Additions <u>underlined</u>
Deletions [bracketed]

### **NYSE Arca Equities**

### FEES AND CHARGES

Effective Date: October [12]25, 2021

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

### **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.
- "Adding [Liquidity]" means the execution of an order on the Exchange that [provided] 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 Area 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.
- "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 [Liquidity]" 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).
- "[US] CADV" means <u>unless otherwise stated</u>, 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 [US] CADV. <u>If CADV</u> 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 [and Market Makers].
- All fees and credits are per share unless noted otherwise.

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

Category	Adding	Adding	Adding	Removing	Opening	Closing
	Liquidity <sup>(a)(b)</sup>	Liquidity -	Liquidity -	Liquidity <sup>(d)</sup>	Orders <sup>(e)(g)</sup>	Orders <sup>(f)(g)</sup>
		Retail	MPL			
		Orders(c)	Orders			
Securities	(\$0.0020)	(\$0.0032)	(\$0.0010)	\$0.0030	\$0.0015;	\$0.0012;
priced at					\$0.0005	\$0.0008
or above					for Retail	for Retail
\$1.00					Orders	Orders
Securities	(\$0.00004)	(\$0.00004)	(\$0.00004)	0.295% of	0.1% of	0.1% of
priced				Dollar	Dollar	Dollar
below				Value	Value	Value
\$1.00						

- (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 [provide] 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 [provide] add liquidity.
- (c) Retail Order means an order as defined in Rule 7.44-E(a)(3).
- (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 <u>or for</u> 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.

# V. Standard Rates - Routing:

Category	Orders	Primary	Primary	PO	PO	PO	PO Orders	PO Orders
	routed	Until 9:45	Only ("PO")	Orders in	Orders in	Orders in	in Tape B	in Tape C
	that	Orders and	Orders in	Tape B	Tape A	Tape B	Securities	Securities
	remove	Primary	Tape A	Securities	Securities	Securities	routed to	routed to
	liquidity	After 3:55	Securities	routed to	routed to	routed to	Cboe	NASDAQ
		Orders	routed to	NYSE	NYSE	NYSE	BZX	Auction
		designated	NYSE that	American	Auction	American	Auction	
		as Retail	add liquidity	that add		Auction		
		Orders and		liquidity				
		routed to						
		the primary						
		market						
Securities	\$0.0035	\$0.0010	(\$0.0012)	No Credit	\$0.0010	\$0.0005	\$0.0030	\$0.0030
priced at								
or above								
\$1.00								
Securities	0.3% of	n/a	n/a	n/a	n/a	n/a	n/a	n/a
priced	Dollar							
below	Value <sup>(a)</sup>							
\$1.00								

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

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

	Adding Tiers									
<u>Tier</u>	Minimum	n Requirement	Credit for Adding							
			Tape A	Tape B(a)	Tape C					
<u>Tier 1</u>	0.70% <u>Adding of</u> <u>CADV</u> , or	84 million shares Adding ADV	(\$0.0031)	(\$0.0023)	(\$0.0032)					
Tier 2	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	<u>(\$0.0029)</u>	<u>(\$0.0022)</u>	<u>(\$0.0029)</u>					
Tier 3	<u>0.20% Ac</u>	lding of CADV	(\$0.0025)*	(\$0.0022)	<u>(\$0.0025)*</u>					
ETP Hold	lers that qualify	for Tier 1, Tier 2 or 7	Sier 3 are subject	to the following	fees:					
Routing	<u>\$0.0030</u>									
Removing Liquidity in Tape B			\$0.0029							
Closing Orders			<u>\$0.0010</u>							

\*ETP Holders that qualify for Tier 3 and add 0.05% of CADV above May 2019 receive an incremental credit of (\$0.0002) for Tape A and C Adding

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).

	Step Up Tiers										
	Mini	imum Requi	<u>re me nt</u>	Credit for	Adding Disp	olayed Liquidity					
<u>Tier</u>	Adding ADV of CADV	Adding Increase of CADV	Adding Increase Baseline	Tape A	Tape B	Tape C					
Step Up Tier 1	0.45%	0.10%	Q1 2018	(\$0.0030)	(\$0.0023)	(\$0.0031)					
Step Up Tier 2	0.22%	0.06%	<u>May 2018</u>	(\$0.0028)	<u>(\$0.0022)</u>	(\$0.0028)					
Step Up Tier 3 <sup>(b)</sup>		0.40%	September 2019	(\$0.0033)	<u>(\$0.0034)</u>	(\$0.0033)					

ETP Holders that qualify for Step Up Tier 3 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.

