

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-85393; File No. SR-EMERALD-2019-15)

March 21, 2019

Self-Regulatory Organizations; MIAX Emerald, LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Establish the MIAX Emerald Fee Schedule

Pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on March 15, 2019, MIAX Emerald, LLC (“MIAX Emerald” or “Exchange”), filed with the Securities and Exchange Commission (“Commission”) a proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange is filing a proposal to amend the MIAX Emerald Fee Schedule (the “Fee Schedule”) by adopting rebates and fees applicable to participants trading options on and/or using services provided by MIAX Emerald.

MIAX Emerald plans to commence operations as a national securities exchange registered under Section 6 of the Act<sup>3</sup> on March 1, 2019.<sup>4</sup>

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> 15 U.S.C. 78f.

<sup>4</sup> See Securities Exchange Act Release No. 84891 (December 20, 2018), 83 FR 67421 (December 28, 2018) (File No. 10-233) (order approving application of MIAX Emerald, LLC for registration as a national securities exchange).

The text of the proposed rule change is available on the Exchange's website at <http://www.miaxoptions.com/rule-filings/emerald>, at MIAX's principal office, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the proposed rule change is to establish transaction rebates and fees, regulatory fees, and certain non-transaction fees applicable to market participants trading options on and/or using services provided by the Exchange. These rebates and fees will apply to all market participants trading options on and/or using services provided by MIAX Emerald.

Definitions

The Exchange has included a Definitions section at the beginning of the Fee Schedule. The purpose of the Definitions section is to streamline the Fee Schedule by placing many of the defined terms used in the Fee Schedule in one location at the beginning of the Fee Schedule. Many of the defined terms are also defined in the Exchange Rules, particularly in Exchange Rule 100. Any defined terms that are also defined or otherwise explained in the Exchange Rules contain a cross reference to the relevant Exchange Rule. The Exchange notes that other

exchanges have Definitions sections in their respective fee schedule,<sup>5</sup> and the Exchange believes that including a Definitions section in the front of the Exchange's Fee Schedule makes the Fee Schedule more user-friendly.

#### Exchange Rebates/Fees

The proposed Fee Schedule sets forth transaction rebates and fees for all options traded on the Exchange in amounts that vary depending upon certain factors, including the type of market participant ("Origin") for whom the transaction is executed, the contra party to a transaction, whether in a Penny class or a non-Penny class, and whether the transaction is in simple, complex, or PRIME<sup>6</sup> or cPRIME,<sup>7</sup> and the amount of volume executed by the Member, as described more fully below.

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<sup>5</sup> See Exchange Act Release Nos. 70200 (August 14, 2013), 78 FR 51242 (August 20, 2013)(SR-Topaz-2013-10); 76453 (November 17, 2015), 80 FR 72999 (November 23, 2015)(SR-EDGX-2015-56); 80061(February 17, 2017), 82 FR 11676 (February 24, 2017)(SR-PEARL-2017-10).

<sup>6</sup> Price Improvement Mechanism ("PRIME") is a process by which a Member may electronically submit for execution ("Auction") an order it represents as agent ("Agency Order") against principal interest, and/or an Agency Order against solicited interest. See Exchange Rule 515A(a).

<sup>7</sup> A Complex PRIME or "cPRIME" Order is a complex order (as defined in Rule 518(a)(5)) that is submitted for participation in a cPRIME Auction. Trading of cPRIME Orders is governed by Rule 515A, Interpretation and Policy .12. See Exchange Rule 518(b)(7).

## Transaction Fees

Tiers and their application are defined in Tier section 1)a)ii)

<b>Members and Their Affiliates In Penny Classes Simple/Complex/PRIME/cPRIME</b>									
<b>Origin</b>	<b>Tier</b>	<b>Simple</b>		<b>Complex#</b>			<b>PRIME/cPRIME</b>		
		<b>Maker</b>	<b>Taker^</b>	<b>Maker (Contra Origins ex Priority Customer)</b>	<b>Maker (Contra Priority Customer Origin)</b>	<b>Taker</b>	<b>Agency</b>	<b>Contra</b>	<b>Responder</b>
Market Maker	1	(\$0.35)	\$0.50	\$0.10	\$0.47	\$0.50	\$0.05	\$0.05	\$0.05
	2	(\$0.35)	\$0.50	\$0.10	\$0.47	\$0.50	\$0.05	\$0.05	\$0.05
	3	(\$0.35)	\$0.50	\$0.10	\$0.47	\$0.50	\$0.05	\$0.05	\$0.05
	4	(\$0.45)	\$0.48	\$0.10	\$0.47	\$0.50	\$0.05	\$0.05	\$0.05
Non-MIAX Emerald Market Maker	1	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.48	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
Firm Proprietary /Broker- Dealer	1	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.49	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
Non- Priority Customer	1	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.49	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
Priority Customer*	1	(\$0.48)	\$0.47	(\$0.25)	(\$0.25)	(\$0.25)	\$0.00	\$0.05	\$0.05
	2	(\$0.48)	\$0.47	(\$0.40)	(\$0.40)	(\$0.40)	\$0.00	\$0.05	\$0.05
	3	(\$0.48)	\$0.47	(\$0.45)	(\$0.45)	(\$0.45)	\$0.00	\$0.05	\$0.05
	4	(\$0.53)	\$0.45	(\$0.50)	(\$0.50)	(\$0.50)	\$0.00	\$0.05	\$0.05

Members and Their Affiliates In Non-Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIMEØ		
		Maker	Taker^	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker~	Agency	Contra	Responder
Market Maker	1	(\$0.45)	\$0.99	\$0.20	\$0.86	\$0.88	\$0.05	\$0.05	\$0.05
	2	(\$0.45)	\$0.99	\$0.20	\$0.86	\$0.88	\$0.05	\$0.05	\$0.05
	3	(\$0.45)	\$0.99	\$0.20	\$0.86	\$0.86	\$0.05	\$0.05	\$0.05
	4	(\$0.75)	\$0.94	\$0.20	\$0.86	\$0.86	\$0.05	\$0.05	\$0.05
Non-MIAX Emerald Market Maker	1	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.94	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
Firm Proprietary /Broker- Dealer	1	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.94	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
Non- Priority Customer	1	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.94	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
Priority Customer*	1	(\$0.85)	\$0.85	(\$0.40)	(\$0.40)	(\$0.40)	\$0.00	\$0.05	\$0.05
	2	(\$0.85)	\$0.85	(\$0.60)	(\$0.60)	(\$0.60)	\$0.00	\$0.05	\$0.05
	3	(\$0.85)	\$0.85	(\$0.70)	(\$0.70)	(\$0.75)	\$0.00	\$0.05	\$0.05
	4	(\$1.05)	\$0.82	(\$0.87)	(\$0.87)	(\$0.85)	\$0.00	\$0.05	\$0.05

^ Contra to Priority Customer Simple Orders, Origins ex Priority Customer Simple Orders will be charged \$0.50 and Priority Customer Simple Orders will be charged \$0.49 in Penny classes, and Origins ex Priority Customer Simple Orders will be charged \$1.10 and Priority Customer Simple Orders will be charged \$0.85 in Non-Penny classes.

\* Priority Customer Complex Orders contra to Priority Customer Complex Orders are neither charged nor rebated. Priority Customer Complex Orders that leg into the Simple book are neither charged nor rebated.

~ A \$0.05 Complex surcharge for Origins ex Priority Customer for Complex Orders that take liquidity from the Complex Order Book in Non-Penny classes.

# For orders in a Complex Auction, Priority Customer Complex Orders will receive the Complex Taker rebate based on the tier achieved when contra to an Origin that is not a Priority Customer. Origins that are not a

Priority Customer will be charged the applicable Maker fee depending on the contra, based on the tier achieved.

- ◊ For PRIME and cPRIME, the per contract rebate or fee for the preexisting contra-side interest that trades with the Agency side will be waived. PRIME/cPRIME Responder side interest that trades with unrelated Agency side interest trades as Taker will be subject to Simple or Complex rates, as applicable.

### **Notes Accompanying Tables Above**

During the Opening Rotation and the ABBO uncrossing, the per contract rebate or fee will be waived for all Origins.

In general, the Exchange proposes that Add/Remove Tiered Rebates/Fees applicable to all market participants will be based upon a threshold tier structure (“Tier”) that is applicable to transaction fees, as set forth in the Fee Schedule. Tiers are determined on a monthly basis and are based on three alternative calculation methods (as defined below). The calculation method that results in the highest Tier achieved by the Member shall apply to all Origin types by the Member. The monthly volume thresholds for each method, associated with each Tier, are calculated as the total monthly volume executed by the Member<sup>8</sup> in all options classes on MIAX Emerald in the relevant Origins and/or applicable liquidity, not including Excluded Contracts<sup>9</sup>, (as the numerator) expressed as a percentage of (divided by) Customer Total Consolidated Volume (“CTCV”) (as the denominator). CTCV, which is defined in the Definitions section of the Fee Schedule, means Customer Total Consolidated Volume calculated as the total national volume cleared at The Options Clearing Corporation (“OCC”) in the Customer range in those classes listed on MIAX Emerald for the month for which fees apply, excluding volume cleared at the OCC in the Customer range executed during the period of time in which the Exchange experiences an “Exchange System Disruption” (solely in the option classes of the affected

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<sup>8</sup> “Member” means an individual or organization approved to exercise the trading rights associated with a Trading Permit. Members are deemed “members” under the Exchange Act. See the Definitions Section of the Fee Schedule and Exchange Rule 100.

<sup>9</sup> “Excluded Contracts” means any contracts routed to an away market for execution.

Matching Engine)<sup>10</sup>. The term Exchange System Disruption, which is defined in the Definitions section of the Fee Schedule, means an outage of a Matching Engine or collective Matching Engines for a period of two consecutive hours or more, during trading hours. The term Matching Engine, which is also defined in the Definitions section of the Fee Schedule, is a part of the MIAX Emerald 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. The Exchange believes that it is reasonable and appropriate to select two consecutive hours as the amount of time necessary to constitute an Exchange System Disruption, as two hours equates to approximately 1.4% of available trading time per month. The Exchange notes that the term “Exchange System Disruption” and its meaning have no applicability outside of the Fee Schedule, as it is used solely for purposes of calculating volume for the threshold tiers in the Fee Schedule.

In addition, the per contract transaction rebates and fees shall be applied retroactively to all eligible volume once the Tier has been reached by the Member. The Exchange additionally

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<sup>10</sup> A “Matching Engine” is a part of the MIAX Emerald 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. See the Definitions Section of the Fee Schedule.

proposes to aggregate the volume of Members and their Affiliates.<sup>11</sup> Members that place resting liquidity, i.e., orders on the MIAX Emerald System, will be assessed the specified “maker” rebate or fee (each a “Maker”) and Members that execute against resting liquidity will be assessed the specified “taker” fee or rebate (each a “Taker”).<sup>12</sup> Finally, Members shall be assessed lower transaction fees and smaller rebates for order executions in standard option classes in the Penny Pilot Program<sup>13</sup> (“Penny classes”) than for order executions in standard option classes which are not in the Penny Pilot Program (“Non-Penny classes”), for which Members will be assessed a higher transaction fees and larger rebates.

The Add/Remove Tiered Rebates/Fees proposed by the Exchange are similar in structure to and in the range of the transaction rebates and fees charged by Cboe BZX Options Exchange (“Cboe BZX”) to its market participants.<sup>14</sup> The Exchange notes the proposed transaction rebate and fee structure is similar to that of Cboe BZX, in that the Exchange proposes to use CTCV as the denominator in determining the volume for each Tier and Cboe BZX uses OCC Clearing Volume (“OCV”) as its denominator in the volume for each of its tiers. OCV is the total equity and ETF options volume that clears in the Customer range at the OCC for the month for which the fees apply, excluding volume on any day that the Exchange experiences an exchange system disruption and on any day with a scheduled early market close. CTCV similarly encompasses volume from all Customer clearing types. However, the Exchange’s proposed transaction rebate

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<sup>11</sup> “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. See the Definitions Section of the Fee Schedule.

<sup>12</sup> For a Priority Customer complex order taking liquidity in both a Penny class and non-Penny class against Origins other than Priority Customer, the Priority Customer order will receive a rebate based on the Tier achieved.

<sup>13</sup> See Securities Exchange Act Release No. 85225 (March 1, 2019), 84 FR 68353 (March 7, 2019)(SR-EMERALD-2019-06).

<sup>14</sup> See Cboe BZX Options Fee Schedule, Transaction Fees.

and fee structure is not identical to that of Cboe BZX. A distinction is the fact that the Exchange proposes to use a Member's actual, total monthly volume as the numerator in determining the volume for each Tier and Cboe BZX instead uses an average of daily volume ("ADV") as its numerator in the volume for each of its tiers. Additionally, Cboe BZX includes in the volume calculations for certain of its tiers applicable to its market participants the volume by such Member on Cboe BZX equities market. Unlike Cboe BZX, the Exchange does not presently offer any such comparable arrangement.<sup>15</sup> The Exchange notes that these are high level similarities and differences regarding the method of using volume cleared in the Customer range at the OCC as the measuring unit (denominator), and specific fees are discussed below.

The Exchange's transaction rebates and fees structure is also similar to that of Nasdaq GEMX, LLC ("GEMX").<sup>16</sup> GEMX has adopted a maker-taker tiered fee structure based upon volume that is also further delineated by whether the transaction is in Penny and SPY classes or Non-Penny classes (Cboe BZX has also adopted this type of maker-taker tiered fee structure).<sup>17</sup> The Exchange also proposes to delineate based on whether the transaction is in Penny or Non-Penny classes, and further delineate within the tables based on whether the order is simple, complex, or PRIME/cPRIME. Similar to the structure proposed by the Exchange, the highest tier threshold attained by a GEMX member applies retroactively in a given month to all eligible traded contracts and applies to all eligible market participants. All eligible volume from affiliated members is aggregated in determining applicable tiers, provided there is at least 75% common ownership between the members as reflected on each member's Form BD, Schedule A.

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<sup>15</sup> Id.

<sup>16</sup> See Nasdaq GEMX, Options 7 Pricing Schedule, Section 3 Regular Order Fees and Rebates.

<sup>17</sup> See Cboe BZX Options Fee Schedule.

## Tiers and Their Application

The Exchange proposes that its maker-taker tiered fee structure based on volume be determined based on three alternative calculation methods. Specifically, the Exchange proposes to add a section to its Fee Schedule titled “Tiers and their Application,” which sets forth volume thresholds based on different types of volume that can be achieved by Members. The proposed section will be included in the Fee Schedule as follows:

### ii) Tiers and their Application

Tiers are determined on a monthly basis. Tiers are determined based on three (3) alternative calculation methods. The calculation method that results in the highest Tier achieved by the Member shall apply to all Origin types by the Member. Following are the three (3) alternative calculation methods:

1. Total Member sides volume, based on % of CTCV (“Method 1”);
2. Total Emerald Market Maker sides volume, based on % of CTCV (“Method 2”);
3. Total Priority Customer Maker sides volume, based on % of CTCV (“Method 3”).

