



# FEE SCHEDULE

AS OF OCTOBER 4, 2018

All Exchange invoices are due in full on a timely basis and payable in accordance with MIAX PEARL Rule 208. All disputes related to fees, dues or other charges must be submitted to the Exchange in writing no later than sixty (60) days after the date of the monthly invoice and must be accompanied by supporting documentation.

---

---

## TABLE OF CONTENTS

	<u>Page</u>
<b>Definitions .....</b>	<b>1</b>
<b>1) Transaction Rebates/Fees .....</b>	<b>5</b>
a) Exchange Rebates/Fees – Add/Remove Tiered Rebates/Fees .....	5
b) Fees and Rebates for Customer Orders Routed to Another Options Exchange.....	6
<b>2) Regulatory Fees .....</b>	<b>7</b>
a) Sales Value Fee .....	7
b) Options Regulatory Fee .....	7
c) Web CRD Fees.....	8
<b>3) Membership Fees .....</b>	<b>9</b>
a) Application for MIAX PEARL Membership (One-Time Fee) .....	9
b) Monthly Trading Permit Fee .....	9
<b>4) Testing and Certification Fees.....</b>	<b>9</b>
a) Member Application Programming Interface (“API”) Testing and Certification Fee .....	9
b) Non-Member API Testing and Certification Fee .....	10
c) Member Network Connectivity Testing and Certification Fee .....	10
d) Non-Member Network Connectivity Testing and Certification Fee .....	11
<b>5) System Connectivity Fees .....</b>	<b>11</b>
a) Monthly Member Network Connectivity Fee .....	11
b) Monthly Non-Member Network Connectivity Fee.....	12
c) Pass-Through of External Connectivity Fees.....	12
d) Port Fees .....	13
e) MPID Fees .....	14
f) Member and Non-Member Technical Support Request Fee.....	14
<b>6) Market Data Fees.....</b>	<b>14</b>
a) MIAX PEARL Top of Market (“ToM”) .....	14
b) MIAX PEARL Liquidity Feed (“PLF”).....	14
c) Historical Market Data .....	15

---

# MIAX PEARL Fee Schedule

## Definitions

For purposes of assessing fees, the following definitions should serve as guidance. Any definitions that are also defined in Exchange Rules include a cross reference to the corresponding Exchange Rule. Rebates and fees are listed per contract per leg unless otherwise noted.

“ABBO” means the best bid(s) or offer(s) disseminated by other Eligible Exchanges (defined in Exchange Rule 1400(f)) and calculated by the Exchange based on market information received by the Exchange from OPRA. See Exchange Rule 100.

“Affiliate” means an affiliate of a Member of at least 75% common ownership between the firms as reflected on each firm’s Form BD, Schedule A.

“Affiliate” means (i) an affiliate of a Member of at least 75% common ownership between the firms as reflected on each firm’s Form BD, Schedule A, or (ii) the Appointed Market Maker of an Appointed EEM (or, conversely, the Appointed EEM of an Appointed Market Maker). An “Appointed Market Maker” is a MIAX PEARL Market Maker (who does not otherwise have a corporate affiliation based upon common ownership with an EEM) that has been appointed by an EEM and an “Appointed EEM” is an EEM (who does not otherwise have a corporate affiliation based upon common ownership with a MIAX PEARL Market Maker) that has been appointed by a MIAX PEARL Market Maker, pursuant to the following process. A MIAX PEARL Market Maker appoints an EEM and an EEM appoints a MIAX PEARL Market Maker, for the purposes of the Fee Schedule, by each completing and sending an executed Volume Aggregation Request Form by email to [membership@miaxoptions.com](mailto:membership@miaxoptions.com) no later than 2 business days prior to the first business day of the month in which the designation is to become effective. Transmittal of a validly completed and executed form to the Exchange along with the Exchange’s acknowledgement of the effective designation to each of the Market Maker and EEM will be viewed as acceptance of the appointment. The Exchange will only recognize one designation per Member. A Member may make a designation not more than once every 12 months (from the date of its most recent designation), which designation shall remain in effect unless or until the Exchange receives written notice submitted 2 business days prior to the first business day of the month from either Member indicating that the appointment has been terminated. Designations will become operative on the first business day of the effective month and may not be terminated prior to the end of the month. Execution data and reports will be provided to both parties.

“Cross-connect” occurs when the affected third-party system is sited at the same data center where MIAX PEARL systems are sited, and the third-party connects to MIAX PEARL through the data center, rather than connecting directly to MIAX PEARL outside of the data center.

“CTD Port” or “Clearing Trade Drop Port” provides an Exchange Member with a real-time clearing trade updates. The updates include the Member’s clearing trade messages on a low latency, real-time basis. The trade messages are routed to a Member’s connection containing certain information. The information includes, among other things, the following: (i) trade date and time; (ii) symbol information; (iii) trade price/size information; (iv) Member type (for example, and without limitation, Market Maker, Electronic Exchange Member, Broker-Dealer); and (v) Exchange MPID for each side of the transaction, including Clearing Member MPID.