<u>Cross-Asset Tier</u>									
Minir	num Requireme								
Equity Volume	Option Customer and Professional Customer Electronic Posting Volume of TCADV by OTP Holder or OTP Firm affiliated with the ETP Holder		Credit for Adding						
	All Issues	<u>Non-Penny</u> <u>Issues</u>	Tape A	Tape B	Tape C				
0.30% Adding of CADV	<u>0.80% of</u> <u>TCADV</u>	<u>0.20% of</u> <u>TCADV</u>	(\$0.0030)	(\$0.0030)	(\$0.0030)				
0.30% Adding of CADV and 0.35% Adding of Tape C CADV	0.80% of TCADV	0.20% of TCADV	<u>n/a</u>	<u>n/a</u>	<u>Additional</u> (\$0.0004)				
0.65% Adding of CADV	0.80% of TCADV	0.20% of TCADV	Additional (\$0.0002)	Additional (\$0.0002)	<u>n/a</u>				
0.30% Adding of CADV and 0.40% Adding and Removing of CADV above Q1 2020 Add and Remove	0.80% of TCADV	0.20% of TCADV	Additional (\$0.0001) for Adding, All Tapes						

MPID Adding Tier								
	Minimum Require	ement by MPID	Credit for MPIDs Adding					
<u>Tier</u>	Adding Increase of CADV over Q2 2021, as a percentage of CADV	Adding ADV	Tape A	Tape B	Tape C			
MPID Adding	2 Times	4 Million	(\$0.0028)	<u>n/a</u>	(\$0.0028)			
<u>Tier</u>	2 Times	9 Million	(\$0.0029)	<u>n/a</u>	<u>(\$0.0029)</u>			

	BBO Setter Tier										
		Minimum	Requirem	<u>ent</u>	Credit for	Orders that se	t a new BBO(c)				
Tier	Adding ADV of CADV	ETP ID Adding ADV of CADV	ETP ID Setting the Arca Best Bid or Offer of CADV	ETP ID Setting the Arca Best Bid or Offer as percent of ETP ID Adding ADV	Tape A	Tape B	Tape C				
BBO Setter Tier	0.70%	0.20%	0.10%	40%	(\$0.0004)	(\$0.0002)	(\$0.0004)				

This credit shall be in addition to the ETP Holder's Tiered or Basic Rate credit(s), and for Tape B and Tape C, the credit shall be in addition to any capped credit.

<u>Retail Tiers</u>									
<u>Tier</u>	Minim	um Requirement (	of CADV	Rates for ]	Retail Orders				
	Retail Adding ADV	Retail Orders with a time-in- force of Day that add and remove that is an increase over April 2018	Adding ADV	Credit for Retail Adding	Fee for Retail Removing with a Time-in-force of Day				
Retail Order Tier	0.15%			(\$0.0033)					
Retail Order Step-Up  Tier 1 <sup>(d)(e)</sup>		0.40%	1.00%	(\$0.0038) <sup>(f)</sup>	No Fee				
Retail Order Step-Up  Tier 2 <sup>(e)</sup>		0.10%		(\$0.0035) <sup>(f)</sup>	No Fee				
Retail Order Step-Up Tier 3 <sup>(e)</sup>		0.20%		(\$0.0036) <sup>(f)</sup>	No Fee				

ETP Holders that qualify for Retail Order Step-Up 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.
- ETP Holders that qualify for Retail Order Step-Up Tier 1, Retail Order Step-Up Tier 2 and Retail Order Step-Up Tier 3 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.
- This credit applies for Adding displayed liquidity.