<b>Tier</b>	<b>Method 1</b>	<b>Method 2</b>	<b>Method 3</b>
1	0.00% - 0.40%	0.00% - 0.10%	0.00% - 0.10%
2	Above 0.40% - 0.80%	Above 0.10% - 0.50%	Above 0.10% - 0.35%
3	Above 0.80% - 1.20%	Above 0.50% - 0.75%	Above 0.35% - 0.60%
4	Above 1.20%	Above 0.75%	Above 0.60%

Each method is calculated based on the total monthly sides executed by the Member in all options classes on MIAX Emerald in the relevant Origin(s) and/or applicable liquidity (i.e. Priority Customer Maker), not including Excluded Contracts, (as the numerator) expressed as a percentage of (divided by) CTCV (as the denominator). The per contract transaction rebates and fees shall be applied retroactively to all eligible volume once the Tier has been reached by the Member. The Exchange aggregates the volume of Members and their Affiliates in the Tiers.

The Exchange believes that its proposed methodology for calculating its tiers is reasonable, as this methodology is similar to how another exchange calculates its tiers. The Exchange’s methodology, which analyzes three alternative calculation methods and then selects the method that is the highest tier reached to the Member, is similar to how GEMX calculates its

tiers.<sup>18</sup> For example, GEMX has four qualifying tiers, the same number that the Exchange is proposing. GEMX calculates its tiers using CTCV (Customer Total Consolidated Volume) at the OCC, which is fundamentally the same denominator method that the Exchange is proposing. GEMX aggregates volume of affiliated members, as the Exchange is also proposing. GEMX has two alternative calculation methods, however the Exchange is proposing three alternative calculation methods, which the Exchange believes provides greater benefit to Members, as there is an additional method to enable qualification for a higher tier. GEMX, for certain of its tiers, offers a calculation that looks at absolute ADV volume (i.e. 20,000 ADV), in addition to, or in lieu of, percentages of CTCV, whereas the Exchange is proposing to only look at monthly percentages of CTCV.

Priority Customers

Transaction rebates/fees applicable to all orders submitted by a Member for the account of a Priority Customer<sup>19</sup> will be assessed according to the following sections of the tables:

Members and Their Affiliates In Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIMEØ		
		Maker	Taker^	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker	Agency	Contra	Responder
Priority Customer*	1	(\$0.48)	\$0.47	(\$0.25)	(\$0.25)	(\$0.25)	\$0.00	\$0.05	\$0.05
	2	(\$0.48)	\$0.47	(\$0.40)	(\$0.40)	(\$0.40)	\$0.00	\$0.05	\$0.05
	3	(\$0.48)	\$0.47	(\$0.45)	(\$0.45)	(\$0.45)	\$0.00	\$0.05	\$0.05
	4	(\$0.53)	\$0.45	(\$0.50)	(\$0.50)	(\$0.50)	\$0.00	\$0.05	\$0.05

<sup>18</sup> See Nasdaq GEMX, Options 7 Pricing Schedule.

<sup>19</sup> “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). See the Definitions Section of the Fee Schedule and Exchange Rule 100, including Interpretations and Policies .01.

Members and Their Affiliates In Non-Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIME◇		
		Maker	Taker^	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker~	Agency	Contra	Responder
Priority Customer*	1	(\$0.85)	\$0.85	(\$0.40)	(\$0.40)	(\$0.40)	\$0.00	\$0.05	\$0.05
	2	(\$0.85)	\$0.85	(\$0.60)	(\$0.60)	(\$0.60)	\$0.00	\$0.05	\$0.05
	3	(\$0.85)	\$0.85	(\$0.70)	(\$0.70)	(\$0.75)	\$0.00	\$0.05	\$0.05
	4	(\$1.05)	\$0.82	(\$0.87)	(\$0.87)	(\$0.85)	\$0.00	\$0.05	\$0.05

^ Contra to Priority Customer Simple Orders, Origins ex Priority Customer Simple Orders will be charged \$0.50 and Priority Customer Simple Orders will be charged \$0.49 in Penny classes, and Origins ex Priority Customer Simple Orders will be charged \$1.10 and Priority Customer Simple Orders will be charged \$0.85 in Non-Penny classes.

\* Priority Customer Complex Orders contra to Priority Customer Complex Orders are neither charged nor rebated. Priority Customer Complex Orders that leg into the Simple book are neither charged nor rebated.

~ A \$0.05 Complex surcharge for Origins ex Priority Customer for Complex Orders that take liquidity from the Complex Order Book in Non-Penny classes.

# For orders in a Complex Auction, Priority Customer Complex Orders will receive the Complex Taker rebate based on the tier achieved when contra to an Origin that is not a Priority Customer. Origins that are not a Priority Customer will be charged the applicable Maker fee depending on the contra, based on the tier achieved.

◇ For PRIME and cPRIME, the per contract rebate or fee for the preexisting contra-side interest that trades with the Agency side will be waived. PRIME/cPRIME Responder side interest that trades with unrelated Agency side interest trades as Taker will be subject to Simple or Complex rates, as applicable.

The rebates and fees proposed by the Exchange for Priority Customer transactions are similar to those assessed in select tiers by GEMX for transactions on behalf of its Priority Customers for simple orders. Transactions on behalf of a GEMX “Priority Customer” are also similar to transactions by a Member on behalf of the Exchange’s Origin type “Priority Customer.”<sup>20</sup> For example, for a GEMX member adding liquidity in a Penny Pilot class on

<sup>20</sup> See supra note 16.

behalf of the account of a Priority Customer, GEMX pays a rebate of (i) \$0.25 in Tier 1; (ii) \$0.40 in Tier 2; (iii) \$0.48 in Tier 3; and (iv) \$0.53 in Tier 4.

Additionally, for a GEMX member taking liquidity in a Penny Pilot class on behalf of the account of a Priority Customer, GEMX assesses a fee of \$0.48 in Tier 1; (ii) \$0.47 in Tier 2; (iii) \$0.47 in Tier 3; and (iv) \$0.45 in Tier 4.<sup>21</sup>

The rebates proposed by the Exchange for Priority Customer complex transactions in Penny classes are also similar to those rebates paid by Nasdaq ISE, LLC (“Nasdaq ISE”) to its “Priority Customers” for “Priority Customer Complex Tier” transactions in Nasdaq ISE “Select Symbols.”<sup>22</sup> For example, for Priority Customer complex orders in Select Symbols, Nasdaq ISE will pay a rebate of (i) \$0.25 in Tier 1; (ii) \$0.30 in Tier 2; (iii) \$0.35 in Tier 3; (iv) \$0.40 in Tier 4; (v) \$0.45 in Tier 5; (vi) \$0.46 in Tier 6; (vii) \$0.48 in Tier 7; and (viii) \$0.50 in Tiers 8 and 9.<sup>23</sup>

Additionally, for Priority Customer complex orders in Non-Select Symbols, Nasdaq ISE will pay a rebate of (i) \$0.40 in Tier 1; (ii) \$0.55 in Tier 2; (iii) \$0.70 in Tier 3; (iv) \$0.75 in Tier 4; (v) \$0.80 in Tiers 5, 6 and 7; and (vi) \$0.85 in Tiers 8 and 9.<sup>24</sup>

The fees proposed by the Exchange for Priority Customer transactions in a PRIME/cPRIME auction are also similar to those assessed by GEMX for transactions on behalf of its Priority Customers for orders executed using GEMX’s “Price Improvement Mechanism” (“PIM”) in both Penny and Non-Penny classes. For example, in both Penny and Non-Penny classes, GEMX members will be assessed a fee of (i) \$0.00 for Priority Customer orders on the

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<sup>21</sup> See id.

<sup>22</sup> See Nasdaq ISE, Options 7 Pricing Schedule, Section 4 Complex Order Fees and Rebates.

<sup>23</sup> See id.

<sup>24</sup> See id.

agency side; (ii) \$0.05 per contract for Priority Customer orders on the contra-side; and (iii) \$0.05 per contract for all Responses. The Exchange’s fee structure for PRIME/cPRIME is similar to GEMX in that both of these structures do not have breakup credits and higher response fees for price improvement auctions.

MIAX Emerald Market Makers

Transaction rebates/fees applicable to all Market Makers<sup>25</sup> will be assessed according to the following sections of the tables:

Members and Their Affiliates In Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIME <sup>0</sup>		
		Maker	Taker^	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker	Agency	Contra	Responder
Market Maker	1	(\$0.35)	\$0.50	\$0.10	\$0.47	\$0.50	\$0.05	\$0.05	\$0.05
	2	(\$0.35)	\$0.50	\$0.10	\$0.47	\$0.50	\$0.05	\$0.05	\$0.05
	3	(\$0.35)	\$0.50	\$0.10	\$0.47	\$0.50	\$0.05	\$0.05	\$0.05
	4	(\$0.45)	\$0.48	\$0.10	\$0.47	\$0.50	\$0.05	\$0.05	\$0.05

Members and Their Affiliates In Non-Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIME <sup>0</sup>		
		Maker	Taker^	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker~	Agency	Contra	Responder
Market Maker	1	(\$0.45)	\$0.99	\$0.20	\$0.86	\$0.88	\$0.05	\$0.05	\$0.05
	2	(\$0.45)	\$0.99	\$0.20	\$0.86	\$0.88	\$0.05	\$0.05	\$0.05
	3	(\$0.45)	\$0.99	\$0.20	\$0.86	\$0.86	\$0.05	\$0.05	\$0.05
	4	(\$0.75)	\$0.94	\$0.20	\$0.86	\$0.86	\$0.05	\$0.05	\$0.05

<sup>25</sup> “Market Maker” means a Member registered with the Exchange for the purpose of making markets in options contracts traded on the Exchange. See the Definitions Section of the Fee Schedule and Exchange Rule 100.

- ^ Contra to Priority Customer Simple Orders, Origins ex Priority Customer Simple Orders will be charged \$0.50 and Priority Customer Simple Orders will be charged \$0.49 in Penny classes, and Origins ex Priority Customer Simple Orders will be charged \$1.10 and Priority Customer Simple Orders will be charged \$0.85 in Non-Penny classes.
- ~ A \$0.05 Complex surcharge for Origins ex Priority Customer for Complex Orders that take liquidity from the Complex Order Book in Non-Penny classes.
- # For orders in a Complex Auction, Priority Customer Complex Orders will receive the Complex Taker rebate based on the tier achieved when contra to an Origin that is not a Priority Customer. Origins that are not a Priority Customer will be charged the applicable Maker fee depending on the contra, based on the tier achieved.
- ◇ For PRIME and cPRIME, the per contract rebate or fee for the preexisting contra-side interest that trades with the Agency side will be waived. PRIME/cPRIME Responder side interest that trades with unrelated Agency side interest trades as Taker will be subject to Simple or Complex rates, as applicable.

The tiered Market Maker rebates/fees proposed by the Exchange are similar in structure to the transaction rebates and fees charged by GEMX to its market makers for simple orders and quotes. For example, for a market maker adding liquidity in a Penny Pilot class, GEMX pays a rebate of (i) \$0.28 in Tier 1; (ii) \$0.30 in Tier 2; (iii) \$0.35 in Tier 3; and (iv) \$0.45 in Tier 4.<sup>26</sup>

For a market maker adding liquidity in a Non-Penny Pilot class, GEMX pays a rebate of (i) \$0.40 in Tier 1; (ii) \$0.42 in Tier 2; (iii) \$0.45 in Tier 3; and (iv) \$0.75 in Tier 4.<sup>27</sup>

Additionally, for a market maker taking liquidity in a Penny Pilot class, GEMX assesses a fee of (i) \$0.50 in Tier 1; (ii) \$0.50 in Tier 2; (iii) \$0.50 in Tier 3; and (iv) \$0.48 in Tier 4.<sup>28</sup>

The fees proposed by the Exchange for Market Maker complex transactions in Penny classes are also similar to those fees charged by Nasdaq ISE to its “Market Makers” for complex transactions in Nasdaq ISE Select Symbols. For example, for a Market Maker adding liquidity in a Select Symbol, Nasdaq ISE assesses a fee of (i) \$0.10 when trading against Origins not Priority Customer; and (ii) a base \$0.47 when trading against Priority Customers. Additionally,

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<sup>26</sup> See supra note 16.

<sup>27</sup> See id.

<sup>28</sup> See id.

for a Market Maker taking liquidity in a Select Symbol, Nasdaq ISE assesses a base fee of \$0.50.<sup>29</sup>

For a Market Maker adding liquidity in a Non-Select Symbol, Nasdaq ISE assesses a fee of (i) \$0.20 when trading against Origins not Priority Customer; and (ii) \$0.86 when trading against Priority Customers. Additionally, for a Market Maker taking liquidity in a Non-Select Symbol, Nasdaq ISE assesses a fee of \$0.86.<sup>30</sup>

The fees proposed by the Exchange for Market Maker transactions in a PRIME/cPRIME auction are also similar to those assessed by GEMX for transactions on behalf of its Market Makers for orders executed in a GEMX PIM auction in both Penny and Non-Penny classes. For example, in both Penny and Non-Penny classes, GEMX members will be assessed a fee of (i) \$0.05 for Market Maker orders on the agency side; (ii) \$0.05 per contract for Market Maker orders on the contra-side; and (iii) \$0.05 per contract for all Responses. The Exchange's fee structure for PRIME/cPRIME is similar to GEMX in that both of these structures do not have breakup credits and higher responses for price improvement auctions.

#### Non-MIAX Emerald Market Makers

Transaction rebates/fees applicable to all orders submitted by a Member for the account of a non-MIAX Emerald Market Maker will be assessed according to the following sections of the tables:

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<sup>29</sup> See supra note 22.

<sup>30</sup> See id.

Members and Their Affiliates In Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIME◇		
		Maker	Taker^	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker	Agency	Contra	Responder
Non-MIAX Emerald Market Maker	1	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.48	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05

Members and Their Affiliates In Non-Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIME◇		
		Maker	Taker^	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker~	Agency	Contra	Responder
Non-MIAX Emerald Market Maker	1	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.94	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05

- ^ Contra to Priority Customer Simple Orders, Origins ex Priority Customer Simple Orders will be charged \$0.50 and Priority Customer Simple Orders will be charged \$0.49 in Penny classes, and Origins ex Priority Customer Simple Orders will be charged \$1.10 and Priority Customer Simple Orders will be charged \$0.85 in Non-Penny classes.
- ~ A \$0.05 Complex surcharge for Origins ex Priority Customer for Complex Orders that take liquidity from the Complex Order Book in Non-Penny classes.
- # For orders in a Complex Auction, Priority Customer Complex Orders will receive the Complex Taker rebate based on the tier achieved when contra to an Origin that is not a Priority Customer. Origins that are not a Priority Customer will be charged the applicable Maker fee depending on the contra, based on the tier achieved.
- ◇ For PRIME and cPRIME, the per contract rebate or fee for the preexisting contra-side interest that trades with the Agency side will be waived. PRIME/cPRIME Responder side interest that trades with unrelated Agency side interest trades as Taker will be subject to Simple or Complex rates, as applicable.

The tiered rebates/fees assessable to Non-MIAX Emerald Market Makers proposed by the Exchange for simple orders are also similar in structure to and in the range of the transaction rebates and fees charged by GEMX for transactions for the accounts of “Non-Nasdaq GEMX Market Makers (FarMM).” For example, for transactions on behalf of Non-Nasdaq GEMX Market Makers (FarMM) adding liquidity in a Penny Pilot class, GEMX pays a rebate of \$0.25 in Tier 1.<sup>31</sup>

Additionally, for transactions on behalf of Non-Nasdaq GEMX Market Makers (FarMM) taking liquidity in a Penny Pilot class, GEMX assesses a fee of (i) \$0.50 in Tier 1; (ii) \$0.50 in Tier 2; (iii) \$0.50 in Tier 3; and (iv) \$0.48 in Tier 4.<sup>32</sup>

The fees proposed by the Exchange for Non-MIAX Emerald Market Maker complex transactions in Penny classes are also similar to those fees charged by Nasdaq ISE to a “Non-Nasdaq ISE Market Maker (FarMM)” for complex transactions in Nasdaq ISE Select Symbols. For example, for a Non-Nasdaq ISE Market Maker (FarMM) adding liquidity in a Select Symbol, Nasdaq ISE assesses a fee of (i) \$0.20 when trading against Origin not Priority Customer; and (ii) \$0.48 when trading against Priority Customers.<sup>33</sup> Additionally, for a Non-Nasdaq ISE Market Maker (FarMM) taking liquidity in a Select Symbol, Nasdaq ISE assesses a fee of \$0.50.<sup>34</sup>

For a Non-Nasdaq ISE Market Maker (FarMM) adding liquidity in a Non-Select Symbol, Nasdaq ISE assesses a fee of (i) \$0.20 when trading against Origin not Priority Customer; and

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<sup>31</sup> See supra note 16.

