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

NYSE Arca Options Fees and Charges

Effective Date: July [10]20, 2017

NYSE Arca OPTIONS: TRADE-RELATED CHARGES FOR STANDARD OPTIONS 14

Unless Professional Customer executions are specifically delineated, such executions will be treated as "Customer" executions for fee/credit purposes. Firms, Broker Dealers, and Market Makers are collectively referred to herein as "Non-Customers."

CUSTOMER [AND PROFESSIONAL CUSTOMER MONTHLY]<u>PENNY PILOT</u> POSTING CREDIT TIERS [AND QUALIFICATIONS FOR EXECUTIONS IN PENNY PILOT ISSUES]

OTP Holders and OTP Firms meeting the qualifications below will receive the corresponding posting credit on all <u>electronic executions of</u> Customer [and Professional Customer]posted <u>interest</u>[electronic executions] in Penny Pilot [i]<u>Issues</u>.

Tier	Qualification Basis (Average Electronic Executions Per Day)[*]	Credit Applied to [Posted]Electronic [Customer and Professional Customer]Executions of Customer Posted Interest in Penny Pilot Issues
Base		(\$0.25)
Tier 1	At least 0.10% of TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues	(\$0.27)

Tier	Qualification Basis (A Executions Pe	C	Credit Applied to [Posted]Electronic [Customer and Professional Customer]Executions of Customer Posted Interest in Penny Pilot Issues
Tier 2	At least 0.25% of TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues, or	At least 0.70% of TCADV from [Posted Orders]posted interest in Penny Pilot Issues, all account types	(\$0.43)
Tier 3	At least 0.40% of TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues		(\$0.45)
Tier 4	At least 0.60% of TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues, [P]plus executed ADV of Retail Orders of 0.1% ADV of U.S. Equity Market Share Posted and Executed on NYSE Arca Equity Market		(\$0.46)
Tier 5	At least 0.75% of TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues, or	At least 0.85% of TCADV from [Posted Orders]posted interest in Penny Pilot Issues, all account types	(\$0.47)
Tier 6	At least 0.35% of TCADV from Customer [and	At least 0.50% of TCADV from Customer [and	(\$0.48)

Tier	Qualification Basis (A Executions Pe	O	Credit Applied to [Posted]Electronic [Customer and Professional Customer]Executions of Customer Posted Interest in Penny Pilot Issues
	Professional Customer Posted Orders]posted interest in all Issues, [P]plus Executed ADV of 0.80% of U.S. Equity Market Share Posted and Executed on NYSE Arca Equity Market, or	Professional Customer Posted Orders] posted interest in all [I]issues, [P]plus at least 0.45% of TCADV from Market Maker Total Electronic Volume	
Tier 7	At least 0.50% of TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues, [P]plus at least 0.60% of TCADV from Market Maker Total Electronic Volume		(\$0.49)
Tier 8	At least 1.00% of TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues, or	At least 0.80% of TCADV from Customer [and Professional Customer Posted Orders] posted interest in all [I]issues, [P]plus executed ADV of 0.30% ADV of U.S. Equity Market Share Posted and Executed on NYSE Arca Equity Market	(\$0.50)

Tier	Qualification Basis (Average Electronic Executions Per Day)[*]	Credit Applied to [Posted]Electronic [Customer and Professional Customer]Executions of Customer Posted Interest in Penny Pilot Issues
	[Includes transaction volume from the OTP Holder's or OTP Firm's affiliates or its Appointed OFP or Appointed MM. ¹⁵	
	*Qualifications based in part on Total Industry Customer equity and ETF option average daily volume ("TCADV")]	

NON-CUSTOMER, [MONTHLY] NON-PENNY PILOT POSTING CREDIT TIERS [AND QUALIFICATIONS FOR EXECUTIONS IN NON-PENNY PILOT ISSUES]

OTP Holders and OTP Firms meeting the qualifications below will receive the corresponding credit on all electronic executions of Non-Customer posted interest in Non-Penny Pilot [i] Issues. 8, 15

Tier	Qualification Basis (Average Electron Executions Per Day)	Per Contract Credit Applied to Electronic Executions of Non- Customer Posted ic Interest in [n]Non- Penny Pilot Issues
	At least 0.05% of [Total Industry Customer equity and ETF option ADV]TCADV from Non-Customer posted	(\$0.32)
Tier 1	interest in all non- Penny Issues	
Tier 2	At least 0.10% of [Total Industry Customer equity and ETF option ADV]TCADV from Non-Customer posted interest in all non- Penny Issues	(\$0.52)

