

### **MIAX Pearl Equities Exchange**

### Fee Schedule

As of December 1, 2022

All Exchange invoices are due in full on a timely basis and payable in accordance with MIAX Pearl Equities Rule 3002(b). 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.

All fees and rebates assessed prior to the three full calendar months before the month in which the Exchange becomes aware of a billing error shall be considered final.



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### **Definitions**

For purposes of assessing fees, the following definitions should serve as guidance. Unless otherwise specified, capitalized terms used in this fee schedule are defined as set forth in the MIAX Pearl Equities Rules. Rebates and fees are listed per share unless otherwise noted.

"ADAV" means average daily added volume calculated as the number of shares added per day and "ADV" means average daily volume calculated as the number of shares added or removed, combined, per day. ADAV and ADV are calculated on a monthly basis.

The Exchange excludes from its calculation of ADAV and ADV shares added or removed on any day that the Exchange's system experiences a disruption that lasts for more than 60 minutes during regular trading hours, on any day with a scheduled early market close, and on the "Russell Reconstitution Day" (typically the last Friday in June).

Routed shares are not included in the ADAV or ADV calculation.

With prior notice to the Exchange, an Equity Member may aggregate ADAV or ADV with other Equity Members that control, are controlled by, or are under common control with such Equity Member (as evidenced on such Equity Member's Form BD).

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

"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.

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

"FIX Order by Order" means a type of FXD Port that sends all order activities other than reject message, including Execution Reports and Trade Cancel/Correct messages.

"FIX Order Interface" or "FOI" means the Financial Information Exchange interface for certain order types as set forth in Exchange Rule 2614.

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

"Full Service Port" or "FSP" means an MEO port that supports all MEO order input message types.



"FIX Drop Port" or "FXD" means a messaging interface that provides real-time order activities of firms' MEO and FOI orders. MIAX Pearl Equities offers two types of FXD ports: (1) Standard FIX Drop; and (2) FIX Order by Order Drop. FXD Ports may be used by Equities Market Makers, Order Entry Firms and Clearing firms.

"Market Quality Securities" or "MQ Securities" shall mean a list of securities designated as such, that are used for the purposes of qualifying for the Market Quality Tiers. The universe of these securities will be determined by the Exchange and published on the Exchange's website.

"MENI" means the MIAX Express Network Interconnect, which is a network infrastructure which provides Equity 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.

"MEO Interface" or "MEO" means a binary order interface for certain order types as set forth in Rule 2614 into the MIAX Pearl System. See Exchange Rule 100.

"Percent Time at NBBO" means the aggregate of the percentage of time during regular trading hours where a Member has a displayed order of at least one round lot at the national best bid ("NBB") or national best offer ("NBO").

"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.

"Standard FIX Drop" means an FXD Port that only sends trade information, including Execution Reports and Trade Cancel/Correct messages.

"Step-Up ADAV as a % of TCV" means ADAV as a percent of TCV in the relevant baseline month subtracted from the current month's ADAV as a percent of TCV.

"TCV" means total consolidated volume calculated as the volume in shares reported by all exchanges and reporting facilities to a consolidated transaction reporting plan for the month for which the fees apply. The Exchange excludes from its calculation of TCV volume on any given day that the Exchange's system experiences a disruption that lasts for more than 60 minutes during Regular Trading Hours, on any day with a scheduled early market close, and on the "Russell Reconstitution Day" (typically the last Friday in June).

"Third Party Vendor" means a subscriber of MIAX Pearl Equities' 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 Equities Fee Schedule until such time that MIAX Pearl has an effective fee filing establishing the applicable fee. MIAX Pearl Equities 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.

### **General Notes**

Rebates are indicated by parentheses ().

All references to "per share" mean "per share executed."

Unless otherwise indicated, rebates and charges for adding, removing or routing liquidity are listed as per share rebates and charges.

Web CRD fees set forth in Section 2)c) of the MIAX Pearl Options Fee Schedule will be assessed on MIAX Pearl Equity Members (as applicable) and collected by FINRA.

The Exchange notes that to the extent a Pearl Equity Member does not qualify for any of the tiers contained herein, the rates listed in the "Liquidity Indicator Codes and Associated Fees" table shall apply.

