

## NYSE Arca Equities

### FEES AND CHARGES

**Effective Date: October 10, 2024**

#### **NYSE ARCA MARKETPLACE: TRADE RELATED FEES AND CREDITS<sup>1</sup>**

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##### EXCHANGE TRANSACTIONS

##### ETP HOLDERS AND MARKET MAKERS<sup>2</sup>

Round Lots and Odd Lots (Per Share Price \$1.00 or Above and Per Share Price Below \$1.00)

#### **I. Definitions (applicable for purposes of fees and credits):**

- “ADV” means average daily volume.

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<sup>1</sup> Trade activity on days when the market closes early and on the date of the annual reconstitution of the Russell Investments Indexes does not count toward volume tiers. For purposes of determining trade related fees and credits based on ADV and US CADV (as defined below), the Exchange may exclude any day that (1) the Exchange is not open for the entire trading day and/or (2) a disruption affects an Exchange system that lasts for more than 60 minutes during regular trading hours. For purposes of calculating an ETP Holder’s qualifications for fees and credits that pertain to providing liquidity, the Exchange will calculate an ETP Holder’s equity volume and total equity CADV twice for the following pricing tiers:

- Adding Tiers
- Limit Non-Display Step Up Tier
- Tape C Tiers for Adding
- Tape B Tiers

First, the Exchange will calculate an ETP Holder’s equity volume and total equity CADV inclusive of volume that consists of executions in securities priced less than \$1. Second, the Exchange will calculate an ETP Holder’s equity volume and total equity CADV exclusive of volume that consists of executions in securities priced less than \$1. The Exchange will then assess which of these two calculations would qualify the ETP Holder for the most advantageous fees and credits for the month and then it will apply those to the ETP Holder.

<sup>2</sup> These transaction fees do not apply to: (1) Directed Orders, regardless of account type, that are matched within the Directed Order Process; (2) Directed Orders for the account of a retail public customer that are executed partially or in their entirety via the Directed Order, Display Order, Working Order, and Tracking Order processes (however, any unfilled or residual portion of a retail customer’s order that is routed away and executed by another market center or participant will incur this transaction fee); (3) Cross Orders; and (4) participants in the Nasdaq UTP Plan that transmit orders via telephone. Orders with specific rates (e.g., MPL, Tracking, PL, Retail Add) may be used to qualify for volume thresholds but are not eligible for tiered rates.

- **“Adding”** means the execution of an order on the Exchange that added liquidity.
- **“Auction”** means Early Open Auction, Core Open Auction, Trading Halt Auction and Closing Auction on NYSE Arca.
- **“Auction Orders”** means Market Orders, Market-On-Close Orders, Limit-On-Close Orders and Auction-Only Orders executed in a NYSE Arca auction.
- **“Cboe BZX Auction”** would mean orders routed for execution in the open or closing auction on Cboe BZX.
- **“Closing Orders”** means Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction.
- **“Directed Orders”** means a Limit Order with instructions to route on arrival at its limit price to a specified alternative trading system (“ATS”) with which the Exchange maintains an electronic linkage.
- **“ETP Holders”** means ETP Holders and Market Makers.
- **“Nasdaq Auction”** would mean orders routed for execution in the open or closing auction on Nasdaq.
- **“NYSE American Auction”** would mean orders routed for execution in the open or closing auction on NYSE American.
- **“NYSE Auction”** would mean orders routed for execution in the open or closing auction on NYSE.
- **“Opening Orders”** means Market and Auction-Only Orders executed in an Early Open Auction, Core Open Auction or Trading Halt Auction.
- **“Removing”** means the execution of an order that removed liquidity.
- **“TCADV”** means total Customer equity and ETF option ADV as reported by The Options Clearing Corporation (OCC).
- **“CADV”** means unless otherwise stated, the United States consolidated average daily volume of transactions reported to a securities information processor (“SIP”). Transactions that are not reported to a SIP are not included in the CADV. If CADV is preceded by a reference to a Tape or to Sub-Dollar, then CADV would refer to all consolidated average daily volume of transactions reported to a SIP for all securities in that Tape or to all Sub-Dollar securities.

## **II. General:**

- Tape A, Tape B and Tape C refers to securities executions reported to the Consolidated Tape A, Consolidated Tape B, and Consolidated Tape C, respectively.
- Rebates indicated by parentheses ( ).
- All fees and credits and tier requirements apply to ETP Holders.
- All fees and credits are per share unless noted otherwise.

### III. Standard Rates - Transactions (applicable when Tier Rates do not apply):

Category	Adding Liquidity <sup>(a)(b)</sup>	Adding Liquidity - Retail Orders <sup>(c)</sup>	Adding Liquidity - MPL Orders	Removing Liquidity <sup>(d)</sup>	Opening Orders <sup>(e)(g)</sup>	Closing Orders <sup>(f)(g)</sup>
Securities priced at or above \$1.00	Tapes A and C: (\$0.0020) Tape B: (\$0.0016)	(\$0.0032)	(\$0.0010)	\$0.0030	\$0.0015; \$0.0005 for Retail Orders	\$0.0012; \$0.0008 for Retail Orders
Securities priced below \$1.00	0.0% of Dollar Value	(0.05% of Dollar Value)	0.0% of Dollar Value	0.30% of Dollar Value	0.1% of Dollar Value	0.1% of Dollar Value