<sup>32</sup> See id.

<sup>33</sup> See supra note 22.

<sup>34</sup> See id.

(ii) \$0.88 when trading against Priority Customers.<sup>35</sup> Additionally, for a Non-Nasdaq ISE Market Makers (FarMM) taking liquidity in a Non-Select Symbol, Nasdaq ISE assesses a fee of \$0.88.<sup>36</sup>

The fees proposed by the Exchange for Non-MIAX Emerald Market Maker transactions in a PRIME/cPRIME auction are also similar to those assessed by GEMX for transactions on behalf of its Non-Nasdaq GEMX Market Makers (FarMM) for orders executed in a GEMX PIM auction in both Penny and Non-Penny classes. For example, in both Penny and Non-Penny classes, GEMX members will be assessed a fee of (i) \$0.05 for Non-Nasdaq GEMX Market Maker (FarMM) orders on the agency side; (ii) \$0.05 per contract for Non-Nasdaq GEMX Market Maker (FarMM) orders on the contra-side; and (iii) \$0.05 per contract for all Responses.<sup>37</sup> The Exchange's fee structure for PRIME/cPRIME is similar to GEMX in that both of these structures do not have a breakup credits and higher responses for price improvement auction.

Firm Proprietary/Broker-Dealer

Transaction rebates/fees applicable to all orders submitted by a Member for the account of a Firm Proprietary or Broker-Dealer will be assessed according to the following sections of the tables:

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<sup>35</sup> See id.

<sup>36</sup> See id.

<sup>37</sup> See supra note 16.

Members and Their Affiliates In Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIME◇		
		Maker	Taker^	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker	Agency	Contra	Responder
Firm Proprietary /Broker- Dealer	1	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.49	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05

Members and Their Affiliates In Non-Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIME◇		
		Maker	Taker^	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker~	Agency	Contra	Responder
Firm Proprietary /Broker- Dealer	1	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.94	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05

^ Contra to Priority Customer Simple Orders, Origins ex Priority Customer Simple Orders will be charged \$0.50 and Priority Customer Simple Orders will be charged \$0.49 in Penny classes, and Origins ex Priority Customer Simple Orders will be charged \$1.10 and Priority Customer Simple Orders will be charged \$0.85 in Non-Penny classes.

~ A \$0.05 Complex surcharge for Origins ex Priority Customer for Complex Orders that take liquidity from the Complex Order Book in Non-Penny classes.

# For orders in a Complex Auction, Priority Customer Complex Orders will receive the Complex Taker rebate based on the tier achieved when contra to an Origin that is not a Priority Customer. Origins that are not a Priority Customer will be charged the applicable Maker fee depending on the contra, based on the tier achieved.

◇ For PRIME and cPRIME, the per contract rebate or fee for the preexisting contra-side interest that trades with the Agency side will be waived. PRIME/cPRIME Responder side interest that trades with unrelated Agency side interest trades as Taker will be subject to Simple or Complex rates, as applicable.

The tiered rebates/fees assessable to Firm Proprietary/Broker-Dealers proposed by the Exchange for simple orders are also similar in structure to and in the range of the transaction

rebates and fees charged by GEMX for transactions for the accounts of “Firm Proprietary/Broker-Dealer.” For example, for transactions on behalf of Firm Proprietary/Broker-Dealer adding liquidity in a Penny Pilot class, GEMX pays a rebate of \$0.25 in Tier 1.<sup>38</sup>

Additionally, for transactions on behalf of Firm Proprietary/Broker-Dealer taking liquidity in a Penny Pilot class, GEMX assesses a fee of (i) \$0.50 in Tier 1; (ii) \$0.50 in Tier 2; (iii) \$0.50 in Tier 3; and (iv) \$0.49 in Tier 4.<sup>39</sup>

The fees proposed by the Exchange for Firm Proprietary/Broker-Dealer complex transactions in Penny classes are also similar to those fees charged by Nasdaq ISE to “Firm Proprietary/Broker-Dealer” order for complex transactions in Nasdaq ISE Select Symbols. For example, for a Firm Proprietary/Broker-Dealer adding liquidity in a Select Symbol, Nasdaq ISE assesses a fee of (i) \$0.10 when trading against Origin not Priority Customer; and (ii) \$0.48 when trading against Priority Customers.<sup>40</sup> Additionally, for a Firm Proprietary/Broker-Dealer taking liquidity in a Select Symbol, Nasdaq ISE assesses a fee of \$0.50.<sup>41</sup>

For a Firm Proprietary/Broker-Dealer adding liquidity in a Non-Select Symbol, Nasdaq ISE assesses a fee of (i) \$0.20 when trading against Origin not Priority Customer; and (ii) \$0.88 when trading against Priority Customers.<sup>42</sup> Additionally, for a Firm Proprietary/Broker-Dealer taking liquidity in a Non-Select Symbol, Nasdaq ISE assesses a fee of \$0.88.<sup>43</sup>

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<sup>38</sup> See supra note 16.

<sup>39</sup> See id.

<sup>40</sup> See supra note 22.

<sup>41</sup> See id.

<sup>42</sup> See id.

<sup>43</sup> See id.

The fees proposed by the Exchange for Firm Proprietary/Broker-Dealer transactions in a PRIME/cPRIME auction are also similar to those assessed by GEMX for transactions on behalf of its Firm Proprietary/Broker-Dealer orders executed in a GEMX PIM auction in both Penny and Non-Penny classes. For example, in both Penny and Non-Penny classes, GEMX members will be assessed a fee of (i) \$0.05 for Firm Proprietary/Broker-Dealer orders on the agency side; (ii) \$0.05 per contract for Firm Proprietary/Broker-Dealer orders on the contra-side; and (iii) \$0.05 per contract for all Responses. The Exchange’s fee structure for PRIME/cPRIME is similar to GEMX in that both of these structures do not have a breakup credit or higher response fees for price improvement auctions.

Non-Priority Customers

Transaction rebates/fees applicable to all orders submitted by a Member for the account of a non-Priority Customers will be assessed according to the following sections of the tables:

Members and Their Affiliates In Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIME		
		Maker	Taker^	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker	Agency	Contra	Responder
Non-Priority Customer	1	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.50	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.49	\$0.20	\$0.50	\$0.50	\$0.05	\$0.05	\$0.05

Members and Their Affiliates In Non-Penny Classes Simple/Complex/PRIME/cPRIME									
Origin	Tier	Simple		Complex#			PRIME/cPRIME <sup>◇</sup>		
		Maker	Taker <sup>^</sup>	Maker (Contra Origins ex Priority Customer)	Maker (Contra Priority Customer Origin)	Taker <sup>~</sup>	Agency	Contra	Responder
Non- Priority Customer	1	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	2	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	3	(\$0.25)	\$0.99	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05
	4	(\$0.25)	\$0.94	\$0.20	\$0.88	\$0.88	\$0.05	\$0.05	\$0.05

<sup>^</sup> Contra to Priority Customer Simple Orders, Origins ex Priority Customer Simple Orders will be charged \$0.50 and Priority Customer Simple Orders will be charged \$0.49 in Penny classes, and Origins ex Priority Customer Simple Orders will be charged \$1.10 and Priority Customer Simple Orders will be charged \$0.85 in Non-Penny classes.

<sup>~</sup> A \$0.05 Complex surcharge for Origins ex Priority Customer for Complex Orders that take liquidity from the Complex Order Book in Non-Penny classes.

<sup>#</sup> For orders in a Complex Auction, Priority Customer Complex Orders will receive the Complex Taker rebate based on the tier achieved when contra to an Origin that is not a Priority Customer. Origins that are not a Priority Customer will be charged the applicable Maker fee depending on the contra, based on the tier achieved.

<sup>◇</sup> For PRIME and cPRIME, the per contract rebate or fee for the preexisting contra-side interest that trades with the Agency side will be waived. PRIME/cPRIME Responder side interest that trades with unrelated Agency side interest trades as Taker will be subject to Simple or Complex rates, as applicable.

The tiered rebates/fees assessable to Non-Priority Customers proposed by the Exchange are also similar in structure to and in the range of the transaction rebates and fees for simple orders charged by GEMX for transactions for the accounts of “Professional Customers.”

For example, for transactions on behalf of Professional Customers adding liquidity in a Penny Pilot class, GEMX pays a rebate of \$0.25 in Tier 1.<sup>44</sup>

<sup>44</sup> See supra note 16.

Additionally, for transactions on behalf of Professional Customers taking liquidity in a Penny Pilot class, GEMX assesses a fee of (i) \$0.50 in Tier 1; (ii) \$0.50 in Tier 2; (iii) \$0.50 in Tier 3; and (iv) \$0.49 in Tier 4.<sup>45</sup>

The fees proposed by the Exchange for Non-Priority Customer complex transactions in Penny classes are also similar to those fees charged by Nasdaq ISE for “Professional Customers” for complex transactions in Nasdaq ISE Select Symbols. For example, for a Professional Customer adding liquidity in a Select Symbol, Nasdaq ISE assesses a fee of (i) \$0.10 when trading against non-Priority Customers; and (ii) \$0.48 when trading against Priority Customers.<sup>46</sup> Additionally, for a Professional Customer taking liquidity in a Select Symbol, Nasdaq ISE assesses a fee of \$0.50.<sup>47</sup>

For a Professional Customer adding liquidity in a Non-Select Symbol, Nasdaq ISE assesses a fee of (i) \$0.20 when trading against non-Priority Customers; and (ii) \$0.88 when trading against Priority Customers.<sup>48</sup> Additionally, for a Professional Customer taking liquidity in a Non-Select Symbol, Nasdaq ISE assesses a fee of \$0.88.<sup>49</sup>

The fees proposed by the Exchange for Non-Priority Customer transactions in a PRIME/cPRIME auction are also similar to those assessed by GEMX for transactions on behalf of its Professional Customer orders executed in a GEMX PIM auction in both Penny and Non-Penny classes. For example, in both Penny and Non-Penny classes, GEMX members will be assessed a fee of (i) \$0.05 for Professional Customer orders on the agency side; (ii) \$0.05 per

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<sup>45</sup> See id.

<sup>46</sup> See supra note 22.

<sup>47</sup> See id.

<sup>48</sup> See id.

<sup>49</sup> See id.

contract for Professional Customer orders on the contra-side; and (iii) \$0.05 per contract for all Responses. The Exchange’s fee structure for PRIME/cPRIME is similar to GEMX in that both of these structures do not have a breakup credit and higher responses fees for price improvement auctions.

### QCC Fees

The Exchange proposes to adopt new Section 1)a)iii of the Fee Schedule to establish transaction fees and rebates for QCC Orders:

Types of Market Participants	QCC Order		
	Per Contract Fee for Initiator	Per Contract Fee for Contra-side	Per Contract Rebate for Initiator
<i>Priority Customer</i>	\$0.00	\$0.00	(\$0.10)
<i>Public Customer that is Not a Priority Customer</i>	\$0.15	\$0.15	(\$0.10)
<i>MIAX Emerald Market Maker</i>	\$0.15	\$0.15	(\$0.10)
<i>Non-MIAX Emerald Market Maker</i>	\$0.15	\$0.15	(\$0.10)
<i>Non-Member Broker-Dealer</i>	\$0.15	\$0.15	(\$0.10)
<i>Firm</i>	\$0.15	\$0.15	(\$0.10)

Rebates will be delivered to the Member that enters the order into the MIAX Emerald system, but will only be paid on the initiating side of the QCC transaction. However, no rebates will be paid for QCC transactions for which both the initiator and contra-side orders are Priority Customers. A QCC transaction is comprised of an ‘initiating order’ to buy (sell) at least 1,000 contracts coupled with a contra-side order to sell (buy) an equal number of contracts.

A QCC Order is comprised of an order to buy or sell at least 1,000 contracts that is identified as being part of a qualified contingent trade, coupled with a contra side order to buy or sell an equal number of contracts.<sup>50</sup> The Exchange proposes to establish a transaction fee for all Origins other than Priority Customer QCC Orders of \$0.15 per contract side (Priority Customer

<sup>50</sup> A Qualified Contingent Cross Order is comprised of an originating order to buy or sell at least 1,000 contracts, or 10,000 mini-option contracts, that is identified as being part of a qualified contingent trade, as that term is defined in Interpretation and Policy .01 to Rule 516, coupled with a contra-side order or orders totaling an equal number of contracts. See Exchange Rule 516(j).

orders will not be assessed a charge). In addition, the Exchange proposes to adopt a \$0.10 per contract rebate for the initiating order side, regardless of Origin code. The Exchange proposes to explicitly provide in the Fee Schedule that the rebate will be assessed to the Member that enters the order into the System, but will only be assessed on the initiating side of the QCC transaction. However, no rebates will be assessed for QCC transactions in which both the initiator and contra-side are Priority Customers.

Additionally, the Exchange proposes to state explicitly in the Fee Schedule that a QCC transaction is comprised of an ‘initiating order’ to buy (sell) at least 1,000 contracts, coupled with a contra-side order to sell (buy) an equal number of contracts. The Exchange notes that with regard to order entry, the first order submitted into the system is marked as the initiating side and the second order is marked as the contra side. The purpose of this proposed fee is to incentivize the sending of QCC Orders to the Exchange. The Exchange notes that other competing exchanges similarly provide rebates on QCC initiating orders.<sup>51</sup>

#### cQCC Fees

The Exchange proposes to adopt new Section 1)a)iv of the Fee Schedule to establish transaction fees and rebates for cQCC<sup>52</sup> Orders, which are identical to transaction fees and rebates that the Exchange proposes to charge for simple QCC Orders:

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<sup>51</sup> See Cboe Exchange, Inc. Fees, Pg. 5, QCC Rate Table, Nasdaq ISE, Options 7 Pricing Schedule, Section 6, Other Options Fees and Rebates.

<sup>52</sup> A Complex Qualified Contingent Cross or “cQCC” Order is comprised of an originating complex order to buy or sell where each component is at least 1,000 contracts that is identified as being part of a qualified contingent trade, as defined in Rule 516, Interpretation and Policy .01, coupled with a contra-side complex order or orders totaling an equal number of contracts. Trading of cQCC Orders is governed by Rule 515(h)(4). See Exchange Rule 518(b)(6).