To the extent a Pearl Equity Member qualifies for higher rebates and/or lower fees than those provided by a tier for which such Member qualifies, the higher rebates and/or lower fees shall apply.

For the purpose of determining qualification for the Market Quality Tiers the Exchange will exclude from its calculation: (1) any trading day that the Exchange's system experiences a disruption that lasts for more than 60 minutes during regular trading hours; (2) any day with a scheduled early market close; and (3) the "Russell Reconstitution Day" (typically the last Friday in June).



# 1) Transaction Rebates/Fees

### a) Standard Rates

Category	Adding Liquidity Displayed Order	Adding Liquidity Non- Displayed Order	Removing Liquidity	Routing and Removing Liquidity	Opening or Re-Opening Process
Securities at or above \$1.00	Tapes A, B, and C (\$0.0029)	(\$0.0021)	\$0.0029	\$0.0030	\$0.00
Securities below \$1.00	(0.10% of Dollar Value)	(0.10% of Dollar Value)	0.20% of Dollar Value	0.30% of Dollar Value	\$0.00
Standard Liquidity Indicator Codes	AA, AB, AC, AR	Aa, Ab, Ac, Ap, Ar	RA, Ra, RB, Rb, RC, Rc, Rp, RR, Rr	X	0

### b) Liquidity Indicator Codes and Associated Fees

Liquidity Indicator Code	Description	Fee/(Rebate) Securities Priced at or Above \$1.00	Fee/(Rebate) Securities Priced Below \$1.00
AA	Adds Liquidity, Displayed Order (Tape A)	(\$0.0029)	(0.10% of Dollar Value)
AB	Adds Liquidity, Displayed Order (Tape B)	(\$0.0029)	(0.10% of Dollar Value)
AC	Adds Liquidity, Displayed Order(Tape C)	(\$0.0029)	(0.10% of Dollar Value)
AR	Retail Order, Adds Liquidity, Displayed Order (All Tapes)	(\$0.0037)	(0.10% of Dollar Value)
Aa	Adds Liquidity, Non-Displayed Order (Tape A)	(\$0.0021)	(0.10% of Dollar Value)
Ab	Adds Liquidity, Non-Displayed Order (Tape B)	(\$0.0021)	(0.10% of Dollar Value)
Ac	Adds Liquidity, Non-Displayed Order (Tape C)	(\$0.0021)	(0.10% of Dollar Value)
Ар	Adds Liquidity and Executes at the Midpoint, Non-Displayed Midpoint Peg Order (All Tapes)	(\$0.0021)	(0.10% of Dollar Value)
Ar	Retail Order, Adds Liquidity, Non-Displayed Order (All Tapes)	(\$0.0021)	(0.10% of Dollar Value)
0	Opening/Re-Opening Process	\$0.00	\$0.00
RA	Removes Liquidity, Displayed Order (Tape A)	\$0.0029	0.20% of Dollar Value
RB	Removes Liquidity, Displayed Order (Tape B)	\$0.0029	0.20% of Dollar Value
RC	Removes Liquidity, Displayed Order (Tape C)	\$0.0029	0.20% of Dollar Value
RR	Retail Order, Removes Liquidity, Displayed Order (All Tapes)	\$0.0029	0.20% of Dollar Value
Ra	Removes Liquidity, Non-Displayed Order (Tape A)	\$0.0029	0.20% of Dollar Value