- (a) In securities priced at or above \$1.00, an additional credit in Tape B Securities shall apply to LMMs and to Market Makers affiliated with LMMs that add displayed liquidity based on the number of Less Active ETP Securities in which the LMM is registered as the LMM. The applicable tiered-credits are noted below (See LMM Transaction Fees and Credits).
- (b) In securities priced below \$1.00, this credit applies to all orders that add liquidity.
- (c) Retail Order means an order designated with a “retail” modifier as provided in Rule 7.31-E(i)(4).
- (d) In securities priced at or above \$1.00, this fee also applies to Non-Displayed Limit Orders that remove liquidity.
- (e) In securities priced at or above \$1.00, this fee is capped at \$20,000 per month per Equity Trading Permit ID.
- (f) Fee applies to orders in all Securities.
- (g) In securities priced at or above \$1.00, this fee applies to executions resulting from Auction Orders. In securities priced below \$1.00, this fee applies to all orders executed in the Early Open Auction, Core Open Auction, Trading Halt Auction or Closing Auction.

### IV. Other Standard Rates for Securities with a Per Share Price \$1.00 or Above:

- No fee or credit for Non-Displayed Limit Orders that add liquidity or for executions resulting from IOIs.
- \$0.0030 fee for MPL Orders removing liquidity; \$0.0010 if such orders are designated as Retail Orders.
- \$0.0006 fee for executions in an Auction other than for executions from Auction Orders.
- (\$0.0005) credit for Discretionary Pegged Orders that add liquidity.

**V. Standard Rates - Routing:**

Category	Orders routed that remove liquidity	Primary Until 9:45 Orders and Primary After 3:55 Orders designated as Retail Orders and routed to the primary market	Primary Only (“PO”) Orders in Tape A Securities routed to NYSE that add liquidity	PO Orders in Tape B Securities routed to NYSE American that add liquidity	PO Orders in Tape A Securities routed to NYSE Auction	PO Orders in Tape B Securities routed to NYSE American Auction	PO Orders in Tape B Securities routed to Cboe BZX Auction and in Tape C Securities routed to NASDAQ Auction
Securities priced at or above \$1.00	\$0.0035	\$0.0010	(\$0.0012)	No Credit	\$0.0010	\$0.0005	\$0.0030
Securities priced below \$1.00	0.35% of Dollar Value <sup>(a)</sup>	n/a	n/a	n/a	n/a	n/a	n/a

<sup>(a)</sup> Applicable to orders of listed and Nasdaq securities routed away and executed by another market center or participant.

**VI. Other Standard Rates - Routing (Per Share Price \$1.00 or Above)**

- \$0.0015 per share for Directed Orders routed to OneChronos LLC.

**VII. Tier Rates - Round Lots and Odd Lots (Per Share Price \$1.00 or Above):**

<b>Adding Tiers</b>					
<b>Tier*</b>	<b>Minimum Requirement</b>		<b>Credit for Adding</b>		
			<b>Tape A</b>	<b>Tape B<sup>(a)</sup></b>	<b>Tape C</b>
Tier 1	0.70% Adding of CADV, or	84 million shares Adding ADV	(\$0.0031)	(\$0.0023)	(\$0.0032)
Tier 2	0.50% Adding of CADV		(\$0.0030)	(\$0.0023)	(\$0.0031)
Tier 3	0.30% Adding of CADV, or	0.25% Adding CADV, 0.40% Tape B Remove of Tape B CADV, and 0.25% Customer and Professional Customer Electronic Posting Volume of TCADV on NYSE Arca Options by OTP Holder or OTP Firm affiliated with the ETP Holder	(\$0.0029)	(\$0.0022)	(\$0.0029)
Tier 4	0.20% Adding of CADV		(\$0.0025)	(\$0.0022)	(\$0.0025)
Tier 5	0.15% Adding of CADV		(\$0.0022)	(\$0.0020)	(\$0.0022)
* ETP Holders that qualify for Tier 1, Tier 2, Tier 3 or Tier 4 and also have combined Adding and Removing of 1.0% of CADV receive a minimum of (\$0.0030) for Adding in Tape A, Tape B and Tape C					
ETP Holders that qualify for Tier 1, Tier 2, Tier 3 or Tier 4 are subject to the following fees:					
Routing	\$0.0030				
Removing Liquidity in Tape B	\$0.0029				
Closing Orders	\$0.0010				

- (a) An additional credit in Tape B shall apply to ETP Holders affiliated with LMMs that add displayed liquidity based on the number of Less Active ETP Securities in which the LMM is registered as the LMM. The applicable tiered-credits are noted below (See LMM Transaction Fees and Credits).