MPL Order Tiers									
	Minimum R	Re quire ment	<u>Credi</u>	t for MPL Adding					
<u>Tier</u>	MPL Adding ADV	MPL Adding ADV Increase over May 2019	Tape A	Tape B and Tape C					
MPL Orders	3.0 Million 1.5 Million	2019	(\$0.0015) (\$0.0015)	(\$0.0020) (\$0.0015)					
MPL Orders Step Up Tier 1		2 Million	(\$0.0026)	(\$0.0026)					
MPL Orders Step Up Tier 2		1 Million	<u>(\$0.0025)</u>	<u>(\$0.0025)</u>					

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

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

	Tape B Tiers								
	Minimum Requirement for Tape B		Minimum Requirement for NYSE Arca Options	Credit for Ta	ape B Adding				
<u>Tier</u>	Adding ADV of Tape B CADV	Adding Increase in Tape B of Tape B CADV	Adding Increase Baseline	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>(g)</sup>			
Tier 1 <sup>(h)</sup>	1.50%				<u>(\$0.0030)</u>				
Tier 2 <sup>(h)</sup>	1.00% or 0.25% above April 2020				(\$0.0028)				
Tier 3 <sup>(h)</sup>	0.20%			0.50%	(\$0.0025)				
Step Up	0.50% 0.50% 0.50%	20% 30% 40%	Q3 2019 Q3 2019 Q3 2019			(\$0.0002) (\$0.0003) (\$0.0004)			

This credit shall be in addition to the ETP Holder's Tiered or Standard credit(s); provided, however, that such combined credit(s) in Tape B shall not exceed \$0.0032, unless the ETP Holder's Adding Tape B ADV increases at least 150% 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 is registered as a Lead Market Maker or Market Maker in at least 150 Less Active ETPs in which it meets at least two Performance Metrics, and has Tape B Adding ADV equal to at least 0.65% of Tape B CADV, or
- \$0.0034 per share if the ETP Holder is registered as a Lead Market Maker or Market Maker in at least 200 Less Active ETPs in which it meets at least two Performance Metrics, and has Tape B Adding ADV equal to at least 0.70% of Tape B CADV.

# (h) LMMs cannot qualify for this Tier.

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[Tier 1: For ETP Holders and Market Makers that provide liquidity an average daily volume (ADV) per month of 0.70% or more of the US CADV or 84 million shares of providing ADV:	Tape A, Tape B and Tape C Securities:  \$0.0030 per share (fee) for orders routed to any away market center that remove liquidity, including Primary Only ("PO") Orders.  Tape A and Tape C Securities:  \$0.0031 per share (credit) for orders that provide liquidity for Tape A Securities and \$0.0032 per share (credit) for orders that provide liquidity for Tape C Securities  \$0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction  Tape B Securities:  \$0.0023 per share (credit) for orders that provide liquidity. An additional credit shall apply to ETP Holders and Market Makers affiliated with LMMs that provide 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).  \$0.0029 per share (fee) for orders, including Limit Non-Displayed Orders, that take liquidity  \$0.0010 per share (fee) for Market, Market-On-Close, Limit-On-	
	\$0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction  For all other fees and credits, Basic Rates apply	
Tier 2: For ETP Holders and Market	Tape A, Tape B and Tape C Securities:	
Makers that either provide	\$0.0030 per share (fee) for orders routed to any away market center	

liquidity an average daily share volume per month of 0.30% or more, but less than 0.70% of the US CADV or (a) provide liquidity an average daily share volume per month of 0.25% or more, but less than 0.70% of the US CADV. (b) execute removing volume in Tape B Securities equal to at least 0.40% of US Tape B CADV, and (c) are affiliated with an OTP Holder or OTP Firm that provides an ADV of electronic posted Customer and Professional Customer executions in all issues on NYSE Area Options (excluding mini options) of at least 0.25% of total Customer equity and ETF option ADV as reported by OCC:

that remove liquidity, including PO Orders

Tape A and Tape C Securities:

\$0.0029 per share (credit) for orders that provide liquidity

\$0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction

Tape B Securities:

\$0.0022 per share (credit) for orders that provide liquidity. An additional credit shall apply to ETP Holders and Market Makers affiliated with LMMs that provide 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).

\$0.0029 per share (fee) for orders, including Limit Non-Displayed Orders, that take liquidity

\$0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction

For all other fees and credits, Basic Rates apply

### Tier 3:

For ETP Holders and Market Makers that provide liquidity an average daily share volume per month of 0.20% or more, but less than 0.30% of the US CADV:

Tape A, Tape B and Tape C Securities:

\$0.0030 per share (fee) for orders routed to any away market center that remove liquidity, including PO Orders

\$0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction

Tape A and Tape C Securities:

\$0.0025 per share (credit) for orders that provide liquidity

\$0.0027 per share (credit) for orders that provide liquidity if the ETP Holder both meets the requirements of Tier 3 and, for the billing month, its ADV of executed orders that provide liquidity is at least 0.05% of US CADV more than the ETP Holder's ADV of executed orders that provide liquidity as a percent of US CADV in May 2019.

