NYSE Arca Equities, Inc.

SCHEDULE OF FEES AND CHARGES FOR EXCHANGE SERVICES

August 3, 2015

NYSE ARCA MARKETPLACE: TRADE RELATED FEES AND CREDITS[1]

EXCHANGE TRANSACTIONS

ETP HOLDERS AND MARKET MAKERS[2]

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

Tier 1: For ETP Holders and Market Makers (1) that provide liquidity an average daily share volume per month of 0.70% or more of the US CADV[3] or (2) that (a) provide liquidity an average daily share volume per month of 0.15% or more of the US CADV and (b) are affiliated with an OTP Holder or OTP Firm that provides an ADV[4] of electronic posted executions (including all	Tape A and Tape C Securities: $0.0030 per share (credit) for orders that provide liquidity to the Book $0.0030 per share (fee) for orders that take liquidity from the Book $0.0030 per share (fee) for orders routed outside the Book to any away market centers other than the NYSE $0.003 per share (fee) for PO+ orders routed outside the Book to NASDAQ For Mid-Point Passive Liquidity ("MPL") orders providing liquidity to the Book: $0.0015 per share (credit) in Tape A Securities and $0.0025 per

1 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.

2 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, RPI, RMO) may be used to qualify for volume thresholds but are not eligible for tiered rates.

3 US CADV means United States Consolidated Average Daily Volume for transactions reported to the Consolidated Tape, excluding odd lots through January 31, 2014 (except for purposes of Lead Market Maker pricing), and excludes volume on days when the market closes early and on the date of the annual reconstitution of the Russell Investments Indexes. Transactions that are not reported to the Consolidated Tape are not included in US CADV.

4 ADV means Average Daily Volume.

account types) in Penny Pilot issues on NYSE Arca Options (excluding mini options) of at least 100,000 contracts, of which at least 25,000 contracts must be for the account of a market maker:	share (credit) in Tape C Securities if provided liquidity in MPL Orders for Tape A, Tape B and Tape C Securities combined ("MPL Adding ADV") during the billing month is at least 3 million shares; $0.0015 per share (credit) in Tape A Securities and Tape C Securities if MPL Adding ADV during the billing month is at least 1.5 million shares and less than 3 million shares; $0.0010 per share (credit) in Tape A and Tape C Securities $0.0030 per share (fee) for MPL orders removing liquidity from the Book that are not designated as "Retail Orders" defined below. No Charge for MPL orders removing liquidity from the Book and are designated as "retail" that meet the requirements of Rule 7.44(a)(3), but that are not executed in the Retail Liquidity Program ("Retail Orders") $0.0015 per share (fee) for Market and Auction-Only Orders executed in an Opening, Market Order or Trading Halt Auction, capped at $20,000 per month per Equity Trading Permit ID $0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction $0.0010 per share (fee) for PO and PO+ orders routed to NASDAQ that execute in the opening or closing auction No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0030 per share (fee) for Passive Liquidity Orders that take liquidity from the Book Tape A Securities: $0.0027 per share (fee) for orders in Tape A securities routed outside the Book to the NYSE $0.0025 per share (fee) for Primary Sweep Orders in Tape A securities routed outside the book to the NYSE that remove liquidity from the NYSE. Primary Sweep Orders in Tape A securities routed outside the book to the NYSE that provide liquidity to the NYSE are not charged a fee or given a credit. $0.0027 per share (fee) for Primary Only Plus ("PO+") Orders routed to the NYSE that remove liquidity. $0.0014 per share (credit) for PO+ Orders that provide liquidity to the NYSE $0.0010 per share (fee) for PO and PO+ Orders routed to the NYSE that execute in the opening or closing auction