<b>Step Up Tiers</b>							
	<b>Minimum Requirement</b>			<b>Credit for Adding Displayed Liquidity</b>			
<b>Tier</b>	<b>Adding ADV of CADV</b>	<b>Removing ADV of CADV</b>	<b>Adding Increase of CADV</b>	<b>Adding Increase Baseline</b>	<b>Tape A</b>	<b>Tape B</b>	<b>Tape C</b>
Step Up Tier 2 <sup>(b)</sup>			0.40%	September 2019	(\$0.0033)	(\$0.0034)	(\$0.0033)
Step Up Tier 3			0.35% or	September 2019	(\$0.0031)	(\$0.0031)	(\$0.0031)
		0.50%	0.25%				

- (b) ETP Holders that qualify for Step Up Tier 2 shall not receive additional Tape B Tier credits for adding displayed liquidity, including any additional credits associated with Less Active ETP Securities, however, ETP Holders that are registered as a LMM may receive up to a combined credit of \$0.0036 per share on all its adding volume if that ETP Holder, together with its affiliates, executes Tape B adding ADV that is at least 40% over the ETP Holder's adding ADV in Q3 2019, as a percentage of Tape B CADV.

**Cross-Asset Tier**

<b>Minimum Requirement</b>		<b>Credit for Adding</b>		
<b>Equity Volume Adding ADV of CADV</b>	<b>Option Customer and Professional Customer Electronic Posting Volume of TCADV by OTP Holder or OTP Firm affiliated with the ETP Holder</b>			
		<b>All Issues</b>	<b>Tape A</b>	<b>Tape B</b>
0.30%	0.80% of TCADV	(\$0.0030)	(\$0.0030)	(\$0.0030)
0.50%	0.80% of TCADV	n/a	n/a	Additional (\$0.0004)
0.65%	0.80% of TCADV	Additional (\$0.0002)	Additional (\$0.0002)	n/a
0.75%	0.80% of TCADV	Additional (\$0.0001) for Adding, All Tapes		

**MPID Adding Tier**

<b>Tier</b>	<b>Minimum Requirement by MPID</b>		<b>Credit for MPIDs Adding</b>		
	<b>Adding Increase of CADV over Q2 2021, as a percentage of CADV</b>	<b>Adding ADV</b>	<b>Tape A</b>	<b>Tape B</b>	<b>Tape C</b>
MPID Adding Tier 2	2 Times	4 Million or	(\$0.0028)	(\$0.0022)	(\$0.0028)
		2 Million in Tape B			
MPID Adding Tier 1	2 Times	9 Million	(\$0.0029)	(\$0.0022)	(\$0.0029)

Retail Tiers					
Tier	Minimum Requirement of CADV			Rates for Retail Orders	
	Retail Orders with a time-in-force of Day that add and remove that is an increase over April 2018	Retail Orders with a time-in-force of Day that add and remove	Adding ADV	Credit for Retail Adding	Fee for Retail Removing with a Time-in-force of Day <sup>(e)</sup>
Retail Tier 1 <sup>(c)(d)</sup>		0.50% or 55 Million ADV	1.00%	(\$0.0038)	No Fee
Retail Tier 2 <sup>(d)</sup>		0.35%		(\$0.0037)	No Fee
Retail Tier 3 <sup>(d)</sup>		0.20%		(\$0.0036)	No Fee
Retail Tier 4		0.10%		(\$0.0034)	
Retail Step-Up Tier <sup>(d)</sup>	0.075%			(\$0.0035)	No Fee

(c) ETP Holders that qualify for Retail Tier 1 are subject to the following rates in Tape C:

- (\$0.0035) for Adding displayed liquidity.
- \$0.0027 for Removing.
- Additional (\$0.0002) for Adding non-displayed liquidity.

(d) ETP Holders that qualify for Retail Tier 1, Retail Tier 2, Retail Tier 3 and Retail Step-Up Tier are subject to the following rates:

- No fee charged or credit paid for Retail Orders where each side of the executed order (1) shares the same MPID and (2) is a Retail Order with a time-in-force of Day.

(e) ETP Holders that increase Retail Orders with a time-in-force of Day that add and remove that is an increase over May 2022 of at least 0.05% of CADV qualify for no fee for Retail Removing with a time-in-force of Day.



<b>MPL Order Tiers</b>				
<b>Tier</b>	<b>Minimum Requirement</b>		<b>Credit for MPL Adding</b>	
	<b>MPL Adding ADV</b>	<b>MPL Adding ADV as percent of Adding ADV</b>	<b>Tape A</b>	<b>Tape B and Tape C</b>
MPL Tier 1	30 Million		(\$0.0033)	(\$0.0033)
MPL Tier 2	25 Million		(\$0.0032)	(\$0.0032)
MPL Tier 3	15 Million		(\$0.0031)	(\$0.0031)
MPL Tier 4	13 Million		(\$0.0029)	(\$0.0029)
MPL Tier 5	5 Million or		(\$0.0026)	(\$0.0026)
	2 Million	50%		
MPL Tier 6	3 Million or		(\$0.0025)	(\$0.0025)
	1 Million	50%		
MPL Tier 7	2 Million		(\$0.0020)	(\$0.0020)
MPL Tier 8	1.5 Million		(\$0.0015)	(\$0.0015)

<b>Limit Non-Display Step Up Tier</b>		
	<b>Minimum CADV Requirement</b>	<b>Credit for Limit Non-Displayed Orders Adding</b>
<b>Tier</b>	<b>Limit-Non-Display and MPL Order Combined ADV Increase over July 2020</b>	<b>All Tapes</b>
Limit Non- Display Order Step Up Tier	0.02%	(\$0.0004)
	0.05%	(\$0.0010)
	0.10%	(\$0.0015)
	0.15%	(\$0.0020)