Tier	Qualification Basis (Av Executions Per Day)	erage Electronic	Per Contract Credit Applied to Electronic Executions of Non- Customer Posted Interest in [n]Non- Penny Pilot Issues
Tier 3	At least 0.20% of [Total Industry Customer equity and ETF option ADV]TCADV from Non-Customer posted interest in all non- Penny Issues		(\$0.82)

[Includes transaction volume from the OTP Holder's or OTP Firm's affiliates or its Appointed OFP or Appointed MM. ¹⁵]

Customer [and Professional Customer]Incentive Program ^{8,15}			
At least 0.80% of [Total Industry			
Customer equity and ETF option			
ADV]TCADV from Customer [and			
Professional Customer Posted			
Orders]posted interest in all, of			
which at least 0.20% of [Total			
Industry Customer equity and ETF			
option ADV]TCADV is from			
Customer [and Professional		Additional \$0.03 Credit on Customer	
Customer Posted Orders]posted		[and Professional Customer]Posting	
<u>interest</u> in non-Penny Pilot Issues		Credits	
At least 0.50% of Total Industry			
Customer equity and ETF option			
ADV from Customer [and			
Professional Customer Posted			
Orders]posted interest in all issues,			
plus, an ADV from Market Maker		Additional \$0.01 Credit on Customer	
[Posted Orders]posted interest in		[and Professional Customer]Posting	
Penny Pilot Issues equal to at least		Credits	

0.30% of [Total Industry Customer equity and ETF option ADV]TCADV	
An ADV from Market Maker Total Electronic Volume of at least 0.60% of [Total Industry Customer equity and ETF option ADV]TCADV, plus at least 0.10% of [Total Industry Customer equity and ETF option ADV]TCADV from Customer [and Professional Customer Posted Orders]posted interest in non-Penny Pilot Issues	Additional \$0.03 Credit on Customer [and Professional Customer]Posting Credits
Executed ADV of Retail Orders of 0.10% ADV of U.S. Equity Market Share Posted and Executed on NYSE Arca Equity Market	Additional \$0.03 Credit on Customer [and Professional Customer]Posting Credits
Executed ADV of 0.80% of U.S. Equity Market Share Posted and Executed on NYSE Arca Equity Market	Additional \$0.03 Credit on Customer [and Professional Customer]Posting Credits
At least 1.50% of [Total Industry Customer equity and ETF option ADV]TCADV from Customer [and Professional Customer Posted Orders]posted interest in both Penny Pilot and non-Penny Pilot Issues, [P]plus Executed ADV of 0.10% of U.S. Equity Market Share Posted and Executed on NYSE Arca Equity Market	Additional \$0.03 Credit on Customer [and Professional Customer]Posting Credits
[Includes transaction volume from the its Appointed OFP or Appointed MM]	OTP Holder's or OTP Firm's affiliates or

its Appointed OFP or Appointed MM. 15]

OTP Holders and OTP Firms may earn one additional Credit from the alternatives listed above.

[

	\$0.41 Credit
	Applied to
	electronic
At least 0.75% of TCADV from	executions of
Customer posted interest in all	Market Maker
issues and an ADV from Market	posted interest in
Maker posted interest equal to	Penny Pilot
0.70% of TCADV	Issues

Market Maker Incentive For Non-Penny Pilot Issues ^{8,15}					
At least 0.55% of TCADV	At least 1.60% of	\$0.55 Credit Applied			
from Market Maker Maker	TCADV from all orders	to electronic			
posted interest in all issues,	in all issues, all account	executions of Market			
or	types, with at least	Maker posted interest			
	0.80% of TCADV from	in non-Penny Pilot			
	posted interest in all	Issues			
	issues				

Market Maker Incentive for SPY ⁸		
At least 0.20% of TCADV from Market Maker posted interest in SPY	\$0.45 credit applied to electronic executions of Market Maker posted interest in SPY	

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CUSTOMER POSTING CREDIT TIERS IN NON-PENNY PILOT ISSUES

OTP Holders and OTP Firms meeting the qualifications below will receive the corresponding credit on all electronic executions of Customer posted interest in Non-Penny Pilot issues.^{8,15}