Types of Market Participants	cQCC Order		
	Per Contract Fee for Initiator	Per Contract Fee for Contra-side	Per Contract Rebate for Initiator
<i>Priority Customer</i>	\$0.00	\$0.00	(\$0.10)
<i>Public Customer that is Not a Priority Customer</i>	\$0.15	\$0.15	(\$0.10)
<i>MIAX Emerald Market Maker</i>	\$0.15	\$0.15	(\$0.10)
<i>Non-MIAX Emerald Market Maker</i>	\$0.15	\$0.15	(\$0.10)
<i>Non-Member Broker-Dealer</i>	\$0.15	\$0.15	(\$0.10)
<i>Firm</i>	\$0.15	\$0.15	(\$0.10)

All fees and rebates are per contract per leg. Rebates will be delivered to the Member that enters the order into the MIAX Emerald system, but will only be paid on the initiating side of the cQCC transaction. However, no rebates will be paid for cQCC transactions for which both the initiator and contra-side orders are Priority Customers. A cQCC transaction is comprised of an ‘initiating complex order’ to buy (sell) where each component is at least 1,000 contracts that is identified as being part of a qualified contingent trade, coupled with a contra-side complex order or orders to sell (buy) an equal number of contracts.

This cQCC Fee table (including the amounts therein) is identical to the QCC Fee table (including the amounts therein), which is contained in Section 1)a)iii) of the Fee Schedule.

The Exchange also proposes to adopt certain explanatory text relating to the cQCC Fee table, just as the Exchange currently has relating to the simple QCC Fee table. The text provides that all fees and rebates are per contract per leg. Also, rebates will be delivered to the Member that enters the order into the MIAX Emerald system, but will only be assessed on the initiating side of the cQCC transaction. However, no rebates will be assessed for cQCC transactions for which both the initiator and contra-side are Priority Customers. A cQCC transaction is comprised of an ‘initiating complex order’ to buy (sell) where each component is at least 1,000 contracts that is identified as being part of a qualified contingent trade, coupled with a contra-side complex order or orders to sell (buy) an equal number of contracts.

## C2C and cC2C Fees

The Exchange proposes to adopt new Section 1)a)v), C2C<sup>53</sup> and cC2C<sup>54</sup> Fees, to the Fee Schedule to clarify and establish transaction fees and rebates for C2C Orders and cC2C Orders.

<b>Types of Market Participants</b>	<b>C2C and cC2C Order Per Contract Fee/Rebate</b>
<i>Priority Customer</i>	<u>\$0.00</u>

The Exchange notes that it proposes to offer trading in C2C Orders.<sup>55</sup> Because C2C Orders are comprised entirely of Priority Customer orders, the Exchange proposes to assess a \$0.00 per contract transaction fee and a \$0.00 rebate to such orders. However, the Exchange desires to clarify and make explicit that C2C Orders will be assessed a \$0.00 per contract transaction fee and assessed a \$0.00 per contract rebate. The Exchange is also proposing to assess cC2C Orders a \$0.00 per contract transaction fee and to pay a \$0.00 per contract rebate.

The Exchange also proposes to adopt certain explanatory text relating to the C2C and cC2C Fee table. The text provides that all fees and rebates are per contract per leg. Also, a C2C Order is comprised of a Priority Customer Order to buy and a Priority Customer Order to sell at the same price and for the same quantity. A cC2C Order is comprised of one Priority Customer complex order to buy and one Priority Customer complex order to sell at the same price and for the same quantity.

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<sup>53</sup> A C2C Order is comprised of a Priority Customer Order to buy and a Priority Customer Order to sell at the same price and for the same quantity. See the Transaction Fees Section of the Fee Schedule.

<sup>54</sup> A Complex Customer Cross or “cC2C” Order is comprised of one Priority Customer complex order to buy and one Priority Customer complex order to sell at the same price and for the same quantity. Trading of cC2C Orders is governed by Rule 515(h)(3). See Exchange Rule 518(b)(5).

<sup>55</sup> See Exchange Rule 516(i).

## Routing Fees

MIAX Emerald proposes to assess Routing Fees in order to recoup costs incurred by MIAX Emerald when routing orders to various away markets. The amount of the applicable fee, is based upon (i) the Origin type of the order, (ii) whether or not it is an order for an option in a Penny or Non-Penny class (or other explicitly identified classes) and (iii) to which away market it is being routed, according to the following table:<sup>56</sup>

Description	Fees
Routed, Priority Customer, Penny Pilot, to: NYSE American, BOX, Cboe, Cboe EDGX Options, MIAX Options, Nasdaq MRX, 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), MIAX PEARL	\$0.65
Routed, Priority Customer, Non-Penny Pilot, to: NYSE American, BOX, Cboe, Cboe EDGX Options, MIAX Options, Nasdaq ISE, Nasdaq MRX, Nasdaq PHLX, Nasdaq BX Options	\$0.15
Routed, Priority Customer, Non-Penny Pilot, to: NYSE Arca Options, Cboe BZX Options, Cboe C2, MIAX PEARL, Nasdaq GEMX, NOM	\$1.00
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, MIAX PEARL, NOM, Nasdaq PHLX, Nasdaq BX Options	\$0.65
Routed, Public Customer that is not a Priority Customer, Non-Penny Pilot, to: MIAX Options, NYSE American, Cboe, Nasdaq PHLX, Nasdaq ISE, Cboe EDGX Options	\$1.00
Routed, Public Customer that is not a Priority Customer, Non-Penny Pilot, to: Cboe C2, BOX, Nasdaq MRX, Nasdaq BX Options, NOM, MIAX PEARL	\$1.15
Routed, Public Customer that is not a Priority Customer, Non-Penny Pilot, to: Cboe BZX Options, NYSE Arca Options, Nasdaq GEMX	\$1.25

<sup>56</sup> This is similar to the methodologies utilized by the Exchange’s affiliates, MIAX and MIAX PEARL, and by Cboe BZX Options in assessing Routing Fees. See MIAX Fee Schedule, Section 1) c), Fees for Customer Orders Routed to Another Options Exchange, MIAX PEARL Fee Schedule, Section 1) b), Fees for Customer Orders Routed to Another Options Exchange, and Cboe BZX Fee Schedule under “Fee Codes and Associated Fees”.

In determining its proposed Routing Fees, the Exchange took into account transaction fees and rebates assessed by the away markets to which the Exchange routes orders, as well as the Exchange's clearing costs,<sup>57</sup> administrative, regulatory, and technical costs associated with routing orders to an away market. The Exchange uses unaffiliated routing brokers to route orders to the away markets; the costs associated with the use of these services are included in the Routing Fees specified in the Fee Schedule. This Routing Fees structure is not only similar to the Exchange's affiliates, Miami International Securities Exchange LLC ("MIAX") and MIAX PEARL, LLC ("MIAX PEARL"), but is also comparable to the structures in place at other exchanges, such as Cboe BZX Options.<sup>58</sup> The Cboe BZX fee schedule has exchange groupings, whereby several exchanges are grouped into the same category, dependent on the order's Origin type and whether it is a Penny or Non-Penny Pilot class. For example, Cboe BZX fee code RQ covers routed customer orders in Penny classes to NYSE Arca Options, Cboe C2, Nasdaq ISE, Nasdaq GEMX, MIAX PEARL or NOM, with a single fee of \$0.85 per contract. The Exchange is proposing a similar structure, however its structure is more granular and thus contains more exchange groupings. The Exchange is proposing to have 8 different exchange groupings, based on the exchange, order type, and option class. The Exchange believes that having more groupings will offer the Exchange to better approximate its costs associated with routing orders to away markets. The per-contract transaction fee amount associated with each grouping closely approximates the Exchange's all-in cost (plus an additional, non-material amount) to execute that corresponding contract at that corresponding exchange. For example, to execute a Priority Customer order in a Penny Pilot symbol at NYSE American costs the Exchange approximately

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<sup>57</sup> The OCC amended its clearing fee from \$0.01 per contract side to \$0.02 per contract side. See Securities Exchange Act Release No. 71769 (March 21, 2014), 79 FR 17214 (March 27, 2014) (SR-OCC-2014-05).

<sup>58</sup> See supra note 56.

\$0.15 a contract. Since this is also the approximate cost to execute that same order at BOX, the Exchange is able to group NYSE American and BOX together in the same grouping. The Exchange notes that in determining the appropriate groupings, the Exchange considered the transaction fees and rebates assessed by away markets, and grouped exchanges together that assess transaction fees for routed orders within a similar range. This same logic and structure applies to all of the groupings in the proposed Routing Fees table. By utilizing the same structure that is utilized by the Exchange's affiliates, MIAX and MIAX PEARL, those Members which are Members of the Exchange, MIAX, and MIAX PEARL, will be assessed Routing Fees in the same manner, which the Exchange believes will minimize any confusion as to the method of assessing Routing Fees between the three exchanges for those Members. This proposal is identical to the structure of the routing fee tables of the Exchange's affiliates, MIAX and MIAX PEARL.<sup>59</sup>

#### Regulatory Fees

##### Sales Value Fee

The Sales Value Fee<sup>60</sup> is proposed to be assessed by the Exchange to each Member for sales on the Exchange with respect to which the Exchange is obligated to pay a fee to the United States Securities and Exchange Commission ("Commission") 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. The Section 31 fee rate is set annually by the Commission. To the extent there may be any excess monies collected under this

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<sup>59</sup> See SR-MIAX-2019-08 and SR-PEARL-2019-06 filed on February 28, 2019 to conform the routing fee structures of MIAX and MIAX PEARL.

<sup>60</sup> See Exchange Rule 1207.

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. The fee is collected indirectly from Members through their clearing firms by the OCC on behalf of MIAX Emerald with respect to option sales and options exercises. The Sales Value fee proposed by the Exchange is identical to the fee assessed by other exchanges, including the Exchange's affiliates MIAX and MIAX PEARL.<sup>61</sup>

#### Web CRD<sup>62</sup> Fees

Financial Industry Regulatory Authority ("FINRA"), through the Web CRD<sup>SM</sup> registration system for the registration of associated persons of Electronic Exchange Member and Market Maker organizations that are not also FINRA members, collects from those MIAX Emerald Members general registration fees and fingerprint processing fees. The Fee Schedule sets forth the Web CRD Fees FINRA is currently charging. The Web CRD fees proposed by the Exchange are similar to those assessed by other exchanges and identical to the same fees assessed by MIAX and MIAX PEARL.<sup>63</sup>

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<sup>61</sup> See MIAX Fee Schedule, Section 2) a), Sales Value Fee and MIAX PEARL Fee Schedule, Section 2) a), Sales Value Fee.

<sup>62</sup> FINRA operates the Web Central Registration Depository (CRD®), the central licensing and registration system for the U.S. securities industry and its regulators. It contains the registration records of more than 6,800 registered broker-dealers and the qualification, employment, and disclosure histories of more than 660,000 active registered individuals.

<sup>63</sup> See MIAX Fee Schedule, Section 2) c), Web CRD Fees and MIAX PEARL Fee Schedule, Section 2) c), Web CRD Fees.

### Non-Transaction Fees

The Exchange proposes to establish certain non-transaction fees, including membership, testing, system connectivity and market data fees, applicable to Members and non-Members using services provided by MIAX Emerald.

### Membership Fees

MIAX Emerald proposes to assess Membership fees for Applications and Trading Permits.

### Application for MIAX Emerald Membership

A one-time application fee based upon the applicant's status as either an Electronic Exchange Member ("EEM") or as a Market Maker will be assessed by MIAX Emerald. The Exchange proposes to assess the one-time application fee on the earlier of (i) the date the applicant is certified in the Exchange's membership system or (ii) once an application for MIAX Emerald membership is finally denied. MIAX Emerald proposes that the one-time application fee for membership will be waived for a period of time, which the Exchange has defined in the Fee Schedule as the Waiver Period,<sup>64</sup> for both EEMs and Market Makers. MIAX Emerald believes that this will provide incentive for potential applicants to submit early applications, which should result in increasing potential order flow and liquidity as MIAX Emerald begins trading. The Exchange will submit a rule filing to the Commission to establish the fee amount and any related requirements, and provide notice to expire the applicable Waiver Period. Even

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<sup>64</sup> "Waiver Period" means, for each applicable fee, the period of time from the initial effective date of the MIAX Emerald 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. See the Definitions Section of the Fee Schedule.

though the Exchange is proposing to waive this particular fee during the Waiver Period, the Exchange believes that is appropriate to provide market participants with the overall structure of the fee by outlining the structure on the Fee Schedule without setting forth a specific fee amount, so that there is general awareness that the Exchange intends to assess such a fee in the future, should the Waiver Period terminate and the Exchange establish an applicable fee. The Exchange believes that its proposal to waive this fee under this waiver structure is reasonable because this waiver structure is identical to the waiver structure that is currently in place at the Exchange's affiliate, MIAX PEARL.<sup>65</sup>

### Trading Permits

MIAX Emerald proposes to issue Trading Permits that confer the ability to transact on MIAX Emerald. Trading Permits will be issued to EEMs and Market Makers. Members receiving Trading Permits during a particular calendar month will be assessed monthly Trading Permit Fees as shall be set forth in the Fee Schedule. The Exchange notes that the Exchange's affiliates, MIAX and MIAX PEARL, charge trading permit fees as well, and the Exchange's proposed structure for its Trading Permit fees is based on the structure of MIAX, particularly as it relates to EEMs.<sup>66</sup> For the calculation of the monthly Trading Permit Fee as it relates to EEMs, Monthly Trading 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

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<sup>65</sup> See Securities Exchange Act Release No. 80061 (February 17, 2017), 82 FR 11676 (February 24, 2017) (SR-PEARL-2017-10) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Establish the MIAX PEARL Fee Schedule). MIAX PEARL introduced the structure of certain non-transaction rebates and fees (without proposing actual fee amounts), but also explicitly waived the assessment of any such fees for the period of time which MIAX PEARL defined as the "Waiver Period".

<sup>66</sup> See MIAX Fee Schedule, Section 3) b), Monthly Trading Permit Fee and MIAX PEARL Fee Schedule, Section 3) b), Monthly Trading Permit Fee.

one or more FIX Ports in the production environment. Further, the Exchange proposes that 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. The Exchange proposes that 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 MIAX Emerald Express Interface (“MEI”) Ports in the production environment and is assigned to quote in one or more classes.

For the calculation of the monthly Trading Permit Fees that apply to Market Makers, 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 Emerald 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 Market Makers the monthly Trading Permit Fee based on the greatest number of classes listed on MIAX Emerald that the 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. 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.

The monthly Trading Permit Fees assessable to EEMs and Market Makers are being waived by the Exchange for the Waiver Period. The Exchange will submit a rule filing to the Commission to establish the fee amount and any related requirements, and provide notice to terminate the applicable Waiver Period. Even though the Exchange is proposing to waive this particular fee during the Waiver Period, the Exchange believes that is appropriate to provide market participants with the overall structure of the fee by outlining the structure on the Fee Schedule without setting forth a specific fee amount, so that there is general awareness that the Exchange intends to assess such a fee in the future, should the Waiver Period terminate and the Exchange establish an applicable fee. The Exchange believes that its proposal to waive this fee under this waiver structure is reasonable because this waiver structure is identical to the waiver structure that was previously in place at the Exchange's affiliate, MIAX PEARL.<sup>67</sup>

#### Testing and Certification Fees

##### API Testing and Certification Fee for Members

MIAX Emerald proposes to assess an Application Programming Interface (“API”) testing and certification fee on all Members depending upon the type of interface being tested. An API makes it possible for Member software to communicate with MIAX Emerald software applications, and is subject to Member testing with, and certification by, MIAX Emerald. The Exchange proposes to offer four types of interfaces: (i) the Financial Information Exchange (“FIX”) Port,<sup>68</sup> which allows Members to electronically send orders in all products traded on the Exchange; (ii) the MEI Port, which allows Market Makers to submit electronic orders and quotes

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<sup>67</sup> See supra note 65.