<b>Tracking Order Tier</b>		
<b>Tier</b>	<b>Minimum ADV Requirement</b>	<b>Credit for Tracking Orders that result in executions</b>
Tracking Order Tier 1	1 Million	(\$0.0010)

Tape B Tiers								
	Minimum Requirement							
	Tape B			NYSE Arca Listed Equities	NYSE Arca Options	Credit for Tape B Adding		
Tier	Adding ADV of Tape B CADV	Adding Increase in Tape B of Tape B CADV	Adding Increase Baseline	# of Less Active ETPs per LMM/Market Maker Meeting At Least Two Performance Metrics in Prior Month	Market Maker Electronic Posting Volume of TCADV by OTP Holder or OTP Firm affiliated with the ETP Holder	Tape B Credit	Tape B Additional Credit <sup>(f)</sup>	
Tier 1 <sup>(g)</sup>	1.50%					(\$0.0030)		
Tier 2 <sup>(g)</sup>	1.00% or					(\$0.0028)		
	0.25% above April 2020							
Tier 3 <sup>(g)</sup>	0.15% above April 2020 or					(\$0.0025)		
	0.20% or				0.50%			
				50				
Step Up	0.50%	20%	Q3 2019				(\$0.0002)	
	0.50%	30%	Q3 2019				(\$0.0003)	
	0.50%	40%	Q3 2019				(\$0.0004)	

<sup>(f)</sup> This credit shall be in addition to the ETP Holder's Tiered or Standard credit(s) and such combined credit(s) in Tape B shall not exceed \$0.0032, except that for ETP Holders registered as a Lead Market Maker or Market Maker in at least 100 Less Active ETPs in which it meets at least two Performance Metrics, where the ETP Holder, together with any affiliates, has Adding Tape B ADV that is an increase of at least 60% over the ETP Holder's Adding ADV in Q3 2019, as a percentage of Tape B CADV, in which case the ETP Holder can receive a combined credit of up to:

- \$0.0033 per share if the ETP Holder, together with any affiliates, has Tape B Adding ADV equal to at least 0.65% of Tape B CADV, or

- \$0.0035 per share if the ETP Holder, together with any affiliates, has Tape B Adding ADV equal to at least 0.70% of Tape B CADV.

(g) LMMs cannot qualify for this Tier.

Tape C Tiers for Adding		
Tier	Minimum Criteria for Tape C Adding	Rate
Tier 1	0.40% of CADV	(\$0.0034) \$0.0029 fee for Removing Liquidity
Tier 2	0.35% of CADV	(\$0.0033)
Tier 3	0.20% of CADV	(\$0.0030)

**VIII. Tier Rates - Round Lots and Odd Lots (Per Share Price Below \$1.00)<sup>3</sup>**

<b>Sub-Dollar Adding Step Up Tier</b>		
	<b>Minimum Requirement</b>	<b>Credit for Sub-Dollar Adding Orders of total dollar value</b>
<b>Tier</b>	<b>1 Million Adding ADV with a per share price below \$1.00 (“Sub-Dollar Adding Orders”) and Adding Increase of CADV in Sub-Dollar Adding Orders over July 2020, as a percentage of CADV with a per share price below \$1.00</b>	<b>All Tapes</b>
Sub-Dollar Adding Step Up Tier	0.30%	0.050%
	0.60%	0.100%
	1.00%	0.150%

<b>Sub-Dollar Retail Day Remove Tier</b>		
	<b>Minimum Requirement</b>	<b>Fee for Retail Day Remove of total dollar value</b>
<b>Tier</b>	<b>Retail Day Remove as a percentage of CADV with a per share price below \$1.00</b>	<b>All Tapes</b>
Sub-Dollar Retail Day Remove Tier	0.20%	0.20%

<sup>3</sup> These fees are consistent with the limitations of Regulation NMS, SEC Rule 610(c), for securities with a price of less than \$1.00. Rebates will not be paid for executions in securities priced under \$1.00.

## NYSE ARCA MARKETPLACE: ETP FEES

ETP Fee	\$15,000 per year per ETP Holder (billed monthly for each month during which the ETP is held for any portion of the month)
ETP Application Fees	
Initial Processing Fee	Waived
Investigation Fee	\$125 fee per individual for registration as an ETP Holder (includes any Approved Person <sup>4</sup> listed on Schedule A or B of Form BD or Market Maker Authorized Trader for whom required information is not available on Web CRD ®)

## REGULATORY FEES

FOCUS Filing Fee	\$100 annual filing fee for ETP Holders for which NYSE Arca is the Designated Examining Authority
Gross FOCUS Fee: Amount per \$1,000 Gross FOCUS Revenue	\$0.069 monthly fee per firm  The Exchange will waive the Monthly Gross FOCUS Fee from October 1, 2024 to February 28, 2025 and recommence assessing the \$0.069 fee as of March 1, 2025.
DEA Fee	\$2,000 monthly fee per firm \$250 annual fee per trader
Application Resulting in Statutory Disqualification Proceedings	\$2,000 fee per application
Late Payment of Dues, Fees, Fines and Charges	
Number of Times Late Within Previous Twelve Months	Amount of Charge
1	\$250 or 1.0% of Invoice Amount, Whichever is Greater
2	\$500 or 1.5% of Invoice Amount, Whichever is Greater

