01)</u>
<i>Non-MIAX Market Maker</i>	<u>\$0.01</u>	<u>\$0.01</u>	<u>\$0.01</u>	<u>(\$0.01)</u>
<i>Broker-Dealer</i>	<u>\$0.01</u>	<u>\$0.01</u>	<u>\$0.01</u>	<u>(\$0.01)</u>
<i>Firm Proprietary</i>	<u>\$0.01</u>	<u>\$0.01</u>	<u>\$0.01</u>	<u>(\$0.01)</u>
<i>Public Customer that is Not a Priority Customer</i>	<u>\$0.01</u>	<u>\$0.01</u>	<u>\$0.01</u>	<u>(\$0.01)</u>

<b>SPIKES Settlement Day SPY Opening Auction Fees</b>	
<u>Origin</u>	<u>SPY Opening Quotes/Orders<sup>x</sup></u>
<i>Priority Customer</i>	<u>\$0.00</u>
<i>Market Maker</i>	<u>\$0.03</u>
<i>Non-MIAX Market Maker</i>	<u>\$0.06</u>
<i>Broker-Dealer</i>	<u>\$0.06</u>
<i>Firm Proprietary</i>	<u>\$0.03</u>
<i>Public Customer that is Not a Priority Customer</i>	<u>\$0.06</u>

<sup>x</sup> These fees will be charged to each side of all trades occurring in the SPY opening in the expiration month used to determine SPIKES settlement on settlement day only; in lieu of any other fees in the Fee Schedule.

c) No Change.

2) No Change.

3) Membership Fees

a) Application for MIAX Membership (One-Time Fee)

<u>Type of Membership</u>	<u>Application Fee</u>
Electronic Exchange Member	\$2,500.00
Market Maker	\$3,000.00

MIAX will assess a one-time Membership Application Fee on the earlier of (i) the date the applicant is certified in the membership system, or (ii) once an application for MIAX membership is finally denied. The Membership Application Fee for a Market Maker that will trade solely in Proprietary Products is waived until [September 30, 2020]December 31, 2020.



## b) Monthly Trading Permit Fee

MIAX will issue Trading Permits<sup>19</sup> to Members that confer the ability to transact on MIAX. Members receiving Trading Permits during a particular calendar month will be assessed Trading Permit Fees according to the schedules below.

Type of Trading Permit	Monthly MIAX Trading Permit Fee
Electronic Exchange Member	\$1,500.00

Monthly Trading Permit Fees will be assessed with respect to EEMs (other than Clearing Firms) in any month the EEM is certified in the membership system and the EEM is credentialed to use one or more FIX Ports in the production environment.

Monthly Trading Permit Fees will be assessed with respect to EEM-Clearing Firms in any month the Clearing Firm is certified in the membership system to clear transactions on the Exchange.

Monthly Trading Permit Fees will be assessed with respect to Market Makers in any month the Market Maker is certified in the membership system, is credentialed to use one or more MEI Ports in the production environment and is assigned to quote in one or more classes.

Notwithstanding the foregoing, the calculation of the Trading Permit Fee for the first month in which the Trading Permit is issued will be pro-rated based on the number of trading days on which the Trading Permit was in effect divided by the total number of trading days in that month multiplied by the monthly rate.

Type of Trading Permit	Monthly MIAX Trading Permit Fee	Market Maker Assignments (the lesser of the applicable measurements below) $\Omega$	
		Per Class	% of National Average Daily Volume
Market Maker (includes RMM, LMM, PLMM)	\$7,000.00	Up to 10 Classes	Up to 20% of Classes by volume
	\$12,000.00	Up to 40 Classes	Up to 35% of Classes by volume
	\$17,000.00*	Up to 100 Classes	Up to 50% of Classes by volume
	\$22,000.00*	Over 100 Classes	Over 50% of Classes by volume up to all Classes listed on MIAX

$\Omega$  Excludes Proprietary Products.

\* For these Monthly MIAX Trading Permit Fee levels, if the Market Maker's total monthly executed volume during the relevant month is less than 0.060% of the total monthly executed volume reported by OCC in the market maker account type for MIAX-listed option classes for that month, then the fee will be \$15,500 instead of the fee otherwise applicable to such level.