<sup>68</sup> “FIX Port” means an interface with MIAX Emerald systems that enables the Port user to submit simple and complex orders electronically to MIAX Emerald. See the Definitions Section of the Fee Schedule.

to the Exchange; (iii) the Clearing Trade Drop (“CTD”) Port,<sup>69</sup> which provides real-time trade clearing information to the participants to a trade on MIAX Emerald and to the participants’ respective clearing firms; and (iv) FIX Drop Copy (“FXD”) Port<sup>70</sup>, which provides a copy of real-time trade execution, correction and cancellation information through a FIX Port to any number of FIX Ports designated by an EEM to receive such messages.

API Testing and Certification Fees will be assessed (i) initially per API for FIX, FXD and CTD 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 will not be assessed in situations where the Exchange initiates a mandatory change to the Exchange’s system that requires testing and certification. The fees represent costs incurred by the Exchange as it works with each Member for testing and certifying that the Member’s software systems communicate properly with MIAX Emerald’s interfaces. MIAX Emerald has set a one-time fee so that MIAX Emerald Members will know the full cost for the service prior to beginning to use such services and thereby be more cost effective to the Members.

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<sup>69</sup> “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. See the Definitions Section of the Fee Schedule.

<sup>70</sup> “FXD Port” 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.

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 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.

In order to provide an incentive to prospective Members to apply early for membership and to engage in API testing and certification such that they will be able to trade options on MIAX Emerald as soon as possible, API Testing and Certification fees assessable to Members will be waived by the Exchange for all interfaces for the Waiver Period. The Exchange will submit a rule filing to the Commission to establish the fee amount and any related requirements, and provide notice to terminate the applicable Waiver Period. Even though the Exchange is proposing to waive this particular fee during the Waiver Period, the Exchange believes that is appropriate to provide market participants with the overall structure of the fee by outlining the structure on the Fee Schedule without setting forth a specific fee amount, so that there is general awareness that the Exchange intends to assess such a fee in the future, should the Waiver Period terminate and the Exchange establish an applicable fee. The Exchange believes that its proposal to waive this fee under this waiver structure is reasonable because this waiver structure is

identical to the waiver structure that is currently in place at the Exchange's affiliate, MIAX PEARL.<sup>71</sup>

#### API Testing and Certification Fee for Non-Members

MIAX Emerald proposes to assess a one-time API Testing and Certification fee per interface on third-party vendors, Service Bureaus and other non-Members whose software interfaces with MIAX Emerald software. As with Members, an API makes it possible for the software of third-party vendors, Service Bureaus and other non-Members to communicate with MIAX Emerald software applications, and is subject to testing with, and certification by, MIAX Emerald. API Testing and Certification Fees will be assessed (i) initially per API for FIX, FXD, CTD and MEI 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 mandatory 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.

Other exchanges, including Nasdaq PHLX, LLC and The Nasdaq Stock Market LLC, charge a fee for similar services to Members and non-Members.<sup>72</sup> In order to provide an incentive to non-Members to engage in early API testing and certification such that they will be able to utilize the services of MIAX Emerald as soon as possible, API Testing and Certification fees assessable to non-Members will be waived by the Exchange for all interfaces for the Waiver Period. The Exchange will submit a rule filing to the Commission to establish the fee amount

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<sup>71</sup> See supra note 65.

<sup>72</sup> See Nasdaq PHLX Options 7 Pricing Schedule, Section 9, Other Member Fees, E. Testing Facilities.

and any related requirements, and provide notice to terminate the applicable Waiver Period. Even though the Exchange is proposing to waive this particular fee during the Waiver Period, the Exchange believes that is appropriate to provide market participants with the overall structure of the fee by outlining the structure on the Fee Schedule without setting forth a specific fee amount, so that there is general awareness that the Exchange intends to assess such a fee in the future, should the Waiver Period terminate and the Exchange establish an applicable fee. The Exchange believes that its proposal to waive this fee under this waiver structure is reasonable because this waiver structure is identical to the waiver structure that is currently in place at the Exchange's affiliate, MIAX PEARL.<sup>73</sup>

#### Member Network Testing and Certification Fee

MIAX Emerald will establish electronic communication connections with Individual Firms and proposes to assess Individual Firms a Testing and Certification Fee for network connectivity. Member Network Connectivity Testing and Certification Fees will be assessed (i) initially per connection in the month the Individual Firm has been credentialed to use any API or Market Data feeds in the production environment utilizing the tested network connection, and (ii) each time an Individual Firm 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.

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<sup>73</sup> See supra note 65.

The Exchange notes that the Emerald Express Network Interconnect (“EENI”)<sup>74</sup> is a network infrastructure which provides Members and non-Members network connectivity to the trading platforms, market data systems, test systems, and disaster recovery facility of the Exchange. When utilizing a Shared<sup>75</sup> cross-connect, the EENI can also be configured to offer network connectivity to the trading platforms, market data systems, test systems, and disaster recovery facilities of MIAX and MIAX PEARL. When utilizing a Dedicated<sup>76</sup> cross-connect, the EENI can only be configured to offer network connectivity to the trading platforms, market data systems, and test systems of the Exchange. The EENI consists of the low latency and ultra-low latency (“ULL”) connectivity options set forth in the Exchange’s Fee Schedule. Accordingly, Members utilizing Shared cross-connects to connect to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange and its affiliates, MIAX and MIAX PEARL will only be assessed one Network Connectivity Testing

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<sup>74</sup> “EENI” means the Emerald 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 MIAX Emerald. When utilizing a Shared cross-connect, the EENI can also be configured to offer network connectivity to the trading platforms, market data systems, test systems, and disaster recovery facilities of MIAX and MIAX PEARL. When utilizing a Dedicated cross-connect, the EENI can only be configured to offer network connectivity to the trading platforms, market data systems, and test systems of MIAX Emerald. The EENI consists of the low latency and ultra-low latency (“ULL”) connectivity options set forth in the Exchange’s Fee Schedule. See the Definitions Section of the Fee Schedule.

<sup>75</sup> “Shared” (cross-connect) means cross-connect that provides network connectivity to the trading platforms, market data systems, test systems, and/or disaster recovery facilities of MIAX Emerald, MIAX and MIAX PEARL via a single, shared connection. The following connections can be Shared across MIAX Emerald, MIAX and MIAX PEARL: 1 Gigabit, 1 Gigabit Disaster Recovery, and 10 Gigabit Disaster Recovery. See the Definitions Section of the Fee Schedule.

<sup>76</sup> “Dedicated” (cross-connect) means cross-connect that provides network connectivity solely to the trading platforms, market data systems, and test systems of MIAX Emerald. The following connection is Dedicated to MIAX Emerald: 10 Gigabit ULL. See the Definitions Section of the Fee Schedule.

and Certification Fee per connection tested, regardless of the trading platforms, market data systems, test systems, and disaster recovery facilities accessed via such connection. The Exchange notes that it has submitted a separate rule filing to the Commission to establish the fee amounts and related requirements related to connectivity for Members to the Exchange's primary/secondary facility.<sup>77</sup>

In order to provide an incentive to Individual Firms to engage in early network connectivity testing and certification, such that they will be able to utilize the services of MIAX Emerald as soon as possible, Network Connectivity Testing and Certification fees assessable to Individual Firms will be waived by the Exchange for the Waiver Period. The Exchange will submit a rule filing to the Commission to establish the fee amount and any related requirements, and provide notice to terminate the applicable Waiver Period. Even though the Exchange is proposing to waive this particular fee during the Waiver Period, the Exchange believes that is appropriate to provide market participants with the overall structure of the fee by outlining the structure on the Fee Schedule without setting forth a specific fee amount, so that there is general awareness that the Exchange intends to assess such a fee in the future, should the Waiver Period terminate and the Exchange establish an applicable fee. The Exchange believes that its proposal to waive this fee under this waiver structure is reasonable because this waiver structure is identical to the waiver structure that was previously in place at the Exchange's affiliate, MIAX PEARL.<sup>78</sup>

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<sup>77</sup> See Securities Exchange Act Release No. 85316 (March 14, 2019), SR-EMERALD-2019-11 (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Adopt System Connectivity Fees).

<sup>78</sup> See supra note 65.

### Non-Member Network Testing and Certification Fee

MIAX Emerald will establish electronic connections with and proposes to assess Service Bureaus, Extranet Providers and other non-Members a Testing and Certification Fee for network connectivity.

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 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 to the Exchange's Disaster Recovery Facility.

The EENI is also available to non-Member subscribers. For non-Member subscribers, when utilizing a Shared cross-connect, the EENI can also be configured to offer network connectivity to the trading platforms, market data systems, test systems, and disaster recovery facilities of MIAX and MIAX PEARL. When utilizing a Dedicated cross-connect, the EENI can only be configured to offer network connectivity to the trading platforms, market data systems, and test systems of the Exchange. The EENI consists of the low latency and ULL connectivity options set forth in the Exchange's Fee Schedule. Accordingly, non-Members utilizing Shared cross-connects to connect to the trading platforms, market data systems, test systems, and disaster recovery facilities of the Exchange and its affiliates, MIAX and MIAX PEARL 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. The Exchange notes that it has submitted a separate rule filing to the Commission to establish the fee amounts and related requirements related to connectivity for Members to the Exchange's primary/secondary facility.<sup>79</sup>

The Member and non-Member Network Testing and Certification fees represent installation and support costs incurred by the Exchange as it works with each Member and non-Member to make sure there are appropriate electronic connections with MIAX Emerald.

In order to provide an incentive to Service Bureau, Extranet Provider or other non-Members to engage in early network connectivity testing and certification such that they will be able to utilize the services of MIAX Emerald as soon as possible, Network Connectivity Testing and Certification fees assessable to Service Bureau, Extranet Provider or other non-Members will be waived by the Exchange for the Waiver Period. The Exchange will submit a rule filing to the Commission to establish the fee amount and any related requirements, and provide notice to terminate the applicable Waiver Period. Even though the Exchange is proposing to waive this particular fee during the Waiver Period, the Exchange believes that is appropriate to provide market participants with the overall structure of the fee by outlining the structure on the Fee Schedule without setting forth a specific fee amount, so that there is general awareness that the Exchange intends to assess such a fee in the future, should the Waiver Period terminate and the Exchange establish an applicable fee. The Exchange believes that its proposal to waive this fee

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<sup>79</sup> See supra note 77.

under this waiver structure is reasonable because this waiver structure is identical to the waiver structure that was previously in place at the Exchange's affiliate, MIAX PEARL.<sup>80</sup>

#### Pass-through of External Connectivity Fees

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

The purpose of the External Connectivity fee is to recoup costs incurred by MIAX Emerald in establishing connectivity with external vendors acting on behalf of a Member or non-Member. MIAX Emerald will only pass-through the actual costs it is charged by the third-party external vendors. Other exchanges, including MIAX, charge a fee for similar services to Members and non-Members.<sup>81</sup>

#### Port Fees

Once network connectivity is established, MIAX Emerald proposes to assess fees for access and services used by Members and non-Members via connections known as "Port." These proposed fees are similar to the fees charged by other exchanges, including MIAX.<sup>82</sup> MIAX Emerald provides four (4) Port types, including (i) the FIX Port, which allows Members to electronically send orders in all products traded on the Exchange; (ii) the MEI Port, which

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<sup>80</sup> See supra note 65.

<sup>81</sup> See MIAX Fee Schedule, Section 5) c), Pass-Through of External Connectivity Fees.

<sup>82</sup> See MIAX Fee Schedule, Section 5) d), Port Fees.

allows Market Makers to submit electronic orders and quotes to the Exchange; (iii) the CTD Port, which provides real-time trade clearing information to the participants to a trade on MIAX Emerald and to the participants' respective clearing firms; and (iv) the FXD Port, which provides a copy of real-time trade execution, correction and cancellation information through a FIX Port to any number of FIX Ports designated by an EEM to receive such messages.

MIAX Emerald will assess monthly Port Fees on Members and non-Members in each month the market participant is credentialed to use a Port in the production environment and based upon the number of credentialed Ports that a user is entitled to use. MIAX Emerald has Primary and Secondary Facilities and a Disaster Recovery Facility. Each type of Port provides access to all three facilities for a single fee. The Exchange notes that, unless otherwise specifically set forth in the Fee Schedule, the Port Fees include the information communicated through the Port. That is, unless otherwise specifically set forth in the Fee Schedule, there is no additional charge for the information that is communicated through the Port apart from what the user is assessed for each Port.

In order to provide an incentive to Members and non-Members to connect to MIAX Emerald through the Ports such that they will be able to utilize the services of MIAX Emerald as soon as possible, all Port Fees (except for one) assessable to Port users will be waived by the Exchange for the Waiver Period for such fees. The one Port Fee that the Exchange does not propose to waive is the Limited Service MEI Ports beyond the two (2) Limited Service MEI Ports per Matching Engine to which they connect, allocated to MEI Port users (the "Additional Limited Service MEI Port Fee"). Specifically, the Exchange notes that the MIAX Emerald Market Makers may request Additional Limited Service MEI Ports for which MIAX Emerald will assess MIAX Emerald Market Makers \$50 per month per Additional Limited Service MEI

Port for each Matching Engine, as discussed below. Market Makers are limited to six Additional Limited Service MEI Ports per Matching Engine, for a total of eight per Matching Engine. For all other waived Port Fees, the Exchange will submit a rule filing to the Commission to establish the fee amount and any related requirements, and provide notice to terminate the applicable Waiver Period. Even though the Exchange is proposing to waive most of these fees during the Waiver Period, the Exchange believes that is appropriate to provide market participants with the overall structure of the fee by outlining the structure on the Fee Schedule without setting forth a specific fee amount, so that there is general awareness that the Exchange intends to assess such a fee in the future, should the Waiver Period terminate and the Exchange establish an applicable fee. The Exchange believes that its proposal to waive most of these fee under this waiver structure is reasonable because this waiver structure is identical to the waiver structure that was previously in place at the Exchange's affiliate, MIAX PEARL.<sup>83</sup>

#### FIX Port Fees

The Exchange is proposing to structure its FIX Port as a monthly fixed amount based on the number of credentialed FIX Ports, not tied to transacted volume of the Member. Although one FIX Port gives access to all products traded on MIAX Emerald, some Members may choose to use more than one FIX Port. A FIX Port is an interface with MIAX Emerald systems that enables the Port user to submit orders electronically to MIAX Emerald. MIAX Emerald will assess monthly FIX Port on Members in each month the Member is credentialed to use a FIX Port in the production environment and based upon the number of credentialed FIX Ports.

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<sup>83</sup> See supra note 65.

## MEI Port Fees

MIAX Emerald will offer different options of MEI Ports depending on the services required by Market Makers. MIAX Emerald will assess monthly MEI Port Fees on Market Makers based upon the number of classes or class volume accessed by the Market Maker. Market Makers are allocated two (2) Full Service MEI Ports<sup>84</sup> and two (2) Limited Service MEI Ports<sup>85</sup> per Matching Engine to which they connect. The Full Service MEI Ports, Limited Service MEI Ports and the additional Limited Service MEI Ports all include access to the Exchange's Primary and Secondary data centers and its Disaster Recovery center.

For the calculation of the monthly MEI Port Fees that apply to Market Makers, 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 Emerald in the prior calendar quarter.<sup>86</sup> 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

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<sup>84</sup> Full Service MEI Ports means a port which provides Market Makers with the ability to send Market Maker simple and complex quotes, eQuotes, and quote purge messages to the MIAX Emerald 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. See the Definitions Section of the Fee Schedule.