## CRD Fees for ETP Holders that are not FINRA Members

Each initial Form U4 filed for the registration of a representative or principal	\$125
Additional processing of each initial or amended Form U4, Form U5 or Form BD that includes the initial reporting,	\$155

<sup>4</sup> As defined by NYSE Arca Rule 1.1(c).

amendment, or certification of one or more disclosure events or proceedings	
Processing and posting to the CRD system each set of fingerprints submitted electronically to FINRA, plus any other charge that may be imposed by the U.S. Department of Justice for processing each set of fingerprints	\$20
Processing and posting to the CRD system each set of fingerprint cards submitted in non-electronic format to FINRA, plus any other charge that may be imposed by the U.S. Department of Justice for processing each set of fingerprints	\$30
Processing and posting to the CRD system each set of fingerprint results and identifying information that have been processed through another self-regulatory organization and submitted to FINRA	\$30
System processing for each registered representative and principal	\$70 annually

#### Consolidated Audit Trail Funding Fees

(a) CAT Fees.

(1) Historical CAT Assessment 1.

(A) Each CAT Executing Broker shall receive its first invoice for Historical CAT Assessment 1 in November 2024, which shall set forth the Historical CAT Assessment 1 fees calculated based on transactions in October 2024, and shall receive an invoice for Historical CAT Assessment 1 for each month thereafter in which Historical CAT Assessment 1 is in effect.

(B) Consolidated Audit Trail, LLC shall provide each CAT Executing Broker with an invoice for Historical CAT Assessment 1 on a monthly basis. Each month, such invoices shall set forth a fee for each transaction in Eligible Securities executed by the CAT Executing Broker in its capacity as a CAT Executing Broker for the Buyer (“CEBB”) and/or the CAT Executing Broker for the Seller (“CEBS”) (as applicable) from the prior month as set forth in CAT Data. The fee for each such transaction will be calculated by multiplying the number of executed equivalent shares in the transaction by the fee rate of \$0.000013 per executed equivalent share.

(C) Historical CAT Assessment 1 will remain in effect until \$212,039,879.34 (two-thirds of Historical CAT Costs 1) are collected from CAT Executing Brokers collectively, which is estimated to be approximately two years, but could be for a longer or shorter period of time. Consolidated Audit Trail, LLC will provide notice when Historical CAT Assessment 1 will no longer be in effect.

(D) Each CAT Executing Broker shall be required to pay each invoice for Historical CAT Assessment 1 in accordance with paragraph (b).

(2) Reserved.

(3) CAT Fee 2024-1

(A) Each CAT Executing Broker shall receive its first invoice for CAT Fee 2024-1 in October 2024, which shall set forth the CAT Fee 2024-1 fees calculated based on transactions in September 2024, and shall receive an invoice for CAT Fee 2024-1 for each month thereafter until January 2025.

(B) Consolidated Audit Trail, LLC shall provide each CAT Executing Broker with an invoice for CAT Fee 2024-1 on a monthly basis. Each month, such invoices shall set forth a fee for each transaction in Eligible Securities executed by the CAT Executing Broker in its capacity as a CAT Executing Broker for the Buyer (“CEBB”) and/or the CAT Executing Broker for the Seller (“CEBS”) (as applicable) from the prior month as set forth in CAT Data. The fee for each such transaction will be calculated by multiplying the number of executed equivalent shares in the transaction by the fee rate of \$0.000035 per executed equivalent share.

(C) Notwithstanding the last invoice date of January 2025 for CAT Fee 2024-1 in paragraph 3(A), CAT Fee 2024-1 shall continue in effect after January 2025, with each CAT Executing Broker receiving an invoice for CAT Fee 2024-1 each month, until a new subsequent CAT Fee is in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act. Consolidated Audit Trail, LLC will provide notice when CAT Fee 2024-1 will no longer be in effect.

(D) Each CAT Executing Broker shall be required to pay each invoice for CAT Fee 2024-1 in accordance with paragraph (b).

(b) Timing and Manner of Payments.

(1) Each CAT Executing Broker shall pay its CAT fees as required pursuant to paragraph (a) each month to the Consolidated Audit Trail, LLC in the manner prescribed by the Consolidated Audit Trail, LLC.

(2) Each CAT Executing Broker shall pay the CAT fees required pursuant to paragraph (a) within thirty days after receipt of an invoice or other notice indicating payment is due (unless a longer payment period is otherwise indicated). If a CAT Executing Broker fails to pay any such CAT fee when due, such CAT Executing Broker shall pay interest on the outstanding balance from such due date until such fee is paid at a per annum rate equal to the lesser of (i) the Prime Rate plus 300 basis points, or (ii) the maximum rate permitted by applicable law.