	Customer and Professional Customer Posting Credit Tiers In Non <u>-</u> Penny Pilot Issues Qualification Basis (Average Electronic Executions Per Day) ^[8]	Credit Applied to [Posted]Electronic [Customer and Professional Customer] Executions of Customer Posted Interest in Non- Penny Pilot Issues
Base		(\$0.75)
Tier A	At least 0.70% of [Total Industry Customer equity and ETF option ADV]TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues, [P]plus executed ADV of Retail Orders of 0.1% ADV of U.S. Equity Market Share Posted and Executed on NYSE Arca Equity Market ^[8]	(\$0.83)
Tier B	At least 0.80% of [Total Industry Customer equity and ETF option ADV]TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues	(\$0.83)
Tier C	At least 0.50% of [Total Industry Customer equity and ETF option ADV]TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues, plus an ADV from Market Maker Total Electronic Volume equal to 0.45% of [Total Industry Customer equity and ETF option ADV]TCADV	(\$0.94)
Tier D	At least 0.80% of [Total Industry Customer equity and ETF option ADV]TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues, of which at least 0.10% of [Total Industry Customer equity and ETF option ADV]TCADV is from Customer [and Professional Customer Posted Orders]posted interest in non-Penny Pilot Issues	(\$0.95)
Tier E	At least 0.50% of [Total Industry Customer equity and ETF option ADV]TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues, plus, an ADV from Market Maker Total Electronic Volume equal to 0.60% of [Total Industry Customer equity and ETF option ADV]TCADV	(\$1.00)
Tier F	At least 0.80% of [Total Industry Customer equity and ETF option ADV]TCADV from Customer [and Professional Customer Posted Orders]posted interest in	(\$1.02)

Customer and Professional Customer Posting Credit Tiers In Non-Penny Pilot Issues Qualification Basis (Average Electronic Executions Per Day) ^[8]	Credit Applied to [Posted] [Electronic] [Customer and Professional Customer] Executions of Customer Posted Interest in Non- Penny Pilot Issues
all [I]issues, [P]plus executed ADV of 0.30% ADV of U.S. Equity Market Share Posted and Executed on NYSE Arca Equity Market ^[8]	
es transaction volume from the OTP Holder's or OTP Firm	i's affiliates or

Appointed OFP or Appointed MM. 15]

DISCOUNT IN TAKE LIQUIDITY FEES FOR PROFESSIONAL CUSTOMER[, MARKET MAKER, FIRM, and BROKER DEALER] <u>AND NON -CUSTOMER</u> LIQUIDITY REMOVING [ORDERS]<u>INTEREST</u>^{8,15}

Take Fee Discount Qualification for Penny Pilot Issues	Discount Amount
At least 1.00% [Total Industry Customer equity and ETF option ADV] TCADV from Customer [and Professional Customer Posted Orders] posted interest in all [I] issues OR at least 2.00% of [Total Industry Customer equity and ETF option ADV] TCADV from Professional Customer[, Market Maker, Firm, and Broker Dealer] and Non-Customer Liquidity Removing [Orders] interest in all [I] issues	\$0.02
At least 0.80% of [Total Industry Customer equity and ETF option ADV]TCADV from Customer [and Professional Customer Posted Orders]posted interest in all [I]issues, [P]plus executed ADV of 0.30% ADV of U.S. Equity Market Share Posted and Executed on NYSE Arca Equity Market ^[8]	\$0.04
[Includes transaction volume from the OTP Holder's or OTI Appointed OFP or Appointed MM. ¹⁵]	P Firm's affiliates or its

Take Fee Discount Qualification for Non-Penny Pilot Issues	Discount Amount
At least 0.65% of [Total Industry Customer equity and	\$0.02

ETF option ADV]TCADV from Professional Customer[,	
Market Maker, Firm, and Broker Dealer]and Non-	
<u>Customer</u> Liquidity Removing [Orders] <u>interest</u> in all	
[I] <u>i</u> ssues	

[Includes transaction volume from the OTP Holder's or OTP Firm's affiliates or its Appointed OFP or Appointed MM.¹⁵]

Market Maker Incentive For Penn	y Pilot Issues ^{8,15}
	\$0.41 Credit
	Applied to
	electronic
At least 0.75% of TCADV from	executions of
Customer posted interest in all	Market Maker
issues and an ADV from Market	posted interest in
Maker posted interest equal to	Penny Pilot
<u>0.70% of TCADV</u>	<u>Issues</u>