Tape B Securities:

	\$0.0022 per share (credit) for orders that provide liquidity. An additional credit shall apply to ETP Holders and Market Makers affiliated with LMMs that provide 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).
	\$0.0029 per share (fee) for orders, including Limit Non-Displayed Orders, that take liquidity
	For all other fees and credits, Basic Rates apply
Step Up Tier:	Tape A Securities:
For ETP Holders and Market Makers that directly execute providing average daily volume (ADV) per month of	\$0.0030 per share (credit) for orders that provide displayed liquidity.
0.45% or more, but less than	Tape B Securities:
0.70% of the US CADV and directly execute providing ADV that is an increase of no less than 0.10% of US	\$0.0023 per share (credit) for orders that provide displayed liquidity.
CADV for that month over	Tape C Securities:
the ETP Holder's or Market Maker's providing ADV in Q1 2018:	\$0.0031 per share (credit) for orders that provide displayed liquidity.
Step Up Tier 2:	Tape A and C Securities:
For ETP Holders and Market Makers that directly execute providing average daily volume (ADV) per month of	\$0.0028 per share (credit) for orders that provide displayed liquidity.
0.22% or more, but less than 0.30% of the US CADV and	Tape B Securities:
directly execute providing ADV that is an increase of no less than 0.06% of US	\$0.0022 per share (credit) for orders that provide displayed liquidity.
CADV for that month over	For all other fees and credits, Tiered or Basic Rates apply based on
the ETP Holder's or Market Maker's providing ADV in May 2018:	a firm's qualifying levels.
Step Up Tier 3:	Tape A Securities:
For ETP Holders and Market Makers that directly execute	\$0.0033 per share (credit) for orders that provide displayed
providing average daily	liquidity.

volume (ADV) per month that is an increase of no less than 0.40% of US CADV for that month over the ETP Holder's or Market Maker's providing ADV in September 2019, taken as a percentage Of US CADV:

Tape B Securities:

\$0.0034 per share (credit) for orders that provide displayed liquidity.

ETP Holders and Market Makers that qualify for Step Up Tier 3 shall not receive any additional incremental Tape B Tier credits for providing displayed liquidity, including any incremental credits associated with Less Active ETP Securities, however, ETP Holders and Market Makers that are registered as a LMM may receive up to a combined credit of \$0.0036 per share on all its providing volume if that ETP Holder or Market Maker, together with its affiliates, executes Tape B providing ADV that is at least 40% over the ETP Holder's or Market Maker's providing ADV in Q3 2019, as a percentage of US Tape B CADV.

Tape C Securities:

\$0.0033 per share (credit) for orders that provide displayed liquidity.

For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.

BBO Setter Tier:

For ETP Holders and Market Makers that directly execute providing average daily volume (ADV) per month of 0.70% or more of the US CADV, and whose ETP ID, on a daily basis, measured monthly: (1) directly executes providing ADV of at least 0.20% of US CADV. (2) sets a new NYSE Arca Best Bid or Offer ("BBO") with at least 0.10% of US CADV; and (3) sets a new NYSE Arca BBO of at least 40% of that ETP Holder's or Market Maker's ETP ID providing ADV:

Tape A and Tape C Securities:

\$0.0004 per share (credit) for orders that set a new NYSE Arca BBO. This credit shall be in addition to the ETP Holder's or Market Maker's Tiered or Basic Rate credit(s), and for Tape C Securities, the credit shall be in addition to any capped credit.

Tape B Securities:

\$0.0002 per share (credit) for orders that set a new NYSE Arca BBO. This credit shall be in addition to the ETP Holder's or Market Maker's Tiered or Basic Rate credit(s), and the credit shall be in addition to any capped credit.