Lead Market Maker (“LMM”) Transaction Fees and Credits

Round Lots (Per Share Price \$1.00 or Above)

**I. Definitions for purposes of LMM Transaction Fees and Credits**

1. “**CADV**” means the consolidated average daily volume in a security in the prior month.
2. “**ETP**” means Exchange Traded Products listed on NYSE Arca.
3. “**ETP Price**” means the average Official Closing Price in that ETP in the prior month.
4. “**Less Active ETPs**” means ETPs that have a CADV in the prior calendar quarter that is the greater of either less than 100,000 shares or less than 0.013% of Consolidated Tape B ADV.
5. “**Leveraged ETP**” means an ETP that tracks an underlying index by a ratio other than on a one-to-one basis.
6. “**Maximum LMM Spread**” means time-weighted average LMM spread (LMM Offer minus LMM Bid) divided by the average of the LMM Bid and LMM Offer, in basis points.
7. “**Minimum LMM Shares within 1% of NBBO**” means the average number of LMM shares quoted throughout the trading day that are within 1% of the National Best Bid and Best Offer divided by two.
8. “**Minimum LMM Shares at the Core Open Auction within 1.5% of the Auction Reference Price**” means the average of LMM buy shares and LMM sell shares for Limit Orders quoted within 1.5% of the Auction Reference Price divided by two.
9. “**Minimum LMM Shares at the Closing Auction within 1% of the NBBO**” means the average number of LMM buy shares and LMM sell shares for Limit Orders quoted within 1% of the National Best Bid and Best Offer before the end of Core Trading Hours divided by two.
10. “**New ETP**” means an ETP for the first 12 months of listing on NYSE Arca.

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<sup>5</sup> Market Maker fees for the NYSE Arca marketplace will not apply to MPL Orders (except MPL Orders will be eligible for transaction credit with respect to Tape A and Tape C Securities).

**II. LMM Base Fees and Credits per Share:** Base rates for LMMs in ETPs in which the LMM is registered as a LMM for the billing month, based on the ETP’s CADV in the prior month.

<b>ETP CADV</b>	<b>Credit for Adding Displayed Liquidity</b>	<b>Fee for Removing Liquidity</b>	<b>Credit for Adding Non-Displayed Limit Orders</b>	<b>Credit for Adding Undisplayed Liquidity in Non-Routable Limit Orders</b>	<b>Fee for Orders in the Closing Auction</b>
< 1,000,000	(\$0.0045)				
1,000,000 to 3,000,000	(\$0.0040)	\$0.0029	(\$0.0015)	(\$0.0030)	No Fee
> 3,000,000	(\$0.0033)				

**III. LMM Performance Metrics-based Incremental Base Credit Adjustments:**

LMMs that meet the Performance Metrics in the table below are entitled to enhanced credits based on the quality of the market in an assigned ETP. The Performance Metrics that the Exchange will measure are:

- (1) Maximum LMM Spread;
- (2) Minimum LMM Shares within 1% of NBBO;
- (3) Minimum LMM Shares in Core Open Auction within 1.5% of Auction Reference Price; and
- (4) Minimum LMM Shares at the Closing Auction within 1% of the NBBO.

Each assigned ETP is grouped based on its prior month CADV and its price. An LMM is considered to have met a Performance Metric for an assigned ETP for a billing month if it meets the following:

<b>Monthly Average LMM Performance Metrics</b>					
<b>ETP CADV</b>	<b>ETP Price</b>	<b>Maximum LMM Spread (bps)</b>	<b>Minimum LMM Shares within 1% of National BBO</b>	<b>Minimum LMM Shares in Core Open Auction within 1.5% of Auction Reference Price</b>	<b>Minimum LMM Shares at the Closing Auction within 1% of the National BBO</b>
> 1,000,000	> \$50	55	6,000	4,000	12,250
	\$25 -\$50	45	20,000	8,500	14,250
	Under \$25	40	42,000	22,000	30,000
100,001 - 1,000,000	> \$50	35	2,500	2,500	3,250
	\$25 -\$50	35	3,500	4,000	4,750
	Under \$25	65	10,000	5,750	7,250
10,000 - 100,000	> \$50	40	2,200	2,000	2,250
	\$25 -\$50	55	2,400	2,050	2,500
	Under \$25	70	4,000	2,200	4,500
Under 10,000	> \$50	50	2,000	1,750	2,000
	\$25 -\$50	60	3,000	1,800	3,000
	Under \$25	75	3,000	1,800	3,000

The base credit earned by an LMM for Adding Displayed Liquidity (as provided in Section II above) in an assigned ETP will be adjusted based on the number of Performance Metrics met by the LMM in the billing month for each assigned ETP, as follows:

# of Performance Metrics Met	Incremental Base Credit Adjustment per ETP	Incremental Base Credit Adjustment per Leveraged ETP	Incremental Base Credit Adjustment per Less Active ETP	Incremental Base Credit Adjustment per Less Active Leveraged ETP	Incremental Base Credit Adjustment per New ETP	Incremental Base Credit Adjustment per New Leveraged ETP
4	(\$0.0001)	(\$0.0001)	(\$0.0002)	(\$0.0002)	(\$0.0004)	(\$0.0004)
3	(\$0.00005)	(\$0.00005)	(\$0.0001)	(\$0.0001)	(\$0.0002)	(\$0.0002)
2	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0002	\$0.0000
1	\$0.0001	\$0.0000	\$0.0002	\$0.0000	\$0.0004	\$0.0000
0	\$0.0002	\$0.0000	\$0.0004	\$0.0000	\$0.0005	\$0.0000

**IV. Additional Tape B Credits for LMMs and Market Makers**

LMMs may earn an additional credit on all Tape B Securities if the LMM meets at least two Performance Metrics in each of the Less Active ETPs in which the LMM is registered as the LMM. As set forth in the table below, the additional credit available for Tape B Securities is based on the number of Less Active ETPs assigned to an LMM.