	Tape B Securities: $0.0023 per share (credit) for orders that provide liquidity to the Book $0.0028 per share (fee) for orders that take liquidity from the Book $0.0030 per share (fee) for orders routed outside the Book to any away market centers $0.0016 per share (credit) for PO and PO+ orders routed to NYSE MKT that provide liquidity to the NYSE MKT Book $0.0028 per share (fee) for PO and PO+ orders routed to NYSE MKT that remove liquidity from the NYSE MKT Book $0.003 per share (fee) for PO+ orders routed outside the Book to NASDAQ MPL orders providing liquidity to the Book: $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; $0.0010 per share (credit) if MPL Adding ADV during the billing month is less than 1.5 million shares. $0.0030 per share (fee) for MPL orders removing liquidity from the Book that are not designated as Retail Orders No Charge for MPL orders removing liquidity from the Book that are designated as Retail Orders $0.0015 per share (fee) for Market and Auction-Only Orders executed in an Opening, Market Order or Trading Halt Auction, capped at $20,000 per month per Equity Trading Permit ID $0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction in NYSE Arca primary listed securities (includes all ETFs/ETNs) $0.00085 per share (fee) for PO and PO+ Orders routed to NYSE MKT that execute in the opening or closing auction No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0028 per share (fee) for Passive Liquidity Orders that take liquidity from the Book

Tier 2: For ETP Holders and Market Makers that provide liquidity an average daily share volume per month of 0.30% or more, but less than 0.70% of the US CADV[3]:	Tape A and Tape C Securities: $0.0029 per share (credit) for orders that provide liquidity to the Book $0.0030 per share (fee) for orders that take liquidity from the Book $0.0030 per share (fee) for orders routed outside the Book to any away market centers other than the NYSE $0.003 per share (fee) for PO+ orders routed outside the Book to NASDAQ For MPL orders providing liquidity to the Book: $0.0015 per share (credit) in Tape A Securities and $0.0025 per share (credit) in Tape C Securities if MPL Adding ADV during the billing month is at least 3 million shares; $0.0015 per share (credit) in Tape A Securities and Tape C Securities if MPL Adding ADV during the billing month is at least 1.5 million shares and less than 3 million shares; $0.0010 per share (credit) in Tape A and Tape C Securities for MPL orders providing liquidity to the Book if MPL Adding ADV during the billing month is less than 1.5 million shares. $0.0030 per share (fee) for MPL orders removing liquidity from the Book that are not designated as Retail Orders No Charge for MPL orders removing liquidity from the Book that are designated as Retail Orders $0.0015 per share (fee) for Market and Auction-Only Orders executed in an Opening, Market Order or Trading Halt Auction, capped at $20,000 per month per Equity Trading Permit ID $0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction $0.0010 per share (fee) for PO and PO+ orders routed to NASDAQ that execute in the opening or closing auction No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0030 per share (fee) for Passive Liquidity Orders that take liquidity from the Book Tape A Securities: $0.0027 per share (fee) for orders in Tape A securities routed outside the Book to the NYSE $0.0025 per share (fee) for Primary Sweep Orders in Tape A securities

	routed outside the book to the NYSE that remove liquidity from the NYSE. Primary Sweep Orders in Tape A securities routed outside the book to the NYSE that provide liquidity to the NYSE are not charged a fee or given a credit. $0.0027 per share (fee) for PO+ Orders routed to the NYSE that remove liquidity. $0.0014 per share (credit) for PO+ Orders that provide liquidity to the NYSE $0.0010 per share (fee) for PO and PO+ Orders routed to the NYSE that execute in the opening or closing auction Tape B Securities: $0.0022 per share (credit) for orders that provide liquidity to the Book $0.0028 per share (fee) for orders that take liquidity from the Book $0.0030 per share (fee) for orders routed outside the Book to any away market centers $0.0016 per share (credit) for PO and PO+ orders routed to NYSE MKT that provide liquidity to the NYSE MKT Book $0.0028 per share (fee) for PO and PO+ orders routed to NYSE MKT that remove liquidity from the NYSE MKT Book $0.003 per share (fee) for PO+ orders routed outside the Book to NASDAQ For MPL orders providing liquidity to the Book: $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; $0.0010 per share (credit) if MPL Adding ADV during the billing month is less than 1.5 million shares. $0.0030 per share (fee) for MPL orders removing liquidity from the Book that are not designated as Retail Orders No Charge for MPL orders removing liquidity from the Book that are designated as Retail Orders $0.0015 per share (fee) for Market and Auction-Only Orders executed in an Opening, Market Order or Trading Halt Auction, capped at $20,000 per month per Equity Trading Permit ID