Market Maker Incentive For Non-Penny Pilot Issues ^{8,15}			
At least 0.55% of TCADV	At least 1.60% of	\$0.55 Credit Applied	
from Market Maker Maker	TCADV from all orders	to electronic	
posted interest in all issues,	in all issues, all account	executions of Market	
<u>or</u>	types, with at least	Maker posted interest	
	0.80% of TCADV from	in non-Penny Pilot	
	posted interest in all	<u>Issues</u>	
	<u>issues</u>		

Market Maker Incentive for SPY ⁸	
	\$0.45 credit
	applied to
At least 0.20% of TCADV from	<u>electronic</u>
Market Maker posted interest in	executions of
SPY	Market Maker
	posted interest
	in SPY

FIRM AND BROKER DEALER MONTHLY FEE CAP \$100,000 cap per month on combined Firm Proprietary Fees and Broker Dealer Fees for transactions in standard option contracts cleared in the customer range for Manual (Open Outcry) Executions, and QCC transactions executed by a Floor Broker from the Floor of the Exchange, exclusive of Strategy Executions, Royalty Fees and firm trades executed via a Joint Back Office agreement. The Monthly Firm and Broker Dealer Cap will decrease as set forth in the table below if Firms or Broker Dealers achieve the tier level set forth in the "[Customer and Professional] Customer [Monthly]Penny Pilot Posting Credit Tiers[and Qualifications for Executions in Penny Pilot Issues]."

FIRM AND BROKER DEALER MONTHLY FIRM CAP TIERS

CUSTOMER [AND PROFESSIONAL CUSTOMER	FIRM CAP	
MONTHLY <u>PENNY PILOT</u> POSTING CREDIT TIER ACHIEVED		
Base or Tier 1	\$	100,000
Tier 2	\$	85,000
Tier 3	\$	80,000
Tier 4	\$	75,000
Tier 5	\$	70,000
Tier 6, 7, or 8	\$	65,000

NYSE Arca OPTIONS: GENERAL

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

1.- 7. No Change

8. The calculations for qualifications for monthly posting credits or discounts only include electronic executions and the Exchange will include the activity of either (i) affiliates or (ii) an Appointed OFP or Appointed MM, per Endnote 15. Unless Professional Customer executions are specifically delineated, such executions will be treated as "Customer" executions in calculating qualifications for monthly posting credits or discounts. Customer equity and ETF option ADV does not include Electronic Complex Order Executions. The Exchange may exclude from the calculation of ADV contracts traded any day (1) the Exchange is not open for the entire trading day and/or (2) there is an Exchange System Disruption. QCC orders are neither posted nor taken; thus QCC transactions are not included in the calculation of posted or taken execution volumes. Orders routed to another market for execution are not included in the calculation of taking volume. Market Maker Total Electronic Volume does not include Electronic Complex Order Executions, QCC Transactions, or orders routed to another exchange for execution. Total Industry Customer equity and ETF option average daily volume ("TCADV") includes OCC calculated Customer volume of all types, including Complex Order Transactions and QCC transactions, in equity and ETF options. An affiliate of an OTP Holder or OTP Firm is as defined in NYSE Arca Rule 1.1(a). For purposes of calculating the executed Average Daily Volume ("ADV") of Retail Orders of U.S. Equity Market Share on the NYSE Arca Equity Market, a Retail Order must qualify for the Retail Order Tier set forth in the Schedule of Fees and Charges for NYSE Arca Equities, Inc.

9.- 14. No Change

15. Includes transaction volume from the OTP Holder's or OTP Firm's affiliates or its Appointed OFP or Appointed MM. An "Appointed MM" is an NYSE Arca Market Maker that has been designated by an Order Flow Provider ("OFP") (as defined in NYSE Arca Rule 6.1A(a)(21)). An "Appointed OFP" is an OFP that has been designated by an NYSE Arca Market Maker. An NYSE Arca Options Market Maker appoints an OFP and an OFP appoints an NYSE Arca Options Market Maker for the purposes of the Fee Schedule, by each sending an email to optionsbilling@nyse.com. These corresponding emails will be viewed as acceptance of the appointment. The Exchange will recognize one such designation for each party. A party may make a designation not more than once every 12-months, which designation shall remain in effect unless or until the Exchange receives an email from either party indicating that the appointment has been terminated.