For the calculation of the monthly Market Maker Trading Permit Fees, the number of classes is defined as the greatest number of classes the Market Maker was assigned to quote in on any given day within the calendar month and the class volume percentage is based on the total national average daily volume in classes listed on MIAX in the prior calendar quarter. Newly listed option

<sup>19</sup> For a complete description of MIAX Trading Permits, see MIAX Rule 200.

classes are excluded from the calculation of the monthly Market Maker Trading Permit Fee until the calendar quarter following their listing, at which time the newly listed option classes will be included in both the per class count and the percentage of total national average daily volume. The Exchange will assess MIAX Market Makers the monthly Market Maker Trading Permit Fee based on the greatest number of classes listed on MIAX that the MIAX Market Maker was assigned to quote in on any given day within a calendar month and the applicable fee rate that is the lesser of either the per class basis or percentage of total national average daily volume measurement. For example, if Market Maker 1 elects to quote the top 40 option classes which consist of 58% of the total national average daily volume in the prior calendar quarter, the Exchange would assess \$12,000 to Market Maker 1 for the month which is the lesser of 'up to 40 classes' and 'over 50% of classes by volume up to all classes listed on MIAX'. If Market Maker 2 elects to quote the bottom 1000 option classes which consist of 10% of the total national average daily volume in the prior quarter, the Exchange would assess \$7,000 to Market Maker 2 for the month which is the lesser of 'over 100 classes' and 'up to 20% of classes by volume'. The Market Maker Trading Permit Fee for a Market Maker that trades solely in Proprietary Products is waived until [September 30, 2020]December 31, 2020.

#### 4) Testing and Certification Fees

##### a) Member Application Programming Interface (API) Testing and Certification Fee

Type of Member	API Testing and Certification Fee
Electronic Exchange Member	\$1,000.00
Market Maker	\$2,500.00

API Testing and Certification Fees for EEMs (other than clearing firms) will be assessed (i) initially per API for FIX, FXD and CTD (as defined below) in the month the EEM has been credentialed to use one or more ports in the production environment for the tested API, and (ii) each time an EEM initiates a change to its system that requires testing and certification.

API Testing and Certification Fees for EEM-Clearing Firms will be assessed (i) initially per API in the month the EEM-Clearing Firm has been credentialed to use one or more CTD ports in the production environment, and (ii) each time an EEM-Clearing Firm initiates a change to its system that requires testing and certification.

API Testing and Certification Fees for Market Makers will be assessed (i) initially per API for CTD and MEI (as defined below) in the month the Market Maker has been credentialed to use one or more ports in the production environment for the tested API and the Market Maker has been assigned to quote in one or more classes, and (ii) each time a Market Maker initiates a change to its system that requires testing and certification.

API Testing and Certification Fees will not be assessed in situations where the Exchange initiates a mandatory change to the Exchange's system that requires testing and certification. The API Testing and Certification Fee for a Market Maker that will trade solely in Proprietary Products is waived until [September 30, 2020]December 31, 2020.

b) - d) No Change.

## 5) System Connectivity Fees

a) - c) No Change.

### d) Port Fees

i) No Change.

#### ii) MEI Port Fees

Monthly MIAX MEI Fees	Market Maker Assignments (the lesser of the applicable measurements below) $\Omega$	
	Per Class	% of National Average Daily Volume
\$5,000.00	Up to 5 Classes	Up to 10% of Classes by volume
\$10,000.00	Up to 10 Classes	Up to 20% of Classes by volume
\$14,000.00	Up to 40 Classes	Up to 35% of Classes by volume
\$17,500.00*	Up to 100 Classes	Up to 50% of Classes by volume
\$20,500.00*	Over 100 Classes	Over 50% of Classes by volume up to all Classes listed on MIAX

$\Omega$  Excludes Proprietary Products.

\* For these Monthly MIAX MEI Fees levels, if the Market Maker's total monthly executed volume during the relevant month is less than 0.060% of the total monthly executed volume reported by OCC in the market maker account type for MIAX-listed option classes for that month, then the fee will be \$14,500 instead of the fee otherwise applicable to such level.