---

“EEM Clearing Firm” means an EEM that solely clears transactions on the Exchange and does not connect to the Exchange via either the FIX Interface or MEO Interface.

“Electronic Exchange Member” or “EEM” means the holder of a Trading Permit who is a Member representing as agent Public Customer Orders or Non-Customer Orders on the Exchange and those non-Market Maker Members conducting proprietary trading. Electronic Exchange Members are deemed “members” under the Exchange Act. See Exchange Rule 100.

“Exchange System Disruption” means an outage of a Matching Engine or collective Matching Engines for a period of two consecutive hours or more, during trading hours.

“Excluded Contracts” means any contracts routed to an away market for execution.

“Extranet Provider” means a technology provider that connects with MIAX PEARL systems and in turn provides such connectivity to MIAX PEARL participants that do not connect directly with MIAX PEARL.

“FIX Interface” means the Financial Information Exchange interface for certain order types as set forth in Exchange Rule 516. See Exchange Rule 100.

“FIX Port” means a FIX port that allows Members to send orders and other messages using the FIX protocol.

“Full Service MEO Port – Bulk” means an MEO port that supports all MEO input message types and binary bulk order entry.

“Full Service MEO Port – Single” means an MEO port that supports all MEO input message types and binary order entry on a single order-by-order basis, but not bulk orders.

“FXD” or “FIX Drop Copy Port” means a messaging interface that provides a copy of real-time trade execution, trade correction and trade cancellation information to FIX Drop Copy Port users who subscribe to the service. FXD Port users are those users who are designated by an EEM to receive the information and the information is restricted for use by the EEM only.

“Limited Service MEO Port” means an MEO port that supports all MEO input message types, but does not support bulk order entry and only supports limited order types, as specified by the Exchange via Regulatory Circular.

“Matching Engine” is a part of the MIAX PEARL electronic system that processes options orders and trades on a symbol-by-symbol basis. Some Matching Engines will process option classes with multiple root symbols, and other Matching Engines may be dedicated to one single option root symbol (for example, options on SPY may 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.

“Market Maker” means a Member registered with the Exchange for the purpose of making markets in options contracts traded on the Exchange and that is vested with the rights and responsibilities specified in Chapter VI of Exchange Rules. See Exchange Rule 100.

“Member” means an individual or organization that is registered with the Exchange pursuant to Chapter II of Exchange Rules for purposes of trading on the Exchange as an “Electronic Exchange Member” or “Market Maker.” Members are deemed “members” under the Exchange Act. See Exchange Rule 100.

“MENI” means the MIAX Express Network Interconnect, which is a network infrastructure which provides Members and non-Members network connectivity to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange. The MENI consists of the low latency and ultra-low latency (“ULL”) connectivity options set forth in the Exchange’s Fee Schedule. The MENI can also be configured to provide network connectivity to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange’s affiliate, MIAX OPTIONS, via a single, shared connection.

“MEO Interface” or “MEO” means a binary order interface for certain order types as set forth in Rule 516 into the MIAX PEARL System. See Exchange Rule 100.

“MEO Purge Ports” provide Members with the ability to send quote purge messages to the MIAX PEARL System. MEO Purge Ports are not capable of sending or receiving any other type of messages or information.

“MIAX Options Exchange” or “MIAX Options” means the Miami International Securities Exchange, LLC. See Exchange Rule 100.

“Monthly Volume Credit” means a credit assessable to a Member whose executed Priority Customer volume along with that of its Affiliates, not including Excluded Contracts, is at least 0.30% of MIAX PEARL-listed TCV, as set forth below:

Type of Member Connection	Monthly Volume Credit
Member that connects via the FIX Interface	\$250
Member that connects via the MEO Interface	\$1,000

\* If a Member connects via both the MEO Interface and FIX Interface and qualifies for the Monthly Volume Credit based upon its Priority Customer Volume, the greater Monthly Volume Credit shall apply to such Member.

The Monthly Volume Credit is a single, once-per-month credit towards the aggregate monthly total of non-transaction fees assessable to a Member.

“New Member Non-Transaction Fee Waiver” means the waiver of certain non-transaction fees, as explicitly set forth in specific sections of the Fee Schedule, for a new Member of the Exchange, for the waiver period. For purposes of this definition, the waiver period consists of the calendar month the new Member is credentialed to use the System in the production environment following approval as a new Member of the Exchange and the two (2) subsequent calendar months thereafter. For purposes of this definition, a new Member shall mean any Member who has not previously been approved as a Member of the Exchange.