The number of Less Active ETPs for a billing month will be calculated as the average number of Less Active ETPs in which an LMM is registered on the first and last business day of the previous month.

To determine which Less Active ETP Tier will be applicable to an LMM, the Exchange will count the number of Less Active ETPs assigned to that LMM as follows:

- Each Less Active ETP in which an LMM is registered and meets at least two Performance Metrics will count as one Less Active ETP. Each Less Active ETP that is a Leveraged ETP in which an LMM is registered will count as one Less Active ETP regardless of the number of Performance Metrics met.

An ETP Holder registered as a Market Maker is also eligible to earn this additional credit on all Tape B securities if:

- The Market Maker notifies the Exchange on or before the first trading day that the additional credit is available in a calendar month of which new Less Active ETPs for which the Market Maker is registered that it is seeking to count towards or remove from qualifying for this additional credit in that month.
- The Market Maker cannot also be the registered LMM in a Less Active ETP that it is seeking to count to qualify for the additional credit as a Market Maker.
- Every two Less Active ETPs that a Market Maker identifies and meets at least two Performance Metrics will count as one Less Active ETP for purposes of determining the applicable additional credit.

- If an ETP Holder is both an LMM and a Market Maker in Less Active ETPs and has notified the Exchange of Less Active ETPs that it seeking to count for the additional credit as a Market Maker, the number of Less Active ETPs calculated for the Market Maker above will be combined with the number of Less Active ETPs in which the LMM is registered.

<b>Less Active ETP Tiers</b>	<b># of Less Active ETPs per LMM/Market Maker</b>	<b>Additional Credit on all Tape B Securities</b>
Tier 5	50 - 74 ETPs	(\$0.00005)
Tier 4	75 – 99 ETPs	(\$0.0001)
Tier 3	100 – 199 ETPs	(\$0.0002)
Tier 2	200 - 399 ETPs, or 200 - 299 ETPs if the LMM or Market Maker and its affiliates add liquidity of at least 1.00% of US CADV	(\$0.0003)
Tier 1	At Least 400 ETPs, or at least 300 ETPs if the LMM or Market Maker and its affiliates add liquidity of at least 1.00% of US CADV	(\$0.0004)

**NYSE ARCA MARKETPLACE: OTHER FEES AND CHARGES**

Connectivity Fees

Line Connection	(Variable pass-through charge for each line installation)
<p>Port Fee (not applicable to ports used for Risk Management Gateway (“RMG”<sup>SM</sup>), which are not charged)</p> <p>Ports for order/quote entry:</p> <p>Ports for drop copies:</p>	<p>\$550 per port per month, except that no fee shall apply to ports in the backup datacenter that are not utilized during the relevant month, and no fee shall apply to ports in the backup datacenter that are utilized when the primary datacenter is unavailable. If a port in the backup datacenter is utilized when the primary datacenter is available, then the fee shall apply. Effective October 1, 2017, the monthly fee for a port activated after August 18, 2017, will be prorated to the number of trading days in such billing month, including any scheduled early closing days, that the port is connected to the Exchange.</p> <p>\$550 per port per month (only one fee per drop copy port shall apply, even if receiving drop copies from multiple order/quote entry ports and/or from NYSE Arca Options), except that no fee shall apply to ports in the backup datacenter if configured such that it is duplicative of another drop copy port of the same user. Effective October 1, 2017, the monthly fee for a port activated after August 18, 2017, will be prorated to the number of trading days in such billing month, including any scheduled early closing days, that the port is connected to the Exchange.</p>
<p>Risk Management Gateway:</p> <p>Number of Connections (Monthly): First Connection (up to 1000 messages per second)</p> <p>Every additional Connection (up to 1000 messages per second)</p>	<p>Amount of Charge:</p> <p>\$3,000.00</p> <p>\$1,000.00</p>

## RATIO THRESHOLD FEES

### *Ratio Threshold for Priority 2 - Display Orders (“RT - Display Fee”)*

For orders ranked Priority 2 - Display Orders, ETP Holders are charged an RT - Display Fee on a monthly basis. For purposes of determining the RT - Display Fee:

- The “Weighted Order Total” is the total number of orders ranked Priority 2 - Display Orders entered by that ETP Holder in a month, as adjusted by a “Weighting Factor.” The Weighted Order Total calculation excludes (i) all orders in securities in which an ETP Holder is registered as a Market Maker or Lead Market Maker and (ii) all orders for an ETP Holder that is registered as a Market Maker or Lead Market Maker in 100 or more securities.
- The “Weighting Factor” applied to each order based on its price in comparison to the national best bid or best offer (“NBBO”) at the time of order entry is:

Order’s Price versus NBBO at Entry	Weighting Factor
Less than 0.20% away	0x
0.20% to 0.99% away	1x
1.00% to 1.99% away	2x
2.00% or more away	3x

For example, an order more than 2.0% away from the NBBO would be equivalent to three orders. Due to the applicable Weighting Factor of 0x, orders entered less than 0.20% away from the NBBO would not be included in the Weighted Order Total, but would be included in the “executed” orders component of the Order Entry Ratio if they execute in full or part.