MIAX will assess monthly MIAX Express Interface ("MEI")<sup>26</sup> Port Fees on Market Makers in each month the Member has been credentialed to use the MEI Port in the production environment and has been assigned to quote in at least one class. The amount of the monthly MEI Port Fee will be based upon the number of classes in which the Market Maker was assigned to quote on any given day within the calendar month, and upon the class volume percentages set forth in the above table. The class volume percentage is based on the total national average daily volume in classes listed on MIAX in the prior calendar quarter. Newly listed option classes are excluded from the calculation of the monthly MEI Port Fee until the calendar quarter following their listing, at which time the newly listed option classes will be included in both the per class count and the percentage of total national average daily volume. The Exchange will assess MIAX Market Makers the monthly MEI Port Fee based on the greatest number of classes listed on MIAX that the MIAX Market Maker was assigned to quote in on any given day within a calendar month and the applicable fee rate that is the lesser of either the per class basis or percentage of total national average daily volume measurement. For example, if Market Maker 1 elects to quote the top 40 option classes which consist of 58% of the total national average daily volume in the prior calendar quarter, the Exchange would assess

<sup>26</sup> MIAX Express Interface is a connection to MIAX systems that enables Market Makers to submit simple and complex electronic quotes to MIAX.

\$14,000 to Market Maker 1 for the month which is the lesser of ‘up to 40 classes’ and ‘over 50% of classes by volume up to all classes listed on MIAX’. If Market Maker 2 elects to quote the bottom 1000 option classes which consist of 10% of the total national average daily volume in the prior quarter, the Exchange would assess \$5,000 to Market Maker 2 for the month which is the lesser of ‘over 100 classes’ and ‘up to 10% of classes by volume’.

MEI Port users will be allocated two (2) Full Service MEI Ports<sup>27</sup> and two (2) Limited Service MEI Ports<sup>28</sup> per matching engine<sup>29</sup> to which they connect. MEI Port Fees include MEI Ports at the Primary, Secondary and Disaster Recovery data centers. MIAX Market Makers may request additional Limited Service MEI Ports for which MIAX will assess MIAX Market Makers \$100 per month per additional Limited Service MEI Port for each engine.<sup>30</sup>

A MIAX Market Maker may request and be allocated two (2) Purge Ports<sup>31</sup> per matching engine to which it connects via a Full Service MEI Port. For each month in which the MIAX Market Maker has been credentialed to use Purge Ports in the production environment and has been assigned to quote in at least one class, the Exchange will assess the MIAX Market Maker a flat fee of \$1,500 per month, regardless of the number of Purge Ports allocated to the MIAX Market Maker.

The MEI Port Fee for a Market Maker that trades solely in Proprietary Products is waived until [September 30, 2020]December 31, 2020.

**(iii) -(iv) No Change.**

**e) - f) No Change.**

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<sup>27</sup> Full Service MEI Ports provide Market Makers with the ability to send Market Maker simple and complex quotes, eQuotes, and quote purge messages to the MIAX System. Full Service MEI Ports are also capable of receiving administrative information. Market Makers are limited to two Full Service MEI Ports per matching engine.

<sup>28</sup> Limited Service MEI Ports provide Market Makers with the ability to send simple and complex eQuotes and quote purge messages only, but not Market Maker Quotes, to the MIAX System. Limited Service MEI Ports are also capable of receiving administrative information. Market Makers initially receive two Limited Service MEI Ports per matching engine.

<sup>29</sup> A “matching engine” is a part of the MIAX electronic system that processes options quotes and trades on a symbol-by- symbol basis. Some matching engines will process option classes with multiple root symbols, and other matching engines will be dedicated to one single option root symbol (for example, options on SPY will be processed by one single matching engine that is dedicated only to SPY). A particular root symbol may only be assigned to a single designated matching engine. A particular root symbol may not be assigned to multiple matching engines.

<sup>30</sup> Market Makers are limited to six additional Limited Service MEI Ports per matching engine, for a total of eight per matching engine.

<sup>31</sup> Purge Ports provide Market Makers with the ability to send quote purge messages to the MIAX System. Purge Ports are not capable of sending or receiving any other type of messages or information.