“Non-Transaction Fees Volume-Based Tiers” means the tier structure that is applicable to certain non-transaction fees, as specifically set forth in the Fee Schedule. The monthly volume thresholds associated with each Tier shall be calculated as the total volume executed by a Member and its Affiliates on the Exchange across all origin types, not including Excluded Contracts, as compared to the TCV in all MIAX PEARL-listed options, as set forth below:

Tier	Total Volume by Member as a Percentage of MIAX PEARL-listed TCV
1	0.00% - 0.30%
2	Above 0.30% - 0.60%
3	Above 0.60%

---

“Priority Customer” means a person or entity that (i) is not a broker or dealer in securities, and (ii) does not place more than 390 orders in listed options per day on average during a calendar month for its own beneficial accounts(s). The number of orders shall be counted in accordance with Interpretation and Policy .01 of Exchange Rule 100. See Exchange Rule 100, including Interpretation and Policy .01.

“Public Customer” means a person that is not a broker or dealer in securities. See Exchange Rule 100.

“Service Bureau” means a technology provider that offers and supplies technology and technology services to a trading firm that does not have its own proprietary system.

“SPY TCV” means total consolidated volume in SPY calculated as the total national volume in SPY for the month for which the fees apply, excluding consolidated volume executed during the period of time in which the Exchange experiences an Exchange System Disruption (solely in SPY options).

“TCV” means total consolidated volume calculated as the total national volume in those classes listed on MIAX PEARL for the month for which the fees apply, excluding consolidated volume executed during the period of time in which the Exchange experiences an Exchange System Disruption (solely in the option classes of the affected Matching Engine).

“Third Party Vendor” means a subscriber of MIAX PEARL’s market and other data feeds, which they in turn use for redistribution purposes.

“Waiver Period” means, for each applicable fee, the period of time from the initial effective date of the MIAX PEARL Fee Schedule until such time that the Exchange has an effective fee filing establishing the applicable fee. The Exchange will issue a Regulatory Circular announcing the establishment of an applicable fee that was subject to a Waiver Period at least fifteen (15) days prior to the termination of the Waiver Period and effective date of any such applicable fee.

Except as otherwise provided in this Fee Schedule with regard to network connectivity, including network testing and certification, all fees set forth in this Fee Schedule are specific to and assessed exclusively for use of MIAX PEARL and do not include access to and/or use of the MIAX Options or any other facilities of the Exchange.

# 1) Transaction Rebates/Fees

## a) Exchange Rebates/Fees – Add/Remove Tiered Rebates/Fees

			Per Contract Rebates/Fees for Penny Classes				Per Contract Rebates/Fees for Non-Penny Classes	
Origin	Tier	Volume Criteria	Maker	Taker*	SPY Taker	QQQ, IWM, VXX Taker	Maker	Taker
Priority Customer	1	0.00% - 0.10%	(\$0.25)	\$0.48	\$0.43	\$0.47	(\$0.85)	\$0.87
	2	Above 0.10% - 0.35%	(\$0.40)	\$0.46	\$0.43	\$0.46	(\$0.95)	\$0.86
	3	Above 0.35% - 0.50%	(\$0.45)	\$0.44	\$0.42	\$0.44	(\$1.00)	\$0.85
	4	Above 0.50% - 0.75%	(\$0.52)	\$0.44	\$0.41	\$0.43	(\$1.03)	\$0.84
	5	Above 0.75% - 1.25%	(\$0.53)	\$0.44	\$0.40	\$0.42	(\$1.04)	\$0.84
	6	Above 1.25%	(\$0.53)	\$0.43	\$0.38	\$0.40	(\$1.04)	\$0.84

\* For all Penny Classes other than SPY, QQQ, IWM, and VXX.

			Per Contract Rebates/Fees for Penny Classes		Per Contract Rebates/Fees for Non-Penny Classes	
Origin	Tier	Volume Criteria	Maker	Taker	Maker**	Taker**
All MIAX PEARL Market Makers	1	0.00% - 0.15%	(\$0.25)	\$0.50	(\$0.30)	\$1.10
	2	Above 0.15% - 0.40%	(\$0.40)	\$0.50	(\$0.30)	\$1.10
	3	Above 0.40% - 0.65%	(\$0.40)	\$0.48	(\$0.60)	\$1.09
	4	Above 0.65% - 1.00% or Above 2.25% in SPY	(\$0.47)	\$0.47	(\$0.65)	\$1.08
	5	Above 1.00% - 1.40%	(\$0.48)	\$0.45	(\$0.70)	\$1.07
	6	Above 1.40%	(\$0.48)	\$0.44	(\$0.85)	\$1.06