- The “Order Entry Ratio” is calculated by dividing the ETP Holder’s Weighted Order Total by the greater of (i) the number of orders ranked Priority 2 - Display Orders that execute in full or in part, or (ii) the number one (1).
- “Excess Weighted Orders” are calculated by subtracting (i) the Weighted Order Total that would result in the ETP Holder having an Order Entry Ratio of 100 from (ii) the ETP Holder’s actual Weighted Order Total.

An ETP Holder with a daily average Weighted Order Total of 100,000 or more during a month will be charged the RT - Display Fee, which is calculated by multiplying the Applicable Rate in the chart below by the number of Excess Weighted Orders.

ETP Holders that exceed the Order Entry Ratio threshold of 1,000:1 will pay a fee of \$0.01 on each order that caused the ETP Holder to surpass the threshold.

ETP Holders that exceed the Order Entry Ratio threshold of 100:1 but less than 1,000:1 will pay a fee of \$0.005 on all orders that caused ETP Holder's ratio to exceed 100:1.

Order Entry Ratio	Applicable Rate
0-100	\$0.00
101 - 1,000	\$0.005
More than 1,000	\$0.01

*Ratio Threshold for Auction-Only Orders During the Period When Auction Imbalance Information is Being Disseminated for a Core Open Auction or Closing Auction (“RT - Auction Fee”)*

For Auction-Only Orders, ETP Holders with an average daily number of orders of 10,000 or more are charged an RT - Auction Fee on a monthly basis, as described below:

- The number of “Ratio Shares” is the average daily number of shares of Auction-Only Orders that are cancelled by the ETP Holder at a disproportionate ratio to the average daily number of shares executed by that ETP Holder. Orders ranked Priority 2 - Display Orders designated for the Core Trading Session only that are entered during the period when Auction Imbalance Information for the Core Open Auction is being disseminated are included in the Ratio Shares calculation. All orders entered by an ETP Holder for securities in which it is registered as a Lead Market Maker are not included in the calculation of Ratio Shares.
- The “Ratio Shares Threshold” is an ETP Holder’s Ratio Shares divided by the average daily executed shares by the ETP Holder.

A Ratio Shares Threshold less than 25	No Charge
A Ratio Shares Threshold greater than or equal to 25	<p>ETP Holders with an average of fewer than 10 million Ratio Shares per day:</p> <ul style="list-style-type: none"> <li>• No Charge</li> </ul> <p>ETP Holders with an average of 10 million to 100 million Ratio Shares per day:</p> <ul style="list-style-type: none"> <li>• \$5.00 per million Ratio Shares</li> </ul> <p>ETP Holders with an average of more than 100 million Ratio Shares per day:</p> <ul style="list-style-type: none"> <li>• \$15.00 per million Ratio Share</li> </ul>

ETP Holders will be charged for the entirety of their Ratio Shares at a rate of \$5.00 per million Ratio Shares if the ETP Holder has an average of 10 million to 100 million Ratio Shares; and \$15.00 per million Ratio Shares if the ETP Holder has an average of more than 100 million Ratio Shares.

The combined RT - Display Fee and RT - Auction Fee for an ETP Holder is capped at \$1,000,000 per month.



## **NYSE ARCA MARKETPLACE: GENERAL**

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### **I. BILLING DISPUTES**

All fee disputes concerning fees billed by the Exchange must be submitted to the Exchange in writing and must be accompanied by supporting documentation. All fee disputes must be submitted no later than sixty (60) days after receipt of a billing invoice.

### **II. Aggregate Billing of Affiliated ETP Holders**

**(a)** For purposes of applying any provision of the Schedule of Fees and Charges for Exchange Services (“Schedule of Fees”) where the charge assessed, or credit provided, by the Exchange depends upon the volume of a ETP Holder's activity, a ETP Holder may request that the Exchange aggregate its eligible activity with the eligible activity of its affiliate(s).

(1) A ETP Holder requesting aggregation of eligible affiliate activity shall be required to certify to the Exchange which affiliate it seeks to aggregate prior to receiving approval for aggregation, and shall be required to inform the Exchange immediately of any event that causes an entity to cease to be an affiliate. The Exchange shall review available information regarding the entities and reserves the right to request additional information to verify the affiliate status of an entity. The Exchange shall approve a request, unless it determines that the certificate is not accurate.

(2) If two or more ETP Holders become affiliated on or prior to the sixteenth day of a month, and submit the required request for aggregation on or prior to the twenty-second day of the month, an approval of the request by the Exchange shall be deemed to be effective as of the first day of that month. If two or more members become affiliated after the sixteenth day of a month, or submit a request for aggregation after the twenty-second day of the month, an approval of the request by the Exchange shall be deemed to be effective as of the first day of the next calendar month.

**(b)** For purposes of applying any provision of the Schedule of Fees where the charge assessed, or credit provided, by the Exchange depends upon the volume of a ETP Holder's activity, references to an entity (excluding references to DMMs and where otherwise not permitted on the Price List) shall be deemed to include the entity and its affiliate(s) that have been approved for aggregation.

**(c)** For purposes of this Schedule of Fees, the term “affiliate” shall mean any ETP Holder under 75% common ownership or control of that ETP Holder.