<sup>85</sup> Limited Service MEI Ports means a port which provides Market Makers with the ability to send simple and complex eQuotes and quote purge messages only, but not Market Maker Quotes, to the MIAX Emerald System. Limited Service MEI Ports are also capable of receiving administrative information. Market Makers initially receive two Limited Service MEI Ports per Matching Engine. See the Definitions Section of the Fee Schedule.

<sup>86</sup> The Exchange will use the following formula to calculate the percentage of total national average daily volume that the Market Maker assignment is for purposes of the MEI Port Fee for a given month:

Market Maker assignment percentage of national average daily volume = [total volume during the prior calendar quarter in a class in which the Market Maker was assigned] / [total national volume in classes listed on MIAX in the prior calendar quarter].

classes will be included in both the per class count and the percentage of total national average daily volume.

The Exchange proposes to assess Market Makers the monthly MEI Port Fees based on the greatest number of classes listed on MIAX Emerald that the 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.

MEI Port users will be allocated two (2) Full Service MEI Ports and two (2) Limited Service MEI Ports per Matching Engine to which they connect. MEI Port Fees include MEI Ports at the Primary, Secondary and Disaster Recovery data centers. MIAX Emerald Market Makers may request additional Limited Service MEI Ports for which MIAX Emerald will assess MIAX Emerald Market Makers \$50 per month per additional Limited Service MEI Port for each Matching Engine. Market Makers are limited to six additional Limited Service MEI Ports per Matching Engine, for a total of eight per Matching Engine.

A MIAX Emerald Market Maker may request and be allocated two (2) Purge Ports per Matching Engine to which it connects. For each month in which the MIAX Emerald 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 Emerald Market Maker a flat fee which will be waived for the Waiver Period, regardless of the number of Purge Ports allocated to the MIAX Emerald Market Maker.

#### Clearing Trade Drop Port Fee

The Exchange is proposing to structure its CTD Port as a monthly fixed amount, not tied to transacted volume of the Member. This fixed fee structure is the same structure in place at

Nasdaq PHLX with respect to the proposed CTD Port Fees.<sup>87</sup> CTD provides Exchange members with 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); (v) Exchange Member Participant Identifier ("MPID") for each side of the transaction, including Clearing Member MPID; and (vi) strategy specific information for complex transactions. CTD Port will be assessed in any month the Member is credentialed to use the CTD Port in the production environment.

#### FIX Drop Copy Port Fees

The Exchange is proposing to structure its FXD Port Fee as a monthly fixed amount, not tied to transacted volume of the Member. This fixed fee structure is the same structure in place at Nasdaq PHLX with respect to FXD Port Fees.<sup>88</sup> FXD is a messaging interface that will provide a copy of real-time trade execution, trade correction and trade cancellation information to FXD 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. FXD Port Fees will be assessed in any month the Member is credentialed to use the FXD Port in the production environment.

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<sup>87</sup> See Nasdaq PHLX Pricing Schedule, Options 7, Section 9, Other Member Fees, B. Port Fees.

<sup>88</sup> Id.

### MPID Fees

MIAX Emerald proposes to assess monthly MPID fees on EEMs based upon the number of MPIDs assigned to a particular EEM in a given month in each month the Member is credentialed to use such MPIDs in the production environment. MIAX Emerald intends to assess MPID fees in order to cover the administrative costs it incurs in assigning and managing these identifiers for each EEM.

In order to provide an incentive to Members to start trading on MIAX Emerald as soon as possible, all MPID fees assessable to EEMs will be waived by the Exchange for the Waiver Period for such fees. The Exchange will submit a rule filing to the Commission to establish the fee amount and any related requirements, and provide notice to terminate the applicable Waiver Period. Even though the Exchange is proposing to waive this particular fee during the Waiver Period, the Exchange believes that is appropriate to provide market participants with the overall structure of the fee by outlining the structure on the Fee Schedule without setting forth a specific fee amount, so that there is general awareness that the Exchange intends to assess such a fee in the future, should the Waiver Period terminate and the Exchange establish an applicable fee. The Exchange believes that its proposal to waive this fee under this waiver structure is reasonable because this waiver structure is identical to the waiver structure that is currently in place at the Exchange's affiliate, MIAX PEARL.<sup>89</sup>

### Technical Support Request Fee

MIAX Emerald proposes to assess a technical support request fee to both Members and non-Members that request MIAX Emerald technical support at any of the MIAX Emerald data centers. MIAX Emerald proposes that such fee will be \$200 per hour for such technical support.

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<sup>89</sup> See supra note 65.

The purpose of the proposed fee is to permit users to request the use of Exchange’s on-site data center personnel as technical support as a convenience to the users to test or otherwise assess the user’s connectivity to the Exchange. Other exchanges, including MIAX and MIAX PEARL, charge a fee for similar services to Members and non-Members.<sup>90</sup>

### Market Data Fees

The Exchange proposes to assess fees for its market data products, MIAX Emerald Top of Market (“ToM”)<sup>91</sup> and Complex Top of Market (“cToM”)<sup>92</sup>; Administrative Information Subscriber (“AIS”)<sup>93</sup>; and MIAX Order Feed (“MOR”).<sup>94</sup> The Exchange notes that it has separately filed with the Commission a proposed rule change to establish the ToM, cToM, AIS, and MOR products (the “Market Data Product Filing”).<sup>95</sup> More information about the ToM, cToM, AIS, and MOR products can be found in the Market Data Product Filing.

To summarize, ToM provides market participants with a direct data feed that includes the Exchange’s best bid and offer, with aggregate size, and last sale information, based on

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<sup>90</sup> See MIAX Fee Schedule, Section 5) f), Member and non-Member Technical Support Request Fee and MIAX PEARL Fee Schedule, Section 5) f), Member and non-Member Technical Support Request Fee.

<sup>91</sup> See Securities Exchange Act Release No. 69007 (February 28, 2013), 78 FR 14617 (March 6, 2013) (SR-MIAX-2013-05).

<sup>92</sup> See Securities Exchange Act Release No. 79146 (October 24, 2016), 81 FR 75171 (October 28, 2016) (SR-MIAX-2016-36)

<sup>93</sup> See Securities Exchange Act Release Nos. 69320 (April 5, 2013), 78 FR 21661 (April 11, 2013) (SR-MIAX-2013-13); 82740 (February 20, 2018), 83 FR 8304 (February 26, 2018) (SR-MIAX-2018-04).

<sup>94</sup> See Securities Exchange Act Release No. 74759 (April 17, 2015), 80 FR 22749 (April 23, 2015) (SR-MIAX-2015-28).

<sup>95</sup> See Securities Exchange Act Release No. 85207 (February 27, 2019, 84 FR 7963 (March 5, 2019)) (SR-Emerald-2019-09) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Establish MIAX Emerald Top of Market (“ToM”) Data Feed, MIAX Emerald Complex Top of Market (“cToM”) Data Feed, MIAX Emerald Administrative Information Subscriber (“AIS”) Data Feed, and MIAX Emerald Order Feed (“MOR”).

displayable order and quoting interest on the Exchange. The ToM data feed includes data that is identical to the data sent to the processor for the Options Price Reporting Authority (“OPRA”). ToM will also contain a feature that provides the number of Priority Customer contracts that are included in the size associated with the Exchange’s best bid and offer.

cToM will provide subscribers with the same information as the ToM market data product as it relates to the strategy book, i.e., the Exchange’s best bid and offer for a complex strategy, with aggregate size, based on displayable order and quoting interest in the complex strategy on the Exchange. cToM will also provide subscribers with the identification of the complex strategies currently trading on MIAX Emerald; complex strategy last sale information; and the status of securities underlying the complex strategy (e.g., halted, open, or resumed). cToM is distinct from ToM, and anyone wishing to receive cToM data must subscribe to cToM regardless of whether they are a current ToM subscriber. ToM subscribers are not required to subscribe to cToM, and cToM subscribers are not required to subscribe to ToM.

AIS provides market participants with a direct data feed that allows subscribers to receive real-time updates of products traded on MIAX Emerald, trading status for MIAX Emerald and products traded on MIAX Emerald, and liquidity seeking event notifications. The AIS market data feed includes opening imbalance condition information, opening routing information, expanded quote range information, post-halt notifications, and liquidity refresh condition information. AIS real-time messages are disseminated over multicast to achieve a fair delivery mechanism. AIS notifications provide current electronic system status allowing subscribers to take necessary actions immediately.

MOR provides market participants with a direct data feed that allows subscribers to receive real-time updates of options orders, products traded on MIAX Emerald, MIAX Emerald

Options System status, and MIAX Emerald Options Underlying trading status. Subscribers to the data feed will get a list of all options symbols and strategies that will be traded and sourced on that feed at the start of every session.

The Exchange proposes to charge monthly fees to Distributors of the ToM, cToM, AIS, and MOR market data products. MIAX Emerald will assess market data fees applicable to the market data products on Internal and External Distributors in each month the Distributor is credentialed to use the applicable market data product in the production environment. A “Distributor” of MIAX Emerald data is any entity that receives a feed or file of data either directly from MIAX Emerald 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 Emerald Distributor Agreement. Market data fees for ToM, cToM, AIS, and MOR will be reduced for new Distributors for the first month during which they subscribe to the applicable market data product, 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 the applicable market data product 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 the applicable market data product in the production environment, divided by the total number of trading days in the affected calendar month.

Other exchanges, including MIAX and MIAX PEARL, charge fees for market data products to Members and non-Members. In order to provide an incentive to Members and non-Members to receive the market data feeds as soon as possible, all market data fees assessable to Distributors for ToM, cToM, AIS, and MOR will be waived by the Exchange for the Waiver

Period for such fees. The Exchange will submit a rule filing to the Commission to establish the fee amount and any related requirements, and provide notice to terminate the applicable Waiver Period. Even though the Exchange is proposing to waive this particular fee during the Waiver Period, the Exchange believes that is appropriate to provide market participants with the overall structure of the fee by outlining the structure on the Fee Schedule without setting forth a specific fee amount, so that there is general awareness that the Exchange intends to assess such a fee in the future, should the Waiver Period terminate and the Exchange establish an applicable fee. The Exchange believes that its proposal to waive this fee under this waiver structure is reasonable because this waiver structure is identical to the waiver structure that is currently in place at the Exchange's affiliate, MIAX PEARL.<sup>96</sup>

The Exchange does not propose to adopt any other fees at this time. The Exchange expects to adopt additional fees after the terminations of applicable Waiver Periods as determined by the Exchange, which shall be at a later date. The Exchange will submit rule filings with the Commission prior to any such fees becoming effective.

## 2. Statutory Basis

The Exchange believes that its proposal to amend its Fee Schedule is consistent with Section 6(b) of the Act<sup>97</sup> in general, and furthers the objectives of Section 6(b)(4) of the Act<sup>98</sup> in particular, in that it is an equitable allocation of reasonable fees and other charges among its members and issuers and other persons using its facilities. The Exchange also believes the proposal furthers the objectives of Section 6(b)(5) of the Act in that it is designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free

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<sup>96</sup> See supra note 65.

<sup>97</sup> 15 U.S.C. 78f(b).

<sup>98</sup> 15 U.S.C. 78f(b)(4) and (5).

and open market and a national market system, and, in general to protect investors and the public interest and is not designed to permit unfair discrimination between customers, issuers, brokers and dealers.

### Transaction Fees

#### Add/Remove Tiered Exchange Rebates/Fees

The Exchange believes the rebates and fees proposed for transactions on MIAX Emerald are reasonable, equitable and not unfairly discriminatory. MIAX Emerald operates within a highly competitive market in which market participants can readily send order flow to several other competing venues if, among other things, they deem fees at a particular venue to be unreasonable or excessive. The proposed fee structure is intended to attract order flow to MIAX Emerald by offering market participants incentives to submit their orders or quotes to MIAX Emerald.

#### Tiers and Their Application

The Exchange believes that its proposed methodology for calculating its tiers is reasonable, equitable, and not unfairly discriminatory, as this methodology is similar to how another exchange calculates its tiers. The Exchange's methodology, which analyzes three alternative calculation methods and then selects the method that is the highest tier reached to the Member, is similar to how GEMX calculates its tiers.<sup>99</sup> For example, GEMX has four qualifying tiers, the same number that the Exchange is proposing. GEMX calculates its tiers using CTCV (Customer Total Consolidated Volume) at the OCC, which is fundamentally the same denominator method that the Exchange is proposing. GEMX aggregates volume of affiliated members, as the Exchange is also proposing. GEMX has two alternative calculation methods,

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<sup>99</sup> See Nasdaq GEMX, Options 7 Pricing Schedule.

however the Exchange is proposing three alternative calculation methods, which the Exchange believes provides greater benefit to Members, as there is an additional method to enable qualification for a higher tier. For GEMX, for certain of its tiers, offers a calculation that looks at absolute ADV volume (i.e. 20,000 ADV), in addition to, or in lieu of, percentages of CTCV, whereas the Exchange is proposing to only look at monthly percentages of CTCV. The Exchange's proposed methodology for calculating its tiers is reasonable, equitable, and not unfairly discriminatory because it applies equally to all Members. Volume-based pricing models such as those proposed on the Exchange have been widely adopted by options exchanges and are equitable and not unfairly discriminatory because they are open to all Members and provide additional benefits or discounts that are reasonably related to the value of an exchange's market quality associated with higher levels of market activity, such as higher levels of liquidity provision and/or growth patterns, and introduction of higher volumes of orders into the price and volume discovery processes.

The Exchange's proposal to offer a rebate or lower fee to Makers that provide liquidity in Penny and Non-Penny classes is also equitable and not unfairly discriminatory under the Act. The Exchange believes that the proposed maker-taker model is an important competitive tool for exchanges and directly or indirectly can provide better prices for investors. The proposed fee structure may incentivize the MIAX Emerald bid and offer because the rebate or lower fee assessable to Makers effectively subsidizes, and thus encourages, the posting of liquidity. The Exchange believes that the Maker rebate or lower Maker fee will also provide MIAX Emerald Market Makers with greater incentive to either match or improve upon the best price displayed on MIAX Emerald, all to the benefit of investors and the public in the form of improved execution prices.

### Priority Customers

The Exchange believes the proposed Tiered rebates and fees assessed on Priority Customers are reasonable, equitable, and not unfairly discriminatory because they are, as detailed in the Purpose section above, comparable to fees that Priority Customers are assessed at other competing exchanges.<sup>100</sup> The Exchange believes charging lower fees and providing higher rebates to Priority Customer orders attracts that order flow to the Exchange and thereby creates liquidity to the benefit of all market participants who trade on the Exchange. Further, the Exchange believes that it is equitable and not unfairly discriminatory to assess lower fees to Priority Customer orders than for orders for Origins other than Priority Customer. The Exchange believes assesses Priority Customers lower or no transaction fees is equitable not unfairly discriminatory because market participants generally seek to trade with Priority Customer order flow, which in turn enhances liquidity on the Exchange for the benefit of all market participants. Priority Customer liquidity benefits all market participants by providing more trading opportunities, which attracts Market Makers. An increase in the activity of these market participants in turn facilitates tighter spreads, which may cause an additional corresponding increase in order flow from other market participants. This limitation does not apply to participants on the Exchange whose behavior is substantially similar to that of market professionals, including Non-Priority Customers, Non-MIAX Emerald Market Makers, Firm Proprietary, and Broker-Dealers, who will generally submit a higher number of orders than Priority Customers.

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<sup>100</sup> See supra notes 16 and 22.