Liquidity Indicator Code	Description	Fee/(Rebate) Securities Priced at or Above \$1.00	Fee/(Rebate) Securities Priced Below \$1.00
Rb	Removes Liquidity, Non-Displayed Order (Tape B)	\$0.0029	0.20% of Dollar Value
Rc	Removes Liquidity, Non-Displayed Order (Tape C)	\$0.0029	0.20% of Dollar Value
Rp	Removes Liquidity and Executes at the Midpoint, Non-Displayed Midpoint Peg Order (All Tapes)	\$0.00265	0.20% of Dollar Value
Rr	Retail Order, Removes Liquidity, Non- Displayed Order (All Tapes)	\$0.0029	0.20% of Dollar Value
X	Routed	\$0.0030	0.30% of Dollar Value
XA	Re-routed by Primary Listing Exchange	\$0.0030	0.30% of Dollar Value
XB	Routed Primary Listing Exchange Execution (Other)	\$0.0030	0.30% of Dollar Value
XC	Routed to NYSE, Opening/Re-Opening Auction	\$0.00105	0.30% of Dollar Value
XD	Routed to NYSE, Closing Auction	\$0.00085	0.30% of Dollar Value
XE	Routed to NYSE, Adds Displayed Liquidity	(\$0.0015)	0.01% of Dollar Value
XF	Routed to NYSE Arca, Opening/Re-Opening Auction	\$0.00155	0.105% of Dollar Value
XG	Routed to NYSE Arca, Closing Auction	\$0.00105	0.105% of Dollar Value
XH	Routed to NYSE Arca, Adds Displayed Liquidity	(\$0.0015)	0.01% of Dollar Value
XI	Routed to NYSE American, Opening/Re- Opening Auction	\$0.00055	0.055% of Dollar Value
XJ	Routed to NYSE American, Closing Auction	\$0.00055	0.055% of Dollar Value
XK	Routed to NYSE American, Adds Displayed Liquidity	(\$0.001)	0.01% of Dollar Value
XL	Routed to Cboe BZX, Opening/Re-Opening Auction	\$0.0008	0.08% of Dollar Value
XM	Routed to Cboe BZX, Closing Auction	\$0.00105	0.105% of Dollar Value
XN	Routed to Cboe BZX, Adds Displayed Liquidity	(\$0.0015)	0.01% of Dollar Value
XO	Routed to Nasdaq, Opening/Re-Opening Auction	\$0.00155	0.30% of Dollar Value
XP	Routed to Nasdaq, Closing Auction	\$0.00085	0.09% of Dollar Value
XQ	Routed to Nasdaq, Adds Displayed Liquidity	(\$0.0015)	0.01% of Dollar Value



### c) Add Volume Tiers

Tier	Percentage Thresholds	Securities Priced at or Above \$1.00
1	ADAV ≥ 0.07% of TCV	(\$0.0032)
2	ADAV ≥ 0.10% of TCV	(\$0.0035)
3	ADAV ≥ 0.20% of TCV	(\$0.0036)

The rebates provided for by the above table are applicable to the following fee codes: AA, AB, and AC.

### d) Remove Volume Tiers

Tier	Required Criteria	Securities Priced at or Above \$1.00
1	ADV ≥ 0.10% of TCV and ≥1,000 shares of added liquidity	\$0.0028
2	ADV ≥ 0.15% of TCV and ≥1,000 shares of added liquidity	\$0.0027

The fees provided for by the above table are applicable to the following fee codes: RA, RB, RC, RR, Ra, Rb, Rc, and Rr.

### e) Midpoint Peg Order Adding Liquidity at Midpoint Volume Tiers

Tier	Share Thresholds	Securities Priced at or Above \$1.00
1	Midpoint ADAV ≥ 500,000 shares	(\$0.0025)
2	Midpoint ADAV ≥ 1,000,000 shares	(\$0.0027)

The rebates provided for by the above table are applicable to the following fee code: Ap.

### f) Market Quality Tiers

Tier	Required Criteria	Securities Priced at or Above \$1.00
1	Member has a Percent Time at NBBO of ≥ 25% in an average of at least 250 securities, at least 50 of which must be MQ Securities, per trading day during the month	(\$0.0032)
2	Member has a Percent Time at NBBO of ≥ 25% in an average of at least 1,000 securities, at least 100 of which must be MQ Securities, per trading day during the month	(\$0.0035)

The rebates provided for by the above table are applicable to the following fee codes: AA, AB, and AC.



### g) Step-Up Added Liquidity Rebate

Tier	Required Criteria	Securities Priced at or Above \$1.00
1	Step-Up ADAV as a % of TCV from July 2022 ≥ 0.03% of the TCV	(\$0.0031)

The rebate provided for by the above table is applicable to the following fee codes: AA, AB, and AC.