Cross-Asset Tier: For ETP Holders and Market Tape A, Tape B, and Tape C Securities:

Makers that (a) provide liquidity of 0.30% or more of the US CADV per month, and (b) are affiliated with an OTP Holder or OTP Firm that provides an ADV of electronic posted Customer and Professional Customer executions in all issues on NYSE Area Options (excluding mini options) of at least 0.80% of total Customer equity and ETF option ADV as reported by OCC, of which at least 0.20% of total Customer equity and ETF option ADV as reported by OCC is from Customer and Professional Customer executions in non-Penny Pilot issues on NYSE Arca Options:

\$0.0030 per share (credit) for orders that provide liquidity

ETP Holders and Market Makers that meet the requirements of Cross Asset Tier and execute providing volume in Tape C Securities during the billing month equal to at least 0.35% of Tape C CADV for the billing month will receive an incremental credit of \$0.0004 per share for orders that provide liquidity in Tape C Securities.

ETP Holders and Market Makers that meet the requirements of Cross-Asset Tier and provide liquidity in Tape A, Tape B and Tape C Securities during the billing month equal to at least 0.65% of US CADV will receive an incremental credit of \$0.0002 per share for orders that provide liquidity in Tape A and Tape B Securities.

ETP Holders and Market Makers that meet the requirements of Cross-Asset Tier and increase adding and removing liquidity in Tape A, Tape B and Tape C Securities combined during the billing month equal to at least 0.40% of US CADV above their adding and removing liquidity in Tape A, Tape B and Tape C Securities combined of US CADV in Q1 2020 will receive an incremental credit of \$0.0001 per share for orders that provide liquidity in Tape A, Tape B, and Tape C Securities.

For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.

Tape B Tier 1:
For ETP Holders and Market
Makers on a daily basis,
measured monthly, that
directly execute providing
volume in Tape B Securities
during the billing month
("Tape B Adding ADV") that
is equal to at least 1.50% of
US Tape B CADV for the

# Tape B Securities:

\$0.0030 per share (credit) for orders that provide liquidity.

LMMs cannot qualify for the Tape B Tier 1.

For all other fees and credits, Tiered or Basic Rate apply based on a firm's qualifying levels.

Tape B Tier 2:
For ETP Holders and Market
Makers on a daily basis,
measured monthly, that
directly execute Tape B
Adding ADV that is either
(1) equal to at least 1.0% of
the US Tape B CADV or (2)

equal to at least 0.25% of the

billing month:

### Tape B Securities:

\$0.0028 per share (credit) for orders that provide liquidity.

LMMs cannot qualify for the Tape B Tier 2.

For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.

US Tape B CADV for the billing month over the ETP Holder's or Market Maker's April 2020 Tape B Adding ADV taken as a percentage of Tape B CADV:

Tape B Securities:

Tape B Tier 3:

For ETP Holders and Market Makers on a daily basis, measured monthly, that directly execute Tape B Adding ADV that is equal to 0.20% or more of the US Tape B CADV and are affiliated with an OTP Holder or OTP Firm that provides an ADV of electronic posted executions for the account of a market maker in all issues on NYSE Arca Options of at least 0.50% of total Customer equity and ETF option ADV as reported by OCC:

\$0.0025 per share (credit) for orders that provide liquidity.

LMMs cannot qualify for Tape B Tier 3.

For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.

### Tape B Step Up Tier:

For ETP Holders and Market Makers that, on a daily basis, measured monthly, directly execute providing ADV in Tape B Securities during the billing month that (1) is at least 0.50% of the US Tape B CADV, and (2) increases providing ADV in Tape B Securities during the billing month as a percentage of US Tape B CADV:

### Tape B Securities:

An incremental per share credit for orders that provide liquidity in Tape B Securities as follows:

- \$0.0002 per share if the ETP Holder's or Market Maker's providing ADV increases at least 20% more but less than 30% over the ETP Holder's or Market Maker's providing ADV in Q3 2019.
- \$0.0003 per share if the ETP Holder's or Market Maker's providing ADV increases at least 30% more but less than 40% over the ETP Holder's or Market Maker's providing ADV in Q3 2019.
- \$0.0004 per share if the ETP Holder's or Market Maker's providing ADV increases at least 40% or more over the ETP Holder's or Market Maker's providing ADV in Q3 2019.