### MIAX Emerald Market Makers

The Exchange believes that its proposed Tiered transaction rebates and fees for MIAX Emerald Market Makers are reasonable, equitable, and not unfairly discriminatory because they are available to all MIAX Emerald Market Makers and are reasonably related to the value to the Exchange that comes with higher market quality and higher levels of liquidity in the price and volume discovery processes. Such increased liquidity at the Exchange should allow it to spread its administrative and infrastructure costs over a greater number of transactions leading to lower costs per transaction.

The Exchange believes it is equitable and not unfairly discriminatory for MIAX Emerald Market Makers to be assessed generally lower fees or higher rebates than other professional market participants (such as non-Priority Customers, Broker-Dealers, Non-MIAX Emerald Market Makers and Firm Proprietary). MIAX Emerald Market Makers have obligations that other professional market participants do not. In particular, they must maintain continuous two-sided markets in the classes in which they are registered to trade, and must meet certain minimum quoting requirements. Therefore, the Exchange believes it is appropriate that MIAX Emerald Market Makers be assessed lower fees or higher rebates since they have the potential to provide greater volumes of liquidity to the market.

### Non-MIAX Emerald Market Makers

The Exchange believes the proposed Tiered rebates and fees assessed on Non-MIAX Emerald Market Makers are reasonable, equitable, and not unfairly discriminatory because they are, as detailed in the Purpose section above, comparable to fees that non-market makers are assessed at other competing exchanges.<sup>101</sup> The tiered rebates/fees assessable to Non-MIAX

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<sup>101</sup> See supra notes 16 and 22.

Emerald Market Makers proposed by the Exchange for simple orders are also similar in structure to and in the range of the transaction rebates and fees charged by GEMX for transactions for the accounts of “Non-Nasdaq GEMX Market Makers (FarMM).” The fees proposed by the Exchange for Non-MIAX Emerald Market Maker complex transactions in Penny classes are also similar to those fees charged by Nasdaq ISE to a “Non-Nasdaq ISE Market Maker (FarMM)” for complex transactions in Nasdaq ISE Select Symbols. The fees proposed by the Exchange for Non-MIAX Emerald Market Maker transactions in a PRIME/cPRIME auction are also similar to those assessed by GEMX for transactions on behalf of its Non-Nasdaq GEMX Market Makers (FarMM) for orders executed in a GEMX PIM auction in both Penny and Non-Penny classes. Finally, the rebates and fees for Non-MIAX Emerald Market Makers are the same amounts as the rebates and fees assessed by the Exchange on other professional Origins (Firm Proprietary/Broker-Dealer, Non-Priority Customer), with only minor differences in the highest Tiers for certain simple Taker fees.

#### Firm Proprietary/Broker-Dealers

The Exchange believes the proposed Tiered rebates and fees assessed on Firm Proprietary/Broker-Dealers are reasonable, equitable, and not unfairly discriminatory because they are, as detailed in the Purpose section above, comparable to fees that orders for Firm Proprietary/Broker-Dealers are assessed at other competing exchanges. The tiered rebates/fees assessable to Firm Proprietary or Broker-Dealers, proposed by the Exchange for simple orders are also similar in structure to and in the range of the transaction rebates and fees charged by GEMX for transactions for the accounts of “Firm Proprietary/Broker-Dealer.” The fees proposed by the Exchange for Firm Proprietary/Broker-Dealer complex transactions in Penny classes are also similar to those fees charged by Nasdaq ISE to “Firm Proprietary/Broker-Dealer”

order for complex transactions in Nasdaq ISE Select Symbols. The fees proposed by the Exchange for Firm Proprietary/Broker-Dealer transactions in a PRIME/cPRIME auction are also similar to those assessed by GEMX for transactions on behalf of its Firm Proprietary/Broker-Dealer orders executed in a GEMX PIM auction in both Penny and Non-Penny classes. Finally, the rebates and fees for Firm Proprietary/Broker-Dealers are the same amounts as the rebates and fees assessed by the Exchange on other professional Origins (Non-MIAX Emerald Market Makers, Non-Priority Customer), with only minor differences in the highest Tiers for certain simple Taker fees.

#### Non-Priority Customers

The Exchange believes the proposed Tiered rebates and fees assessed on Non-Priority Customers are reasonable, equitable, and not unfairly discriminatory because they are, as detailed in the Purpose section above, comparable to fees that Non-Priority Customers are assessed at other competing exchanges. The tiered rebates/fees assessable to Non-Priority Customers proposed by the Exchange are also similar in structure to and in the range of the transaction rebates and fees for simple orders charged by GEMX for transactions for the accounts of “Professional Customers.” The fees proposed by the Exchange for Non-Priority Customer complex transactions in Penny classes are also similar to those fees charged by Nasdaq ISE for “Professional Customers” for complex transactions in Nasdaq ISE Select Symbols. The fees proposed by the Exchange for Non-Priority Customer transactions in a PRIME/cPRIME auction are also similar to those assessed by GEMX for transactions on behalf of its Professional Customer orders executed in a GEMX PIM auction in both Penny and Non-Penny classes. . Finally, the rebates and fees for Non-Priority Customers are the same amounts as the rebates and fees assessed by the Exchange on other professional Origins (Non-MIAX Emerald Market

Makers, Firm Proprietary/Broker-Dealer), with only minor differences in the highest Tiers for certain simple Taker fees.

#### Penny and Non-Penny Classes

The Exchange believes that establishing different pricing for options in Penny classes and Non-Penny classes is reasonable, equitable, and not unfairly discriminatory because options in Penny classes are generally more liquid as compared to Non-Penny classes. Additionally, other competing options exchanges differentiate pricing in a similar manner.<sup>102</sup>

#### Complex Transactions

The Exchange believes that the proposed rebates and fees for complex orders is reasonable, equitable and not unfairly discriminatory because all similarly situated market participants are subject to the same fee and rebate structure for complex order transactions, and access to the Exchange is offered on terms that are not unfairly discriminatory. With the exception of Priority Customer Origins which receive higher rebates and lower fees, all other professional Origins (Non-Emerald Market Maker, Firm Proprietary/Broker-Dealer, Non-Priority Customer) are assessed the same rebate and fee amounts. MIAX Emerald Market Makers are also assessed higher rebates and lower fees than those professionals in certain Tiers, however MIAX Emerald Market Makers have additional obligations discussed above that warrant such differences. The Exchange believes that the proposed tiered fee structure for maker rebates and fees and taker rebates and fees for complex orders, carving out orders that are contra to Priority Customer Origin is reasonable, equitable and not unfairly discriminatory because the structure is consistent with other options markets that also assess different transaction fees

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<sup>102</sup> See Nasdaq PHLX Options 7 Pricing Schedule, Section 4, Section II; NYSE American Options Fee Schedule, Section 1; Cboe Exchange, Inc., Fee Schedule, p. 1.

depending on the contra Origin.<sup>103</sup> Additionally, the Exchange believes the structure is reasonable, equitable and not unfairly discriminatory because all similarly situated market participants in the same Origin type are subject to the same tiered rebates and fees and access to the Exchange is offered on terms that are not unfairly discriminatory.

#### PRIME/cPRIME

The Exchange believes that the proposed fee structure for PRIME/cPRIME Auction transaction fees and rebates is reasonable, equitable, and not unfairly discriminatory. The proposed fee structure is reasonably designed because it is intended to incentivize market participants to send simple and complex order flow to the Exchange in order to participate in the price improvement mechanism in a manner that enables the Exchange to improve its overall competitiveness and strengthen its market quality for all market participants. PRIME/cPRIME Auctions and the corresponding fees are also reasonably designed because they are within the range of fees and rebates assessed by other exchanges employing similar fee structures for complex orders submitted and executed in a price improvement mechanism. Other competing exchanges offer different fees and rebates for complex agency orders, contra-side orders, and responders to an auction in a manner similar to the proposal. Other competing exchanges also charge different rates for transactions in their price improvement mechanisms for Priority Customers versus Origins other than Priority Customer in a manner similar to the proposal.

The PRIME and cPRIME fee and rebate structure is reasonable, equitable, and not unfairly discriminatory because it will apply equally to Priority Customer orders, Market Maker orders, Non-MIAX Emerald Market Maker orders, Broker-Dealer orders, Firm Proprietary orders, and Non-Priority Customers, in each respective category of PRIME and cPRIME

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<sup>103</sup> See supra note 22.

orders. All similarly situated categories of participants are subject to the same transaction fee and rebate schedule, and access to the Exchange is offered on terms that are not unfairly discriminatory. The PRIME and cPRIME fee and rebate structure is reasonably designed because it is intended to incentivize market participants to send complex orders to the Exchange in order to participate in the price improvement mechanism in a manner that enables the Exchange to improve its overall competitiveness and strengthen its market quality for all market participants.

#### QCC Orders

The Exchange believes the proposed transaction fees for QCC orders is reasonable because the proposed amount is in line with the amount assessed at other Exchanges for similar transactions.<sup>104</sup> Additionally, the proposed fees would be charged to all Origins except Priority Customer. Assessing QCC rates to all market participants except Priority Customers is equitable and not unfairly discriminatory because Priority Customer order flow enhances liquidity on the Exchange for the benefit of all market participants. Specifically, Priority Customer liquidity benefits all market participants by providing more trading opportunities, which attracts Market-Makers. An increase in the activity of these market participants in turn facilitates tighter spreads, which may cause an additional corresponding increase in order flow from other market participants. By assessing a \$0.00 fee for Priority Customer orders, the QCC transaction fees will not discourage the sending of Priority Customer orders.

The Exchange believes the proposed rebate for the initiating order side of a QCC transaction is reasonable because other competing exchanges also provide a rebate on the initiating order side. Additionally, the proposed rebate amount is within the range of the rebate

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<sup>104</sup> See supra note 51.

amounts at the other competing exchanges.<sup>105</sup> The Exchange believes the proposed rebate is equitable and not unfairly discriminatory because it applies to all Members that enter the initiating order (except for when both the initiator and contra-side orders are Priority Customers) and because it is intended to incentivize the sending of more QCC Orders to the Exchange. The Exchange believes it is reasonable, equitable and not unfairly discriminatory to not provide a rebate for the initiating order for QCC transactions for which both the initiator and the contra-side are Priority Customers since Priority Customers are already incentivized by a reduced fee for submitting QCC Orders.

#### cQCC Fees

The Exchange believes the proposed transaction fees for cQCC orders are reasonable because the proposed amounts are identical to the proposed fees for QCC transactions and are in line with the amounts assessed at other Exchanges for similar transactions.<sup>106</sup> Additionally, the proposed fees would be assessed to all Origins except Priority Customer.

The Exchange believes the proposed rebate for the initiating order side of a cQCC transaction is reasonable because other competing exchanges also provide a rebate on the initiating order side.<sup>107</sup> Additionally, the proposed rebate amount is within the range of the

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<sup>105</sup> See id.

<sup>106</sup> See BOX Options Market LLC (“BOX”) Fee Schedule, Section I(D) (BOX does not charge Public Customers but charges Professional Customers, Broker-Dealers and Market Makers \$0.17 per contract on both Agency and Contra Orders); see also Cboe Exchange, Inc. (“Cboe”) Fee Schedule, “QCC Rate Table,” Page 5 (Cboe charges non-Public Customers \$0.17 per contract and does not charge Public Customers); see also NYSE American Options Fee Schedule, Section I.F (NYSE American charges Non-Customers \$0.20 per contract, Specialists and e-Specialists \$0.13 per contract, and does not charge Customer and Professional Customers).

<sup>107</sup> See BOX Fee Schedule, Section I(D)(1); see also Cboe Fee Schedule, “QCC Rate Table,” Page 5; see also NYSE American Options Fee Schedule, Section I.F; see also Nasdaq ISE Pricing Schedule, Options 7, Section 6, Other Options Fees and Rebate, A. QCC and Solicitation Rebate.

rebate amounts at the other competing exchanges.<sup>108</sup> The Exchange believes the proposed rebate is equitable and not unfairly discriminatory because it applies to all Members that enter the initiating order (except for when both the initiator and contra-side orders are Priority Customers) and because it is intended to incentivize the sending of cQCC Orders to the Exchange. The Exchange believes it is reasonable, equitable, and not unfairly discriminatory to not provide a rebate for the initiating order for cQCC transactions for which both the initiator and the contra-side orders are Priority Customers since Priority Customers are already incentivized by a reduced fee for submitting cQCC Orders.

#### C2C and cC2C Fees

The Exchange believes that adding the C2C fee to the Fee Schedule is reasonable, equitable, and not unfairly discriminatory because it clarifies that there is no fee applicable for these orders which are comprised solely of Priority Customer orders. The Exchange believes that it will make it more transparent as to how the Exchange assesses such fee and avoid any confusion as to how such fee is assessed for simple (C2C) and complex (cC2C) orders. The Exchange believes that the proposed transaction fee for cC2C Orders is reasonable because the proposed amount is identical to the fee assessed for C2C transactions, which is currently \$0.00. The proposed fees would be charged to all Priority Customers alike and the Exchange believes that assessing a \$0.00 fee to Priority Customers is equitable and not unfairly discriminatory. By

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<sup>108</sup> See BOX Fee Schedule, Section I(D)(1) (a \$0.14 per contract rebate will be applied to the Agency Order where at least one party to the QCC transaction is a Non-Public Customer); see also Cboe Fee Schedule, “QCC Rate Table,” Page 5 (a \$0.10 per contract credit will be delivered to the TPH Firm that enters the order into Cboe Command but will only be paid on the initiating side of the QCC transaction); see also NYSE American Options Fee Schedule, Section I.F (a \$0.07 credit is applied to Floor Brokers executing 300,000 or fewer contracts in a month and a \$0.10 credit is applied to Floor Brokers executing more than 300,000 contracts in a month); see also Nasdaq ISE Pricing Schedule, Options 7, Section 6, Other Options Fees and Rebate, A. QCC and Solicitation Rebate (rebates range from \$0.00 to \$0.11 per contract).

assessing a \$0.00 fee to Priority Customer orders, the C2C and cC2C transaction fees will not discourage the sending of Priority Customer orders.

### Routing Fees

The Exchange believes that the proposed Routing Fees are reasonable, equitable and not unfairly discriminatory because they seek to recoup costs incurred by MIAX Emerald when routing orders to various away markets. In determining its proposed Routing Fees, the Exchange took into account transaction fees and rebates assessed by the away markets to which the Exchange routes orders, as well as the Exchange's clearing costs,<sup>109</sup> administrative, regulatory, and technical costs associated with routing orders to an away market. The Exchange uses unaffiliated routing brokers to route orders to the away markets; the costs associated with the use of these services are included in the Routing Fees specified in the Fee Schedule. This Routing Fees structure is not only similar to the Exchange's affiliates, MIAX and MIAX PEARL, but is also comparable to the structures in place at other exchanges, such as Cboe BZX Options.<sup>110</sup> The Exchange believes that having 8 groupings for its proposed routing fees is reasonable, equitable and not unfairly discriminatory because the Exchange will be able to better approximate its costs associated with routing orders to away markets. The per-contract transaction fee amount associated with each grouping closely approximates the Exchange's all-in cost (plus an additional, non-material amount) to execute that corresponding contract at that corresponding exchange. The Exchange notes that in determining the appropriate groupings, the Exchange considered the transaction fees and rebates assessed by away markets, and grouped exchanges together that assess transaction fees for routed orders within a similar range. This same logic and structure applies to all of the groupings in the proposed Routing Fees table. By utilizing the

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<sup>109</sup> See supra note 57.