			Per Contract Rebates/Fees for Penny Classes		Per Contract Rebates/Fees for Non-Penny Classes	
Origin	Tier	Volume Criteria	Maker^	Taker	Maker***^	Taker**
Non-Priority Customer, Firm, BD, and Non-MIAX PEARL Market Makers	1	0.00% - 0.15%	(\$0.25)	\$0.50	(\$0.30)	\$1.10
	2	Above 0.15% - 0.40%	(\$0.40)	\$0.50	(\$0.30)	\$1.10
	3	Above 0.40% - 0.65%	(\$0.40)	\$0.48	(\$0.60)	\$1.10
	4	Above 0.65% - 1.00%	(\$0.47)	\$0.48	(\$0.65)	\$1.09
	5	Above 1.00% – 1.40%	(\$0.48)	\$0.48	(\$0.70)	\$1.08
	6	Above 1.40%	(\$0.48)	\$0.48	(\$0.85)	\$1.07

\*\* Members may qualify for the Maker Rebate and the Taker Fee associated with the highest Tier for transactions in Non-Penny classes if the Member executes more than 0.30% volume in Non-Penny classes, not including Excluded Contracts, as compared to the TCV in all MIAX PEARL listed option classes. For purposes of qualifying for such rates, the Exchange

will aggregate the volume transacted by Members and their Affiliates in the following Origin types in Non-Penny classes: MIAX PEARL Market Makers, and Non-Priority Customer, Firm, BD, and Non-MIAX PEARL Market Makers.

- ^ Members may qualify for Maker Rebates equal to the greater of: (A) (\$0.40) for Penny Classes and (\$0.65) for Non-Penny Classes, or (B) the amount set forth in the applicable Tier reached by the Member in the relevant Origin, if the Member and their Affiliates execute at least 1.50% volume in the relevant month, in Priority Customer Origin type, in all options classes, not including Excluded Contracts, as compared to the TCV in all MIAX PEARL listed option classes.

Except as otherwise set forth herein, the Volume Criteria is calculated based on the total monthly volume executed by the Member in all options classes on MIAX PEARL in the relevant Origin type, not including Excluded Contracts, (as the numerator) expressed as a percentage of (divided by) TCV (as the denominator). In Tier 4 for MIAX PEARL Market Makers, the alternative Volume Criteria (above 2.25% in SPY) is calculated based on the total monthly volume executed by the Market Maker solely in SPY options on MIAX PEARL in the relevant Origin type, not including Excluded Contracts, (as the numerator) expressed as a percentage of (divided by) SPY TCV (as the denominator). The per contract transaction rebates and fees shall be applied retroactively to all eligible volume once the threshold has been reached by Member. The Exchange aggregates the volume of Members and their Affiliates in the Add/Remove Tiered Fees. The per contract transaction rebates and fees shall be waived for transactions executed during the opening and for transactions that uncross the ABBO.

## b) Fees and Rebates for Customer Orders Routed to Another Options Exchange

MIAX PEARL will assess a Routing Fee to market participants on all orders routed to and executed on an away market as set forth in the table below.

Description	Fees
Routed, Priority Customer, Penny Pilot, to: NYSE American, BOX, Cboe, Cboe EDGX Options, Nasdaq MRX, MIAX OPTIONS, Nasdaq PHLX (except SPY), Nasdaq BX Options	\$0.15
Routed, Priority Customer, Penny Pilot, to: NYSE Arca Options, Cboe BZX Options, Cboe C2, Nasdaq GEMX, Nasdaq ISE, NOM, Nasdaq PHLX (SPY only)	\$0.65
Routed, Priority Customer, Non-Penny Pilot, to: NYSE American, BOX, Cboe, Cboe EDGX Options, Nasdaq ISE, Nasdaq MRX, MIAX OPTIONS, Nasdaq PHLX, Nasdaq BX Options	\$0.15
Routed, Priority Customer, Non-Penny Pilot, to: NYSE Arca Options, Cboe BZX Options, Cboe C2, Nasdaq GEMX, NOM	\$0.97
Routed, Public Customer that is not a Priority Customer, Penny Pilot, to: NYSE American, NYSE Arca Options, Cboe BZX Options, BOX, Cboe, Cboe C2, Cboe EDGX Options, Nasdaq GEMX, Nasdaq ISE, Nasdaq MRX, MIAX OPTIONS, NOM, Nasdaq PHLX, Nasdaq BX Options	\$0.65
Routed, Public Customer that is not a Priority Customer, Non-Penny Pilot, to: NYSE American	\$0.65
Routed, Public Customer that is not a Priority Customer, Non-Penny Pilot, to: NYSE Arca Options, Cboe BZX Options, Cboe C2, Nasdaq GEMX, Nasdaq MRX, Nasdaq BX Options	\$1.20
Routed (Public Customer that is not a Priority Customer), Non-Penny Pilot, to: BOX, Cboe, Cboe EDGX Options, Nasdaq ISE, MIAX OPTIONS, NOM, Nasdaq PHLX	\$0.97