	$0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction in NYSE Arca primary listed securities (includes all ETFs/ETNs) $0.00085 per share (fee) for PO and PO+ Orders routed to NYSE MKT that execute in the opening or closing auction No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0028 per share (fee) for Passive Liquidity Orders that take liquidity from the Book
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[3]:	Tape A and Tape C Securities: $0.0025 per share (credit) for orders that provide liquidity to the Book $0.0030 per share (fee) for orders that take liquidity from the Book $0.0030 per share (fee) for orders routed outside the Book to any away market centers No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0030 per share (fee) for Passive Liquidity Orders that take liquidity from the Book Tape A Securities: $0.0027 per share (fee) for orders in Tape A securities routed outside the Book to the NYSE $0.0010 per share (fee) for PO and PO+ Orders routed to the NYSE that execute in the opening or closing auction Tape B Securities: $0.0022 per share (credit) for orders that provide liquidity to the Book $0.0028 per share (fee) for orders that take liquidity from the Book $0.0030 per share (fee) for orders routed outside the Book to any away market centers No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0028 per share (fee) for Passive Liquidity Orders that take liquidity from the Book For all other fees and credits, Basic Rates apply
Step Up Tier 1: For ETP Holders and	Tape A and Tape C Securities:

Market Makers on a daily basis, measured monthly, that directly execute providing volume that is an increase of no less than 0.20% of US CADV[3] for that month over ETP Holders' and Market Makers' average daily providing volume in June 2011, subject to a minimum increase of 20 million average daily providing shares:	$0.00295 per share (credit) for orders that provide liquidity to the Book No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0030 per share (fee) for Passive Liquidity Orders that take liquidity from the Book Tape A Securities: $0.0027 per share (fee) for orders in Tape A securities routed outside the Book to the NYSE Tape B Securities: $0.0023 per share (credit) for orders that provide liquidity to the Book $0.0028 per share (fee) for orders that take liquidity from the Book $0.0030 per share (fee) for orders routed outside the Book to any away market centers No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0028 per share (fee) for Passive Liquidity Orders that take liquidity from the Book All other fees will be at the existing Tiered and Basic Rates based on the ETP Holders' and Market Makers' qualifying levels
Step Up Tier 2: For ETP Holders and Market Makers on a daily basis, measured monthly, that directly execute providing volume that is an increase of no less than 0.10% of US CADV[3] for that month over ETP Holders' and Market Makers' average daily providing volume in June 2011, subject to a minimum increase of 10 million average daily providing shares:	Tape A and Tape C Securities: $0.0029 per share (credit) for orders that provide liquidity to the Book No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0030 per share (fee) for Passive Liquidity Orders that take liquidity from the Book Tape A Securities: $0.0027 per share (fee) for orders in Tape A securities routed outside the Book to the NYSE Tape B Securities: $0.0028 per share (fee) for orders that take liquidity from

