

**Exhibit 5**

New text is underlined;  
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**MIAX Options Fee Schedule**

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**1) – 2) No Change.****3) Membership Fees****a) Application for MIAX Membership (One-Time Fee)**

Type of Membership	Application Fee
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, 2019] December 31, 2019.

**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.

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

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 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, 2019] December 31, 2019.

## 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, 2019] December 31, 2019.

**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 \$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'.

<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.

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, 2019] December 31, 2019.

**(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.