<sup>110</sup> See supra note 56.

same structure that is utilized by the Exchange's affiliates, MIAX and MIAX PEARL, those Members which are Members of the Exchange, MIAX, and MIAX PEARL, will be assessed Routing Fees in the same manner, which the Exchange believes will minimize any confusion as to the method of assessing Routing Fees between the three exchanges for those Members. This proposal is identical to the routing fee tables of the Exchange's affiliates, MIAX and MIAX PEARL.<sup>111</sup>

### Regulatory Fees

#### Sales Value Fee

The assessment by the Exchange of the proposed Sales Value Fee is reasonable, equitable and not unfairly discriminatory since it allows the Exchange to offset the cost it incurs in payment to the Commission of a transaction fee that is designed to recover the costs related to the government's supervision and regulation of the securities markets and securities professionals. The amount of the fee is the same amount assessed to the Exchange pursuant to Section 31 of the Exchange Act. The Exchange believes it is reasonable to recover the actual costs associated with the payment of Section 31 fees and other exchanges, including MIAX, charge the same fee to their market participants.

#### Web CRD Fees

The Exchange believes it is reasonable, equitable and not unfairly discriminatory for the proposed FINRA fees to be included on the Fee Schedule because these fees are not being assessed or set by MIAX Emerald, but by FINRA, and will be assessed to broker-dealers that register associated persons through FINRA's Web CRD system, and other exchanges, including MIAX, charge the same fees to their market participants.

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<sup>111</sup> See supra note 59.

## Non-Transaction Fees

### Membership Fees

The Exchange believes that the assessment of one-time Membership Application fees is reasonable, equitable and not unfairly discriminatory. As described in the Purpose section, the one-time application fees are charged by other options exchanges, including MIAX and MIAX PEARL, and are designed to recover costs associated with the processing of such applications. MIAX Emerald believes it is reasonable and equitable to waive the fee to applicants who apply for membership during the Waiver Period since the waiver of such fees provides incentives to interested applicants to apply early for MIAX Emerald membership. This in turn provides MIAX Emerald with potential order flow and liquidity providers as it begins operations. The waiver will apply equally to all applicants during the Waiver Period for the membership application fee.

### Trading Permit Fees

The Exchange believes that the assessment of Trading Permit fees is reasonable, equitable and not unfairly discriminatory. The assessment of Trading Permit fees is done by the Exchange's affiliates, MIAX and MIAX PEARL, and is commonly done by other exchanges as described in the Purpose section above. MIAX Emerald believes it is reasonable and equitable to waive the fee to Members during the Waiver Period since the waiver of such fees provides incentives to interested Members to apply early for trading permits. This in turn provides MIAX Emerald with potential order flow and liquidity providers as it begins operations. The waiver of the Trading Permit fees will apply equally to all Members during the Waiver Period.

### API and Network Testing and Certification Fees

MIAX Emerald believes that the assessment of API and Network Testing and Certification fees is a reasonable allocation of its costs and expenses among its Members and other persons using its facilities since it is recovering the costs associated with providing such infrastructure testing and certification services. Other exchanges, including MIAX and MIAX PEARL, charge a fee for similar services to Members and non-Members.

MIAX Emerald believes it is reasonable and equitable to waive the API Testing and Certification fee assessable to Members and non-Members during the Waiver Period since the waiver of such fees provides incentives to interested Members and non-Members to test their APIs early. Determining system operability with the Exchange's system early will in turn provide MIAX Emerald with potential order flow and liquidity providers as it begins operations. The waiver of API Testing and Certification fees will apply equally to all Members and non-Members during the Waiver Period.

Additionally, MIAX Emerald believes it is reasonable, equitable and not unfairly discriminatory to assess different Network Testing and Certification fees to Members and non-Members. The higher fee charged to non-Members reflects the greater amount of time spent by MIAX Emerald employees testing and certifying non-Members. It has been MIAX Emerald's experience that Member testing takes less time than non-Member testing because Members have more experience testing these systems with exchanges; generally fewer questions and issues arise during the testing and certification process.

### System Connectivity Fees

The Exchange believes that the proposed pass-through of external connectivity fees and Port Fees constitute an equitable allocation of fees, and are not unfairly discriminatory, because

they allow the Exchange to recover costs associated with offering access through the network connections and access and services through the Ports, responding to customer requests, configuring MIAX Emerald systems, programming API user specifications and administering the various services. Access to the MIAX Emerald market is offered on fair and non-discriminatory terms.

MIAX Emerald believes it is reasonable, equitable and not unfairly discriminatory to pass-through External Connectivity fees to Members and non-Members that establish connections with MIAX Emerald through a third-party. MIAX Emerald will only pass-through the actual costs it is charged by third-party external vendors. MIAX Emerald believes it is reasonable and equitable to recover costs charged it on behalf of a Member or non-Member that establishes connections with MIAX Emerald through a third party. Other exchanges, including MIAX, charge a fee for similar services to Members and non-Members.

MIAX Emerald believes it is reasonable, equitable and not unfairly discriminatory to assess Port Fees on both Members and non-Members who use such services. In particular, the Exchange believes that it is reasonable, equitable and not unfairly discriminatory to assess Port Fees on Members since the Ports enable Members to submit orders and to receive information regarding transactions. Specifically, the FIX Port, MEI Port, CTD Port and FXD Port enable Members to submit orders electronically to the Exchange for processing. The Exchange believes that its proposed fees are reasonable in that other exchanges offer similar ports with similar services and charge fees for the use of such ports, including MIAX.

MIAX Emerald believes it is reasonable and equitable to waive most of the Port Fees assessable to Members and non-Members during the Waiver Period since the waiver of such fees provides incentives to Members and non-Members to connect to the Ports early. Determining

connectivity and system operability with the Exchange's system early will in turn provide MIAX Emerald with potential order flow and liquidity providers as it begins operations. The waiver of most of the Port Fees will apply equally to all Members and non-Members during the Waiver Period. The sole Port Fee that is not waived is the Additional Limited Service MEI Ports Fee. The Exchange believes it is reasonable to exclude this fee from the Waiver Period in order to ensure that Members and non-Members do not request an excessive number of Additional Limited Service MEI Ports, since there is no fee associated with such Ports.

MIAX Emerald believes that its fees for MPIDs are reasonable, equitable and not unfairly discriminatory in that they apply to all EEMs equally and allow the Exchange to recover operational and administrative costs in assigning and maintaining such services based on the number of MPIDs assigned to the particular EEM in a given month in each month the Member is credentialed to use such MPIDs in the production environment. The Exchange believes that its proposed fees are reasonable in that other exchanges charge fees for similar services, including MIAX.

MIAX Emerald believes it is reasonable and equitable to waive the MPID fee to EEMs during the Waiver Period since the waiver of such fees provides incentives to Members to apply early. This in turn provides MIAX Emerald with potential order flow and liquidity providers as it begins operations. The waiver of the MPID fees will apply equally to all Members during the Waiver Period.

The Exchange believes that the proposed Technical Support fee is fair, equitable and not unreasonably discriminatory, because it is assessed equally to all Members and non-Members who request technical support. Furthermore, Members and non-Members are not required to use the service but instead it is offered as a convenience to all Members and non-Members. The

proposed fee is reasonably designed because it will permit both Members and non-Members to request the use of the Exchange's on-site data center personnel as technical support and as a convenience in order to test or otherwise assess the User's connectivity to the Exchange and the fee is within the range of the fee charged by other exchanges for similar services and is identical to the same fee assessed by MIAX and MIAX PEARL.

#### Market Data Fees

The Exchange believes that its proposal to assess market data fees is consistent with the provisions of Section 6(b)(4) of the Act in that it provides an equitable allocation of reasonable fees among distributors of ToM, cToM, AIS and MOR, because all Distributors in each of the respective category of Distributor (*i.e.*, Internal and External) will be assessed the same fees as other Distributors in their category for the applicable market data product.

In adopting Regulation NMS, the Commission granted self-regulatory organizations and broker-dealers increased authority and flexibility to offer new and unique market data to the public. It was believed that this authority would expand the amount of data available to consumers, and also spur innovation and competition for the provision of market data:

“[E]fficiency is promoted when broker-dealers who do not need the data beyond the prices, sizes, market center identifications of the NBBO and consolidated last sale information are not required to receive (and pay for) such data when broker-dealers may choose to receive (and pay for) additional market data based on their own internal analysis of the need for such data.”<sup>112</sup>

By removing “unnecessary regulatory restrictions” on the ability of exchanges to sell their own data, Regulation NMS advanced the goals of the Act and the principles reflected in its legislative history. If the free market should determine whether proprietary data is sold to

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<sup>112</sup> Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005).

broker-dealers at all, it follows that the price at which such data is sold should be set by the market as well.

In July, 2010, Congress adopted H.R. 4173, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (“Dodd-Frank Act”), which amended Section 19 of the Act. Among other things, Section 916 of the Dodd-Frank Act amended paragraph (A) of Section 19(b)(3) of the Act by inserting the phrase “on any person, whether or not the person is a member of the self-regulatory organization” after “due, fee or other charge imposed by the self-regulatory organization.” As a result, all SRO rule proposals establishing or changing dues, fees or other charges are immediately effective upon filing regardless of whether such dues, fees or other charges are imposed on members of the SRO, non-members, or both. Section 916 further amended paragraph (C) of Section 19(b)(3) of the Act to read, in pertinent part, “At any time within the 60-day period beginning on the date of filing of such a proposed rule change in accordance with the provisions of paragraph (1) [of Section 19(b)], the Commission summarily may temporarily suspend the change in the rules of the self-regulatory organization made thereby, if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of this title. If the Commission takes such action, the Commission shall institute proceedings under paragraph (2)(B) [of Section 19(b)] to determine whether the proposed rule should be approved or disapproved.”

The Exchange believes that these amendments to Section 19 of the Act reflect Congress’s intent to allow the Commission to rely upon the forces of competition to ensure that fees for market data are reasonable and equitably allocated. Although Section 19(b) had formerly authorized immediate effectiveness for a “due, fee or other charge imposed by the self-regulatory

organization,” the Commission adopted a policy and subsequently a rule stating that fees for data and other products available to persons that are not members of the self-regulatory organization must be approved by the Commission after first being published for comment. At the time, the Commission supported the adoption of the policy and the rule by pointing out that unlike members, whose representation in self-regulatory organization governance was mandated by the Act, non-members should be given the opportunity to comment on fees before being required to pay them, and that the Commission should specifically approve all such fees. MIAX Emerald believes that the amendment to Section 19 reflects Congress’s conclusion that the evolution of self-regulatory organization governance and competitive market structure have rendered the Commission’s prior policy on non-member fees obsolete. Specifically, many exchanges have evolved from member-owned, not-for-profit corporations into for-profit, investor-owned corporations (or subsidiaries of investor-owned corporations). Accordingly, exchanges no longer have narrow incentives to manage their affairs for the exclusive benefit of their members, but rather have incentives to maximize the appeal of their products to all customers, whether members or non-members, so as to broaden distribution and grow revenues. Moreover, the Exchange believes that the change also reflects an endorsement of the Commission’s determinations that reliance on competitive markets is an appropriate means to ensure equitable and reasonable prices. Simply put, the change reflects a presumption that all fee changes should be permitted to take effect immediately, since the level of all fees are constrained by competitive forces. The Exchange therefore believes that the assessment of fees for the use of ToM, cToM, AIS and MOR is proper for all Distributors.

The decision of the United States Court of Appeals for the District of Columbia Circuit in NetCoalition v. SEC, No. 09-1042 (D.C. Cir. 2010), although reviewing a Commission decision

made prior to the effective date of the Dodd-Frank Act, upheld the Commission's reliance upon competitive markets to set reasonable and equitably allocated fees for market data:

“In fact, the legislative history indicates that the Congress intended that the market system ‘evolve through the interplay of competitive forces as unnecessary regulatory restrictions are removed’ and that the SEC wield its regulatory power ‘in those situations where competition may not be sufficient,’ such as in the creation of a ‘consolidated transactional reporting system.’”<sup>113</sup>

The court's conclusions about Congressional intent are therefore reinforced by the Dodd-Frank Act amendments, which create a presumption that exchange fees, including market data fees, may take effect immediately, without prior Commission approval, and that the Commission should take action to suspend a fee change and institute a proceeding to determine whether the fee change should be approved or disapproved only where the Commission has concerns that the change may not be consistent with the Act.

MIAX Emerald believes that the assessment of the proposed market data fees for ToM, cToM, AIS and MOR is fair and equitable in accordance with Section 6(b)(4) of the Act, and not unreasonably discriminatory in accordance with Section 6(b)(5) of the Act. As described above, market data fees are assessed by other exchanges, including MIAX.<sup>114</sup>

Moreover, the decision as to whether or not to subscribe to ToM, cToM, AIS and MOR is entirely optional to all parties. Potential subscribers are not required to purchase the ToM, cToM, AIS or MOR market data feed, and MIAX Emerald is not required to make the ToM, cToM, AIS or MOR market data feed available. Subscribers can discontinue their use at any time and for any reason, including due to their assessment of the reasonableness of fees charged.

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<sup>113</sup> NetCoalition, at 15 (quoting H.R. Rep. No. 94-229, at 92 (1975), as reprinted in 1975 U.S.C.C.A.N. 321, 323).

<sup>114</sup> See Securities Exchange Act Release Nos. 69323 (April 5, 2013), 78 FR 21677 (April 11, 2013) (SR-MIAX-2013-14); 73326 (October 9, 2014), 79 FR 62233 (October 16, 2014) (SR-MIAX-2014-51); 74857 (May 1, 2015), 88 FR 26306 (May 7, 2015) (SR-MIAX-2015-32).

The allocation of fees among subscribers is fair and reasonable because, if the market deems the proposed fees to be unfair or inequitable, firms can diminish or discontinue their use of this data.

MIAX Emerald believes it is reasonable and equitable to waive the market data fees to Distributors during the Waiver Period since the waiver of such fees provides incentives to interested Distributors to receive the data feeds early. This in turn provides MIAX Emerald with potential order flow and liquidity providers as it begins operations. The waiver of the market data fees will apply equally to all Distributors during the Waiver Period.

Finally, the Exchange notes that it operates in a highly competitive market in which market participants can readily favor competing venues. In such an environment, the Exchange must establish fees that are competitive with other exchanges. For the reasons described above, the Exchange believes that the proposed fees in the MIAX Emerald Fee Schedule appropriately reflect this competitive environment.

B. Self-Regulatory Organization's Statement on Burden on Competition

MIAX Emerald does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. Unilateral action by MIAX Emerald in establishing rebates and fees for services provided to its Members and others using its facilities will not have an impact on competition. As a new entrant in the already highly competitive environment for equity options trading, MIAX Emerald does not have the market power necessary to set prices for services that are unreasonable or unfairly discriminatory in violation of the Act. MIAX Emerald's proposed rebates and fees, as described herein, are comparable to rebates and fees charged by other options exchanges for the same or similar services, including those rebates and fees assessed by its affiliates, MIAX and MIAX PEARL.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act,<sup>115</sup> and Rule 19b-4(f)(2)<sup>116</sup> thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act.

Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>);
- or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-EMERALD-2019-15 on the subject line.

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<sup>115</sup> 15 U.S.C. 78s(b)(3)(A)(ii).

<sup>116</sup> 17 CFR 240.19b-4(f)(2).

Paper comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-EMERALD-2019-15. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make

available publicly. All submissions should refer to File Number SR-EMERALD-2019-15 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>117</sup>

Eduardo A. Aleman  
Deputy Secretary

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<sup>117</sup> 17 CFR 200.30-3(a)(12).