	the Book $0.0030 per share (fee) for orders routed outside the Book to any away market centers No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0028 per share (fee) for Passive Liquidity Orders that take liquidity from the Book All other fees will be at the existing Tiered and Basic Rates based on the ETP Holders' and Market Makers' qualifying levels
Step Up Tier 3: For ETP Holders and Market Makers on a daily basis, measured monthly, that directly execute Adding ADV during the billing month that is (i) at least 0.20% of the US CADV[3] for the billing month; (ii) at least 0.125% taken as a percentage of US CADV for the billing month over the ETP Holder's or Market Maker's December 2013 Adding ADV taken as a percentage of US CADV in December 2013 ("Baseline % CADV"); and (iii) at least 40% over the ETP Holder's or Market Maker's Baseline % CADV as a percentage of US CADV for the billing month:	Tape A and Tape C Securities: $0.0004 per share (credit) for (i) Adding ADV in Tape A securities during the billing month taken as a percentage of US CADV in Tape A securities in the billing month in excess of the Baseline % CADV in Tape A securities and (ii) Adding ADV in Tape C securities during the billing month taken as a percentage of US CADV in Tape C securities in the billing month in excess of the Baseline % CADV in Tape C securities. 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 shall not exceed $0.0034 per share. If an ETP Holder or Market Maker qualifies for more than one Tier in this Fee Schedule, the Exchange shall apply the most favorable rate available under such Tiers. LMMs cannot qualify for the Step Up Tier 3. Retail Order Tier ETP Holders and Market Makers cannot qualify for the Step Up Tier 3. LMM provide and Retail Order provide volume cannot apply to the Step Up Tier 3 volume requirements. 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 on a daily basis, measured monthly, that directly execute providing volume in Tape B Securities during the billing month ("Tape B Adding ADV")[4] that is equal to at least 0.275% of the US Tape B CADV[3] for the billing month over the ETP Holder's or Market Maker's May 2013 Tape B Adding ADV taken as a	$0.0004 per share (credit) for orders that provide liquidity to the Book in Tape B Securities, which shall be in addition to the ETP Holder's or Market Maker's Tiered or Basic Rate credit(s). Retail Order Tier ETP Holders, Routable Retail Order Tier ETP Holders, Cross-Asset Tier ETP Holders and Market Makers cannot qualify for the Tape B Step Up Tier. If an ETP Holder or Market Maker qualifies for more than one Tier in this Fee Schedule, the Exchange shall apply the most favorable rate available under such Tiers. LMMs cannot qualify for the Tape B Step Up Tier.

percentage of Tape B CADV ("Tape B Baseline % CADV")	LMM provide volume cannot apply to the Tape B Step Up Tier volume requirements. For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.
Tape C Step Up Tier: For ETP Holders and Market Makers on a daily basis, measured monthly, that directly execute providing volume in Tape C Securities during the billing month ("Tape C Adding ADV")[4] that is at least the greater of (a) the ETP Holder's or Market Maker's January 2012 Tape C Adding ADV ("Tape C Baseline ADV") plus 0.10% of US Tape C CADV[3] for the billing month or (b) the ETP Holder's or Market Maker's Tape C Baseline ADV plus 20%, subject to the ETP Holders' and Market Makers' total providing liquidity in Tape A, Tape B, and Tape C Securities increasing in an amount no less than 0.03% of US CADV over their January 2012 providing liquidity:	$0.0029 per share (fee) for orders that take liquidity from the Book in Tape C Securities, and, if a firm's ratio of Tape C Baseline ADV to its total Tape C ADV during January 2012 is less than 30%, the $0.0029 rate would only apply to the ETP Holder's or Market Maker's shares that are executed in an amount up to and including 1.1% of the US Tape C CADV during the billing month. The Tier 1, Tier 2, Tier 3, Step Up Tier 1, Step Up Tier 2, or Basic Rates per share would apply to the ETP Holder's or Market Maker's remaining shares that are executed, unless the ETP Holder's or Market Maker's Tape C Adding ADV is greater than its Tape C Baseline ADV by at least 0.33% of the US Tape C CADV during the billing month, in which case the $0.0029 per share fee would apply to the ETP Holder's or Market Maker's shares that take liquidity. ETP Holders and Market Makers that qualify for the Retail Order Tier , Routable Retail Order Tier or the Routable Order Tier shall not qualify to receive the Tape C Step Up Tier 2 rate. If an ETP Holder or Market Maker qualifies for more than one Tier in this Fee Schedule, the Exchange shall apply the most favorable rate available under such Tiers. ETP Holders and Market Makers that qualify for the Retail Order Tier or the Routable Order Tier shall not qualify to receive the Tape C Step Up Tier rate. For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.
Tape C Step Up Tier 2: For ETP Holders and Market Makers that, on a daily basis, measured monthly, directly execute Tape C Adding ADV[4] during the billing month that is at least 2 million shares greater than the ETP Holder's or Market Maker's Tape C Adding ADV during Q2 2012, subject to the ETP Holder's or Market Maker's combined providing ADV in Tape A, Tape B, and Tape C Securities during the billing month as a percentage of CADV[3] being no less than during Q2 2012:	$0.0002 per share (credit) for orders that provide liquidity to the Book in Tape C Securities, which shall be in addition to the ETP Holder's or Market Maker's Tiered or Basic Rate credit(s). Cross-Asset Tier ETP Holders and Market Makers cannot qualify for the Tape C Step Up Tier 2. If an ETP Holder or Market Maker qualifies for more than one Tier in this Fee Schedule, the Exchange shall apply the most favorable rate available under such Tiers. ETP Holders and Market Makers that qualify for the Retail Order Tier, Routable Retail Order Tier or the Routable Order Tier shall not qualify to receive the Tape C Step Up Tier rate. For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.