---

## 2) Regulatory Fees

### a) Sales Value Fee

**Current Fee Rate: Defined amount per \$1,000,000 of the aggregate dollar amount of covered sales.**

The Sales Value Fee is assessed by the Exchange to each Member for sales on the Exchange for which the Exchange is obligated to pay a fee to the SEC pursuant to Section 31 of the Exchange Act. The Sales Value Fee is equal to the Section 31 fee rate multiplied by the Member's aggregate dollar amount of covered sales resulting from options transactions occurring on the Exchange during any computational period. To the extent there may be any excess monies collected under this rule, the Exchange may retain those monies to help fund general operating expenses. The sales transactions to which the fee applies are sales of options (other than options on a security index) and the sales of securities resulting from the exercise of physical-delivery options. For a detailed description of the Sales Value Fee, see MIAX PEARL Rule 1207.

<b>Sales Value Fee</b>	<b>Per Executed Sell Contract side and Sales of Securities Resulting from the Exercise of Physical Delivery Options</b> (per million dollars in notional value)
All Classes	Rate set annually and sometimes adjusted semi-annually by the SEC. See <a href="http://www.sec.gov/divisions/marketreg/sec31info.htm">http://www.sec.gov/divisions/marketreg/sec31info.htm</a> for the current rate.

### b) Options Regulatory Fee

The per-contract Options Regulatory Fee ("ORF") is assessed by MIAX PEARL to each MIAX PEARL Member for all options transactions, including Mini Options, cleared or ultimately cleared by the Member that are cleared by OCC in the "customer" range, regardless of the exchange on which the transaction occurs. The ORF is not assessed on outbound linkage trades. The ORF is collected by OCC on behalf of MIAX PEARL from either (1) a Member that was the ultimate clearing firm for the transaction or (2) a non-Member that was the ultimate clearing firm where a Member was the executing clearing firm for the transaction. The Exchange uses reports from OCC to determine the identity of the executing clearing firm and ultimate clearing firm. The Exchange may only increase or decrease the ORF semi-annually, and any such fee change will be effective on the first business day of February or August. The Exchange will notify participants via a Regulatory Circular of any change in the amount of the fee at least 30 calendar days prior to the effective date of the change.

<b>Options Regulatory Fee (ORF)</b>	<b>Per Executed Contract side</b>
All Classes	\$0.0010

---

## c) Web CRD Fees

The following fees will be collected and retained by FINRA through the Web Central Registration Depository (CRD<sup>SM</sup>) registration system for the registration of associated persons of Electronic Exchange Members and Market Maker organizations that are not also FINRA members:

### GENERAL REGISTRATION FEES:

\$100.00	FINRA CRD Processing Fee
\$110.00	FINRA Disclosure Processing Fee (Form U4, Form U5, Form BD & amendments)
\$45.00	FINRA Annual System Processing Fee assessed only during Renewals

### FINRA Fingerprint Card Processing Fees:

\$29.50	First card submission (electronic)
\$44.50	First card submission (hard copy)
\$15.00	Second card submission (electronic)
\$30.00	Second card submission (hard copy)
\$29.50	Third card submission (electronic)
\$44.50	Third card submission (hard copy)
\$30.00	FINRA Processing Fee for Fingerprint Results Submitted by Other SROs
\$00.00	MIAX PEARL Initial Registration Fee (Individual)
\$00.00	MIAX PEARL Annual Individual Renewal Fee
\$00.00	MIAX PEARL Transfer Fee
\$00.00	MIAX PEARL Termination Fee
\$00.00	MIAX PEARL Broker Dealer Registration Fee
\$00.00	MIAX PEARL Broker Dealer Renewal Fee

### Continuing Education Fees:

\$55.00	Continuing Education Session Fee for All Registrations
---------	--

### Qualification Examination Fee:

\$120.00	Series 57 Examination Fee
----------	---------------------------

### Notes to Web CRD Fees:

The FINRA CRD Processing Fee applies to all initial, transfer, relicense, and dual registration Form U4 filings. This fee is assessed when a non-FINRA firm (i.e., a firm that is not a member of FINRA) submits its first initial, transfer, relicense, or dual registration Form U4 filing on behalf of a registered person. The FINRA Disclosure Processing Fee (Form U4, Form U5, Form BD & Amendments) applies to all registration, transfer, or termination filings with new or amended disclosure information or that require certification, as well as any amendment to disclosure information. The Continuing Education Fee applies to each individual who is required to complete the Regulatory Element of the Continuing Education Requirements pursuant to MIAX PEARL Rule 1304.

### 3) Membership Fees

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

Type of Membership	Application Fee
Electronic Exchange Member	Fee waived for the Waiver Period
Market Maker	Fee waived for the Waiver Period

MIAX PEARL 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 PEARL membership is finally denied.