# 2) System Connectivity Fees

#### a) Monthly Member Network Connectivity Fees

Member Network Connectivity Per Month	Primary/ Secondary Facility 1 Gigabit ULL Per Connection	Disaster Recovery Facility 1 Gigabit ULL Per Connection	Disaster Recovery Facility 10 Gigabit ULL Per Connection	Primary/ Secondary Facility 10 Gigabit ULL Per Connection
Individual Firm	\$1,000.00	\$1,000.00	\$3,000.00	\$3,500.00

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 Equities 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 Equities 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. The Disaster Recovery Facility 1 Gigabit ULL Per Connection fee for Members shall be waived for a single 1 Gigabit ULL connection to the Disaster Recovery Facility where such Member is designated by the Exchange for required testing in accordance with Regulation SCI and pursuant to Chapter III of the Exchange's Rules and that same single 1 Gigabit ULL connection is used for testing purposes only. This waiver shall apply to each month in which the designated Member is required to maintain that single 1 Gigabit ULL connection to the Disaster Recovery Facility for testing purposes, as described above.



#### b) Monthly Non-Member Network Connectivity Fees

Non-Member	Primary/	Disaster Recovery	Disaster Recovery	Primary/
Network	Secondary Facility	Facility 1 Gigabit	Facility 10 Gigabit	Secondary Facility
Connectivity Per	1 Gigabit ULL Per	ULL Per	ULL Per	10 Gigabit ULL Per
Month	Connection	Connection	Connection	Connection
Service Bureau/ Extranet Provider and other non- Members	\$1,000.00	\$1,000.00	\$3,000.00	\$3,500.00

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 Equities APIs or Market Data feeds via the network connection in the production environment and will be prorated 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

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

MIAX Pearl Equities will assess External Connectivity Fees to Members and non-Members that establish connections with MIAX Pearl Equities through a third-party. Fees assessed to MIAX Pearl Equities by third-party external vendors on behalf of a Member or non-Member connecting to MIAX Pearl Equities (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 Equities by a third-party for the benefit of a Member or non-Member.



#### d) Port Fees

MIAX Pearl Equities 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, MEO Ports, and FXD Ports are as set forth in the table below. MIAX Pearl Equities 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.

Type of Port	Monthly Port Fees Includes Connectivity to the Primary, Secondary and Disaster Recovery Data Centers
FIX Port^	Per Port:  1st - 5th Fee Waived for the Waiver Period 6th - 10th Fee Waived for the Waiver Period 11th - 25th Fee Waived for the Waiver Period 26th - 50th \$450 51st - 75th \$400 76th - 100th \$350 101st or more \$300
MEO Port^*	Per Port:  1st - 5th Fee Waived for the Waiver Period 6th - 10th Fee Waived for the Waiver Period 11th - 25th Fee Waived for the Waiver Period 26th - 50th \$450 51st - 75th \$400 76th - 100th \$350 101st or more \$300
FXD Port <sup>^</sup>	Fee Waived for the Waiver Period

- ^ Each port will have access to all Matching Engines.
- The rates set forth above for MEO Ports entitle an Equity Member to one (1) FSP and one (1) Purge Port for all Matching Engines for a single port fee.

MEO and FIX Ports are counted separately for the tiers in the table.

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

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



## 3) Market Data Fees

### a) MIAX Pearl Equities Top of Market ("ToM") Feed

Fees Waived for the Waiver Period.

#### b) MIAX Pearl Equities Depth of Market ("DoM") Feed

Fees Waived for the Waiver Period.

#### c) Historical Market Data

User Type	Fee Per Device
Members and Non-Members	\$500

MIAX Pearl Equities will assess Market Data Fees applicable to Historical Market Data on users (Members and Non-Members) that request Historical Market Data on a per device basis. Historical Market Data consists of all proprietary trading data published by MIAX Pearl Equities through its proprietary market data feeds, from September 25, 2020 to the present (on a T+1 basis). Historical Market Data is 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 date of the request.

# 4) Additional Fees

Additional fees are set forth in Rule 3000 of the MIAX PEARL Rule book. Such fees include Regulatory Transaction Fees collected to fund the Exchange's Section 31 obligations.

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