This credit shall be in addition to the ETP Holder's or Market Maker's Tiered or Basic Rate credit(s); provided, however, that such combined credit(s) in Tape B Securities shall not exceed \$0.0032 per share, unless the ETP Holder's or Market Maker's providing Tape B ADV increases at least 150% over the ETP Holder's or Market Maker's providing ADV in Q3 2019, as a percentage of US Tape B CADV, in which case the ETP Holder or Market Maker can receive a combined credit of up to:

- \$0.0033 per share if the ETP Holder or Market Maker is registered as a Lead Market Maker or Market Maker in at least 150 Less Active ETPs in which it meets at least two Performance Metrics, and has Tape B Adding ADV equal to at least 0.65% of US Tape B CADV, or
- \$0.0034 per share if the ETP Holder or Market Maker is registered as a Lead Market Maker or Market Maker in at least 200 Less Active ETPs in which it meets at least two Performance Metrics, and has Tape B Adding ADV equal to at least 0.70% of US Tape B CADV.

### Retail Order Tier:

For ETP Holders, including Market Makers, that execute an ADV of Retail Orders that provide liquidity during the month that is 0.15% or more of the US CADV:

Tape A, Tape B, and Tape C Securities:

\$0.0033 per share (credit) for Retail Orders that provide liquidity.

For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.

Retail Order Step-Up Tier 1: For ETP Holders, including Market Makers, that provide liquidity an average daily share volume per month of 1.00% or more of the US CADV, and execute an ADV of Retail Orders with a time-in-force of Day that add or remove liquidity during the month that is an increase of 0.40% or more of the US CADV above their April 2018 ADV taken as a percentage of US CADV:

Tape A, Tape B, and Tape C Securities:

\$0.0038 per share (credit) for Retail Orders that provide displayed liquidity, unless a firm qualifies for a higher rebate based on its Tiered Rates. No fee for Retail Orders with a time-in-force of Day that remove liquidity.

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.

Tape C Securities:

\$0.0035 per share (credit) for orders that provide displayed liquidity. ETP Holders and Market Makers shall receive an incremental credit of \$0.0002 per share for orders that provide non-displayed liquidity. The incremental credit shall be in addition to the ETP Holder's or Market Maker's Tiered or Basic Rate credit(s).

	\$0.0027 per share (fee) for orders that take liquidity in Tape C Securities.		
	For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.		
Retail Order Step-Up Tier 2:	Tape A, Tape B, and Tape C Securities:		
For ETP Holders, including Market Makers, that execute an ADV of Retail Orders with a time-in-force of Day that add or remove liquidity during the month that is an	\$0.0035 per share (credit) for Retail Orders that provide displayed liquidity, unless a firm qualifies for a higher rebate based on its Tiered Rates. No fee for Retail Orders with a time-in-force of Day that remove liquidity.		
increase of 0.10% or more of the US CADV above their April 2018 ADV taken as a percentage of US CADV:	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.		
	For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.		
Retail Order Step-Up Tier 3:	Tape A, Tape B, and Tape C Securities:		
For ETP Holders, including Market Makers, that execute an ADV of Retail Orders with a time-in-force of Day that add or remove liquidity during the month that is an	\$0.0036 per share (credit) for Retail Orders that provide displayed liquidity, unless a firm qualifies for a higher rebate based on its Tiered Rates. No fee for Retail Orders with a time-in-force of Day that remove liquidity.		
increase of 0.20% or more of the US CADV above their April 2018 ADV taken as a percentage of US CADV:	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.		
percentage of objectible.	For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.		
MPID Adding Tier: For MPIDs that execute providing ADV in all	Per share credit for orders that provide liquidity in Tape A and Tape C Securities:		
securities that is at least 2 times more than its providing ADV in 2Q 2021, as a percentage of US CADV:	<ul> <li>\$0.0028 per share if the MPID has at least 4 million shares of providing ADV during the billing month.</li> <li>\$0.0029 per share if the MPID has at least 9 million shares of providing ADV during the billing month.</li> </ul>		
IOI Credit	Tape A, Tape B, and Tape C Securities:		
	No Credit		
MPL Orders	For MPL orders providing liquidity:		