#### b) Monthly Trading Permit Fee

MIAX PEARL will issue Trading Permits to Members that confer the ability to transact on MIAX PEARL. (For a complete description of MIAX PEARL Trading Permits, see MIAX PEARL Rule 200.) Members receiving Trading Permits during a particular calendar month will be assessed Trading Permit Fees according to the table below, and (except for EEM Clearing Firms) is based upon the Non-Transaction Fees Volume-Based Tiers. Monthly Trading Permit Fees will be assessed with respect to EEM Clearing Firms in any month the EEM Clearing Firm is certified in the membership system to clear transactions on the Exchange. Such fees are subject to the New Member Non-Transaction Fee Waiver.

Type of Trading Permit	Monthly MIAX PEARL Trading Permit Fee
Member that connects via the FIX Interface	Tier 1 \$250 Tier 2 \$350 Tier 3 \$450
Member that connects via the MEO Interface*	Tier 1 \$300 Tier 2 \$400 Tier 3 \$500
Member that is an EEM Clearing Firm	\$250

\* Members that connect via the MEO Interface and that also connect via the FIX Interface will be assessed the rates for both types of Trading Permits set forth above, but will receive a \$100 credit towards the Trading Permit Fees set forth above for MEO Interface use.

### 4) Testing and Certification Fees

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

Type of Interface	API Testing and Certification Fee
FIX	Fee waived for the Waiver Period
MEO	Fee waived for the Waiver Period
FXD	Fee waived for the Waiver Period
CTD	Fee waived for the Waiver Period

API Testing and Certification Fees will be assessed (i) initially per API for FIX, MEO, FXD and CTD in the month the Member has been credentialed to use one or more ports in the production environment for the tested API, and (ii) each time a Member 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.

**b) Non-Member API Testing and Certification Fee**

Type of Interface	API Testing and Certification Fee
FIX	Fee waived for the Waiver Period
MEO	Fee waived for the Waiver Period
FXD	Fee waived for the Waiver Period
CTD	Fee waived for the Waiver Period

API Testing and Certification Fees for Third Party Vendors, Service Bureaus and other non-Members will be assessed (i) initially per API for FIX, MEO, FXD, and CTD in the month the non-Member has been credentialed to use one or more ports in the production environment for the tested API, and (ii) each time a Third Party Vendor, Service Bureau, or other non-Member 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.

**c) Member Network Connectivity Testing and Certification Fee**

Type of Firm	1 Gigabit Fee Per Connection	10 Gigabit 10 Gigabit ULL Fee Per Connection
Member	\$1,000.00	\$4,000.00

Member Network Connectivity Testing and Certification Fees will be assessed (i) initially per connection in the month the Member has been credentialed to use any API or Market Data feeds in the production environment utilizing the tested network connection, and (ii) each time a Member initiates a change to its system that requires network connectivity testing and certification.

Network Connectivity 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. Member Network Connectivity Testing and Certification Fees will not be assessed for testing and certification of connectivity to the Exchange’s Disaster Recovery Facility.

Members utilizing the MENI to connect to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange and MIAX Options via a single, shared connection will only be assessed one Network Connectivity Testing and Certification Fee per connection tested, regardless of the trading platforms, market data systems, test systems, and disaster recovery facilities accessed via such connection.

## d) Non-Member Network Connectivity Testing and Certification Fee

Type of Firm	1 Gigabit Fee Per Connection	10 Gigabit 10 Gigabit ULL Fee Per Connection
Service Bureau/Extranet Provider and other Non-Members	\$1,200.00	\$4,200.00

Non-Member Network Connectivity Testing and Certification fees will be assessed (i) initially per connection in the month the Service Bureau, Extranet Provider or other non-Member has been credentialed to use any API or Market Data feeds in the production environment using the tested network connection, and (ii) each time a Service Bureau, Extranet Provider or other non-Member initiates a change to its system that requires network connectivity testing and certification.

Network Connectivity 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. Non-Member Network Connectivity Testing and Certification Fees will not be assessed for testing and certification of connectivity with the Exchange’s Disaster Recovery Facility.

Non-Members utilizing the MENI to connect to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange and MIAX Options via a single, shared connection will only be assessed one Network Connectivity Testing and Certification Fee per connection tested, regardless of the trading platforms, market data systems, test systems, and disaster recovery facilities accessed via such connection.