Cross-Asset Tier: For ETP Holders and Market Makers that either: (1) provide liquidity of 0.40% or more of the US CADV[3] per month, and 2) are affiliated with an OTP Holder or OTP Firm that provides an ADV[4] of electronic posted Customer executions in Penny Pilot issues on NYSE Arca Options (excluding mini options) of at least 0.95% of total Customer equity and ETF option ADV as reported by OCC or (1) provide liquidity of 0.30% or more of the US CADV[3] per month, (2) are affiliated with an OTP Holder or OTP Firm that provides an ADV[4] of electronic posted Customer executions in all issues on NYSE Arca Options (excluding mini options) of at least 0.80% of total Customer equity and ETF option ADV as reported by OCC, and (3) execute an ADV[4] of Retail Orders that provide liquidity during the month that is 0.10% or more of the US CADV:	Tape A, Tape B, and Tape C Securities: $0.0030 per share (credit) for orders that provide liquidity to the Book For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.
Retail Order Tier: For ETP Holders, including Market Makers, that execute an ADV[4] of Retail Orders that provide liquidity during the month that is 0.15% or more of the US CADV[3]: .	Tape A, Tape B, and Tape C Securities: $0.0033 per share (credit) for Retail Orders that provide liquidity to the Book. For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.
Routable Order Tier: For ETP Holders, including Market Makers, that 1) provide liquidity of 0.40% or more of the US CADV[3] during the billing month across all Tapes, 2)	Tape A and Tape C Securities: $0.0032 per share (credit) for Routable and non-Routable Orders that provide liquidity to the Book. For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.

maintain a ratio during the billing month across all Tapes of executed provide liquidity that is eligible to route away from the Exchange ("Routable Orders") to total executed provide liquidity of 75% or more, and 3) execute an ADV[4] of provide liquidity during the billing month across all Tapes that is equal to at least the ETP Holder's or Market Maker's May 2013 provide liquidity across all Tapes plus 40%:	
Routable Retail Order Tier: For ETP Holders, including Market Makers, that 1) provide liquidity of 0.20% or more of the US CADV3 during the billing month across all Tapes, 2) maintain a ratio during the billing month across all Tapes of executed provide liquidity that is eligible to route away from the Exchange ("Routable Orders") to total executed provide liquidity of 55% or more, and (3) execute an ADV4 of Retail Orders that provide liquidity during the month that is 0.10% or more of the US CADV:	Tape A and Tape C Securities: $0.0032 per share (credit) for Routable and non-Routable Orders that provide liquidity to the Book. Tape B Securities: $0.0030 per share (credit) for Routable and non-Routable Orders that provide liquidity to the Book For all other fees and credits, Tiered or Basic Rates apply based on a firm's qualifying levels.
Basic Rates (applicable when tier rates do not apply)	Tape A Securities: $0.0020 per share (credit) for orders that provide liquidity to the Book $0.003 per share (fee) for orders that take liquidity from the Book $0.003 per share (fee) for orders routed outside the Book to any away market centers other than the NYSE $0.0029 per share (fee) for orders routed outside the Book to the NYSE, except that Primary Until 9:45 Orders and Primary After 3:55 Orders that are designated as Retail Orders and routed to the primary listing market