	Tape A Securities:
	\$0.0015 per share (credit) if MPL Adding ADV during the billing month is at least 3 million shares
	\$0.0015 per share (credit) if MPL Adding ADV during the billing month is at least 1.5 million shares and less than 3 million shares
	Tape B Securities and Tape C Securities:
	\$0.0020 per share (credit) if MPL Adding ADV during the billing month is at least 3 million shares
	\$0.0015 per share (credit) if MPL Adding ADV during the billing month is at least 1.5 million shares and less than 3 million shares
MPL Orders Step Up Tier 1: For an ETP Holder whose MPL Adding ADV during the billing month is at least 2 million shares more than the ETP Holder's May 2019 MPL Adding ADV:	Executed MPL Orders that provide liquidity: \$0.0026 per share (credit) in Tape A, B and C Securities
MPL Orders Step Up Tier 2: For an ETP Holder whose MPL Adding ADV during the billing month is at least 1 million shares more than the ETP Holder's May 2019 MPL Adding ADV:	Executed MPL Orders that provide liquidity: \$0.0025 per share (credit) in Tape A, B and C Securities
Limit Non-Displayed Order Step Up Tier:  For an ETP Holder and Market Maker whose Limit Non-Displayed Order ADV and MPL Order ADV that provide liquidity combined during the billing month as a percent of US CADV is at least 0.02% more than the ETP Holder's or Market	<ul> <li>Executed Limit Non-Displayed Orders that provide liquidity in Tape A, B and C Securities:</li> <li>\$0.0004 per share (credit) for ETP Holders and Market Makers with at least 0.02% more but less than 0.05% than the ETP Holder's or Market Maker's Non-Displayed and MPL Baseline</li> <li>\$0.0010 per share (credit) for ETP Holders and Market Makers with at least 0.05% more but less than 0.10% than the ETP Holder's or Market Maker's Non-Displayed and MPL Baseline</li> <li>\$0.0015 per share (credit) for ETP Holders and Market Makers with at least 0.10% more but less than 0.15% than</li> </ul>

Maker's July 2020 Limit Non-Displayed Order ADV and MPL Order ADV that provide liquidity combined as a percent of US CADV ("Non-Displayed and MPL Baseline")	the ETP Holder's or Market Maker's Non-Displayed and MPL Baseline  • \$0.0020 per share (credit) for ETP Holders and Market Makers with at least 0.15% more than the ETP Holder's or Market Maker's Non-Displayed and MPL Baseline
Tracking Order Tier 1: For ETP Holders and Market Makers that send Tracking Orders to the Exchange resulting in executions with an average daily share volume per month of at least 1 million shares	Tape A, Tape B, and Tape C Securities:  \$0.001 per share (credit) for Tracking Orders that result in executions]

Tape C Tiers for Adding [Liquidity]			
Tier	Minimum Criteria for Tape C Adding [Liquidity]	Rate	
Tier 4	0.15% of [US] CADV, or 20 million shares ADV	(\$0.0029)	
Tier 3	0.25% of [US] CADV	(\$0.0031)	
Tier 2	0.35% of [US] CADV	(\$0.0033)	
Tier 1	0.40% of [US] CADV	(\$0.0034) \$0.0029 fee for Removing Liquidity	

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

Sub-Dollar Adding Step Up Tier		
	Minimum Requirement	Credit for Sub-Dollar Adding Orders of total dollar value
<u>Tier</u>	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	<u>All Tapes</u>
Sub-Dollar	<u>0.20%</u>	<u>0.050%</u>
Adding Step Up	<u>0.50%</u>	<u>0.100%</u>
<u>Tier</u>	0.75%	<u>0.125%</u>
	1.00%	0.150%

# [Sub-Dollar Adding Step Up Tier:

For ETP Holders and Market Makers on a daily basis, measured monthly, that have an Adding ADV of 1 million shares with a per share price below \$1.00 ("Sub-Dollar Adding Orders") and directly execute providing volume in Sub-Dollar Adding Orders equal to at least 0.20% of the CADV with a per share price below \$1.00 ("Sub-Dollar CADV") over the ETP Holder's or Market Maker's July 2020 Sub-Dollar Adding ADV taken as a percentage of Sub-Dollar CADV ("Sub-Dollar Baseline"):

A credit for orders that provide liquidity to the Book in Sub-Dollar Adding Orders, as follows:

- 0.05% of the total dollar value for an increase of at least 0.20% more but less than 0.50% of Sub-Dollar CADV over the Sub-Dollar Baseline
- 0.10% of the total dollar value for an increase of at least 0.50% more but less than 0.75% of Sub-Dollar CADV over the Sub-Dollar Baseline
- 0.125% of the total dollar value for an increase of least 0.75% more but less than 1.0% of Sub-Dollar CADV
- 0.15% of the total dollar value for an increase of at least 1.0% more of Sub-Dollar CADV over the Sub-Dollar Baseline]

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