## 5) System Connectivity Fees

### a) Monthly Member Network Connectivity Fee

Member Network Connectivity Per Month	Primary/ Secondary Facility 1 Gigabit Per Connection	Disaster Recovery Facility 1 Gigabit Per Connection	Primary/ Secondary Facility 10 Gigabit Per Connection	Disaster Recovery Facility 10 Gigabit Per Connection	Primary/ Secondary Facility 10 Gigabit ULL Per Connection
Individual Firm	\$1,100.00	\$500.00	\$5,500.00	\$2,500.00	\$8,500.00

Monthly Member Network Connectivity fees for connectivity with the Primary/Secondary Facility will be assessed in any month the Member is credentialed to use any of the MIAX PEARL APIs or Market Data feeds in the production environment and will be pro-rated when a Member makes a change to the connectivity (by adding or deleting connections) with such pro-rated fees based on the number of trading days that the Member has been credentialed to utilize any of the MIAX PEARL APIs or Market Data feeds in the production environment through such connection, divided by the total number of trading days in such month multiplied by the applicable monthly rate. Monthly Member Network Connectivity fees for connectivity with the Disaster Recovery Facility will be assessed in each month during which the Member has established connectivity with the Disaster Recovery Facility.

Members utilizing the MENI to connect to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange and MIAX Options via a single, shared connection will only be assessed one Monthly Member Network Connectivity Fee per connection, regardless of the trading platforms, market data systems, test systems, and disaster recovery facilities accessed via such connection.

### **b) Monthly Non-Member Network Connectivity Fee**

<b>Non-Member Network Connectivity Per Month</b>	<b>Primary/Secondary Facility 1 Gigabit Per Connection</b>	<b>Disaster Recovery Facility 1 Gigabit Per Connection</b>	<b>Primary/Secondary Facility 10 Gigabit Per Connection</b>	<b>Disaster Recovery Facility 10 Gigabit Per Connection</b>	<b>Primary/Secondary Facility 10 Gigabit ULL Per Connection</b>
Service Bureau/ Extranet Provider and other non-Members	\$1,100.00	\$500.00	\$5,500.00	\$2,500.00	\$8,500.00

Monthly Non-Member Network Connectivity fees for connectivity with the Primary/Secondary Facility will be assessed in each month the Non-Member has been credentialed to use any of the MIAX PEARL APIs or Market Data feeds via the network connection in the production environment and will be pro-rated when a Non-Member makes a change to the connectivity (by adding or deleting connections) with such pro-rated fees based on the number of trading days that the Non-Member has been credentialed to utilize any one of the two MIAX Exchanges' APIs or Market Data feeds in the production environment through such connection, divided by the total number of trading days in such month multiplied by the applicable monthly rate. Monthly Non-Member Network Connectivity fees for connectivity with the Disaster Recovery Facility will be assessed in each month during which the Non-Member has established connectivity with the Disaster Recovery Facility.

Non-Members utilizing the MENI to connect to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange and MIAX Options via a single, shared connection will only be assessed one Monthly Non-Member Network Connectivity Fee per connection, regardless of the trading platforms, market data systems, test systems, and disaster recovery facilities accessed via such connection.

### **c) Pass-Through of External Connectivity Fees**

MIAX PEARL will assess External Connectivity Fees to Members and non-Members that establish connections with MIAX PEARL through a third-party. Fees assessed to MIAX PEARL by third-party external vendors on behalf of a Member or non-Member connecting to MIAX PEARL (including cross-connects), will be passed through to the Member or non-Member. The External Connectivity Fees passed through can include one-time set-up fees, monthly charges, and other fees charged to MIAX PEARL by a third-party for the benefit of a Member or non-Member.

## d) Port Fees

MIAX PEARL will assess monthly Port Fees on Members in each month the Member is credentialed to use a Port in the production environment. The Port Fees assessable for FIX Ports, Limited Service MEO Ports, Purge Ports, CTD Ports and FXD Ports are as set forth in the table below. The Port Fees assessable for Full Service MEO Ports, both Bulk and/or Single, are based upon the Non-Transaction Fees Volume-Based Tiers, as set forth in the table below. MIAX PEARL has primary and secondary data centers and a disaster recovery center. Each Port provides access to all three data centers for a single fee. Unless otherwise specifically set forth in the Fee Schedule, the Port Fees include the information communicated through the Port at no additional charge. Such fees are subject to the New Member Non-Transaction Fee Waiver.

Type of Port	Monthly Port Fees Includes Connectivity to the Primary, Secondary and Disaster Recovery Data Centers
FIX Port <sup>^</sup>	Per Port: 1 <sup>st</sup> \$275, 2 <sup>nd</sup> to 5 <sup>th</sup> \$175, 6 <sup>th</sup> or more \$75
Full Service MEO Port - Bulk*	Tier 1 \$3,000 Tier 2 \$4,500 Tier 3 \$5,000
Full Service MEO Port - Single*	Tier 1 \$2,000 Tier 2 \$3,375 Tier 3 \$3,750
Limited Service MEO Port**	1 <sup>st</sup> to 2 <sup>nd</sup> \$0, 3 <sup>rd</sup> to 4 <sup>th</sup> \$200, 5 <sup>th</sup> to 6 <sup>th</sup> \$300, 7 <sup>th</sup> to 8 <sup>th</sup> \$400
MEO Purge Port***	\$750
CTD Port <sup>^</sup>	Per Port: \$450
FXD Port <sup>^</sup>	Per Port: \$250

\* The rates set forth above for Full Service MEO Ports, both Bulk and/or Single, entitle a Member to two (2) such Ports for each Matching Engine for a single port fee. If a Member selects at least one Full Service MEO Port – Bulk as part of their two (2) Ports, i.e. option (c) described below, the rates applicable to Full Service MEO Port – Bulk set forth above apply.