	will be charged $0.0010 per share (fee) $0.0025 per share (fee) for Primary Sweep Orders in Tape A securities routed outside the book to the NYSE that remove liquidity from the NYSE. Primary Sweep Orders in Tape A securities routed outside the book to the NYSE that provide liquidity to the NYSE are not charged a fee or given a credit. For MPL orders providing liquidity to the Book: $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; $0.0010 per share (credit) if MPL Adding ADV during the billing month is less than 1.5 million shares. $0.0030 per share (fee) for MPL orders removing liquidity from the Book that are not designated as Retail Orders No Charge for MPL orders removing liquidity from the Book that are designated as Retail Orders $0.0015 per share (fee) for Market and Auction-Only Orders executed in an Opening, Market Order or Trading Halt Auction, capped at $20,000 per month per Equity Trading Permit ID $0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction $0.0027 per share (fee) for PO+ Orders routed to the NYSE that remove liquidity. $0.0014 per share (credit) for PO+ Orders that provide liquidity to the NYSE $0.0010 per share (fee) for PO and PO+ Orders routed to the NYSE that execute in the opening or closing auction No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0030 per share (fee) for Passive Liquidity Orders that take liquidity from the Book $0.0030 per share (credit) for Retail Orders that provide liquidity to the Book Tape B Securities: $0.0020 per share (credit) for orders that provide liquidity to the Book

	$0.003 per share (fee) for orders that take liquidity from the Book $0.0035 per share (fee) for orders routed outside the Book to any away market centers, except that Primary Until 9:45 Orders and Primary After 3:55 Orders that are designated as Retail Orders and routed to the primary listing market will be charged $0.0010 per share (fee) $0.0016 per share (credit) for PO and PO+ orders routed to NYSE MKT that provide liquidity to the NYSE MKT Book $0.0028 per share (fee) for PO and PO+ orders routed to NYSE MKT that remove liquidity from the NYSE MKT Book For MPL orders providing liquidity to the Book: $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; $0.0010 per share (credit) if MPL Adding ADV during the billing month is less than 1.5 million shares. $0.0030 per share (fee) for MPL orders removing liquidity from the Book that are not designated as Retail Orders No Charge for MPL orders removing liquidity from the Book that are designated Retail Orders $0.0015 per share (fee) for Market and Auction-Only Orders executed in an Opening, Market Order or Trading Halt Auction, capped at $20,000 per month per Equity Trading Permit ID $0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction in NYSE Arca primary listed securities (includes all ETFs/ETNs) $0.00085 per share (fee) for PO and PO+ Orders routed to NYSE MKT that execute in the opening or closing auction No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0030 per share (fee) for Passive Liquidity Orders that take liquidity from the Book $0.0030 per share (credit) for Retail Orders that provide liquidity to the Book Tape C Securities:

	$0.0020 per share (credit) for orders that provide liquidity to the Book $0.003 per share (fee) for orders that take liquidity from the Book $0.0035 per share (fee) for orders routed outside the Book to any away market centers, except that Primary Until 9:45 Orders and Primary After 3:55 Orders that are designated as Retail Orders that are routed to the primary listing market will be charged $0.0010 per share (fee) For MPL orders providing liquidity to the Book: $0.0025 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; $0.0010 per share (credit) if MPL Adding ADV during the billing month is less than 1.5 million shares. $0.0030 per share (fee) for MPL orders removing liquidity from the Book that are not designated as Retail Orders No Charge for MPL orders removing liquidity from the Book that are designated as Retail Orders $0.0015 per share (fee) for Market and Auction-Only Orders executed in an Opening, Market Order or Trading Halt Auction, capped at $20,000 per month per Equity Trading Permit ID $0.0010 per share (fee) for Market, Market-On-Close, Limit-On-Close, and Auction-Only Orders executed in a Closing Auction $0.0010 per share (fee) for PO and PO+ orders routed to NASDAQ that execute in the opening or closing auction No fee or credit for Passive Liquidity Orders that provide liquidity to the Book $0.0030 per share (fee) for Passive Liquidity Orders that take liquidity from the Book $0.0030 per share (credit) for Retail Orders (as defined in Rule 7.44(a)(3)) that provide liquidity to the Book
IOI Credit: Tier 1: For ETP Holders and Market Makers that send an IOI to the Exchange resulting in an execution with an average daily share volume per month greater than or equal to 10 million	Tape A, Tape B, and Tape C Securities: $0.0012 per share (credit) for IOIs that result in an execution up to and including 15 million shares. $0.0015 per share (credit) for IOIs that result in an execution in excess of 15 million shares.

shares	
IOI Credit: Tier 2: For ETP Holders and Market Makers that send an IOI to the Exchange resulting in an execution with an average daily share volume per month between 5 million shares and 9,999,999 shares	Tape A, Tape B, and Tape C Securities: $0.001 per share (credit) for IOI's that result in an execution
IOI Credit: Tier 3: For ETP Holders and Market Makers that send an IOI to the Exchange resulting in an execution with an average daily share volume per month between 2.5 million shares and 4,999,999 shares	Tape A, Tape B, and Tape C Securities: $0.0005 per share (credit) for IOI's that result in an execution
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 greater than or equal to 10 million shares	Tape A, Tape B, and Tape C Securities: $0.0015 per share (credit) for Tracking Orders that result in executions
Tracking Order Tier 2: For ETP Holders and Market Makers that send Tracking Orders to the Exchange resulting in executions with an average daily share volume per month between 5 million shares and 9,999,999 shares	Tape A, Tape B, and Tape C Securities: $0.0012 per share (credit) for Tracking Orders that result in executions
Tracking Order Tier 3: For ETP Holders and Market Makers that send Tracking Orders to the Exchange resulting in executions with an average daily share volume per month between 1 million shares and 4,999,999 shares	Tape A, Tape B, and Tape C Securities: $0.001 per share (credit) for Tracking Orders that result in executions

Round Lots and Odd Lots (Per Share Price Below $1.00)[5]

Tape A, Tape B, and Tape C Securities:	0.3% of the total dollar value for orders that take liquidity from the Book
Routing Services:	0.3% fee of the total dollar value (applicable to orders of listed and Nasdaq securities routed away and executed by another market center or participant)
Auctions	0.1% of the total dollar value for orders that execute in the Opening, Market Order, Trading Halt or Closing Auctions.

Self Trade Prevention Modifiers (Tape A, Tape B, and Tape C Securities)[6]

STP credits and fees shall be capped at a net total of $25,000.00 per month.

STP Cancel Newest (STPN)	$0.00
STP Cancel Oldest (STPO)	$0.00
STP Cancel Both (STPC)[7]	$0.0029 per share (credit) for resting STP orders returned to the ETP Holder $0.0030 per share (fee) for incoming STP orders returned to the ETP Holder
STP Decrement and Cancel (STPD)	$0.0029 per share (credit) for the portion of the resting STP order returned to the ETP Holder $0.0030 per share (fee) for the portion of the incoming STP order returned to the ETP Holder

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 Allied Person[8] or Approved

5 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.

6 The incoming order (last received order) marked with one of the STP Modifiers controls the billing treatment of both interacting orders marked with STP Modifiers.

7 An incoming order marked with a STPC Modifier will be billed only up to the equivalent size of the contra order marked with a STP Modifier.