\*\* Each Limited Service MEO Port fee entitles a Member to one (1) such port for each Matching Engine. For example, the purchase of 4 Limited Service MEO Ports will allow the Member to access 4 ports per Matching Engine.

\*\*\* The MEO Purge Port fee entitles a Member to two (2) such ports for each Matching Engine for a single port fee.

<sup>^</sup> Each port will have access to all Matching Engines.

Members may be allocated two (2) Full-Service MEO Ports of either type per Matching Engine and up to eight (8) Limited Service MEO Ports per Matching Engine. The two (2) Full-Service MEO Ports that may be allocated per Matching Engine to a Member may consist of: (a) two (2) Full Service MEO Ports – Bulk; (b) two (2) Full Service MEO Ports – Single; or (c) one (1) Full Service MEO Port – Bulk and one (1) Full Service MEO Port - Single.

---

### e) MPID Fees

MIAX PEARL will assess monthly MIAX PEARL Member Participant Identifier (“MPID”) fees to Members as follows in the table below.

Type of MPID	Monthly MPID Fees
FIX MPID	Fee waived for the Waiver Period
MEO MPID	Fee waived for the Waiver Period

### f) Member and Non-Member Technical Support Request Fee

Members and Non-Members that request MIAX PEARL technical support at any of the MIAX PEARL data centers will be assessed a fee of \$200 per hour for such technical support.

## 6) Market Data Fees

### a) MIAX PEARL Top of Market (“ToM”)

Distributor Type	Monthly Fee
Internal Distributor	\$500
External Distributor	\$750

MIAX PEARL will assess Market Data Fees applicable to ToM on Internal and External Distributors in each month the Distributor is credentialed to use ToM in the production environment. A Distributor of MIAX PEARL data is any entity that receives a feed or file of data either directly from MIAX PEARL or indirectly through another entity and then distributes it either internally (within that entity) or externally (outside that entity). All Distributors are required to execute a MIAX PEARL Distributor Agreement. Market Data Fees for ToM will be reduced for new Distributors for the first month during which they subscribe to ToM, based on the number of trading days that have been held during the month prior to the date on which they have been credentialed to use ToM in the production environment. Such new Distributors will be assessed a pro-rata percentage of the fees described above, which is the percentage of the number of trading days remaining in the affected calendar month as of the date on which they have been credentialed to use ToM in the production environment, divided by the total number of trading days in the affected calendar month. Such fees are subject to the New Member Non-Transaction Fee Waiver.

### b) MIAX PEARL Liquidity Feed (“PLF”)

Distributor Type	Monthly Fee
Internal Distributor	\$1,250
External Distributor	\$1,500

MIAX PEARL will assess Market Data Fees applicable to PLF on Internal and External Distributors in each month the Distributor is credentialed to use PLF in the production environment. A Distributor of MIAX PEARL data is any entity that receives a feed or file of data either directly from MIAX PEARL or indirectly through another entity and then distributes it either internally (within that entity) or externally (outside that entity).



---

All Distributors are required to execute a MIAX PEARL Distributor Agreement. Market Data Fees for PLF will be reduced for new Distributors for the first month during which they have been credentialed to use PLF in the production environment, based on the number of trading days that have been held during the month prior to the date on which they have been credentialed to use PLF in the production environment. Such new Distributors will be assessed a pro-rata percentage of the fees described above, which is the percentage of the number of trading days remaining in the affected calendar month as of the date on which they have been credentialed to use PLF in the production environment, divided by the total number of trading days in the affected calendar month. Such fees are subject to the New Member Non-Transaction Fee Waiver.

### **c) Historical Market Data**

<b>User Type</b>	<b>Fee Per Device</b>
Members and Non-Members	\$500.00

MIAX PEARL will assess Market Data Fees applicable to Historical Market Data on users (Members and Non-Members) that request such Historical Market Data, on a per device basis. Historical Market Data consists of all proprietary trading data published by MIAX PEARL through proprietary market data feeds, from August 1, 2017 to the present (always on a T+1 basis). Historical Market Data will be uploaded onto an Exchange-provided device. Users may request up to six months of Historical Market Data per device, subject to the device's storage capacity. Only the most recent six months of Historical Market Data shall be available for purchase from the request date.