	Person[9] listed on Schedule A or B of Form BD or Market Maker Authorized Trader for whom required information is not available on Web CRD ®)

NYSE ARCA EQUITIES: 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	$0.07 monthly fee per firm ($0.075 as of April 1, 2013)
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	$100
Additional processing of each initial or amended Form U4, Form U5 or Form BD that includes the initial reporting, amendment, or certification of one or more disclosure events or proceedings	$110
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	$15
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	$45 annually

8 As defined by NYSE Arca Equities Rule 1.1(c).

9 As defined by NYSE Arca Equities Rule 1.1(d).

representative and principal	

NYSE ARCA MARKETPLACE: MARKET MAKER FEES AND CREDITS[10]

Lead Market Maker ("LMM") Transaction Fees and Credits

Round Lots (Per Share Price $1.00 or Above)

NYSE Arca Marketplace Primary Listed Securities (excluding Exchange-Traded Products ("ETPs") in the Incentive Program)[11]	$0.0035 per share (credit) for orders that provide displayed liquidity to the Book in securities for which they are registered as the LMM and which have a CADV[3] in the previous month greater than 5,000,000 shares $0.004 per share (credit) for orders that provide displayed liquidity to the Book in securities for which they are registered as the LMM and which have a CADV in the previous month of between 1,000,000 and 5,000,000 shares inclusive $0.0045 per share (credit) for orders that provide displayed liquidity to the Book in securities for which they are registered as the LMM and which have a CADV in the previous month of less than 1,000,000 shares $0.0025 per share (fee) for orders that take liquidity from the Book $0.0030 per share (credit) for orders that provide undisplayed liquidity in Post No Preference Blind (PNP B) Orders to the Book in securities for which they are registered as the LMM. $0.0015 per share (credit) for Passive Liquidity Orders that provide liquidity to the Book in securities for which they are registered as the LMM. No fee for orders executed in the Closing Auction

Incentive Program – In accordance with NYSE Arca Equities Rule 8.800, at the end of each quarter, the Exchange shall credit an LMM an "LMM Payment" for each month during such quarter that the LMM meets or exceeds its performance standards for an assigned ETP. If an LMM does not meet or exceed its performance standards for an assigned ETP for a particular month, or the ETP is withdrawn from the Incentive Program pursuant to paragraph (e) of NYSE Arca Equities Rule 8.800, then the LMM Payment shall be zero for such month. The amount of the LMM Payment for a particular month shall not exceed

[10] 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).

[11] No transaction fee or credit for orders executed as Directed Orders against a Directed Fill.

1/3 of the quarterly Optional Incentive Fee, less an Exchange administration fee of 5%, and such LMM shall be subject to the transaction fees and credits applicable to ETP Holders and Market Makers set forth in the preceding sections for transactions in such ETP during that quarter instead of the LMM transaction fees and credits set forth in this section.

If an issuer does not pay its quarterly installments to the Exchange on time and the ETP continues to be listed, the Exchange shall continue to credit the LMM if the LMM meets its performance standards.

FEES AND CREDITS APPLICABLE TO EXECUTIONS IN THE RETAIL LIQUIDITY PROGRAM

Retail Liquidity Provider ("RLP") or Non-RLP Retail Price Improvement Order ("RPI") that executes against a Retail Member Organization ("RMO") Retail Order:	Tape B and Tape C Securities: $0.0003 credit.
Other non-displayed liquidity and displayable odd lot interest priced better than the best protected bid ("PBB") or the best protected offer ("PBO") (together, the "PBBO") ("other price-improving interest") that executes against an RMO Retail Order:	Tape B and Tape C Securities: Tiered or Basic Rates apply based on a firm's qualifying levels.
RMO Retail Order that executes against an RLP or Non-RLP RPI or against other price-improving interest:	Tape B and Tape C Securities: No fee or credit applies.

NYSE ARCA MARKETPLACE: CROWD PARTICIPANT ("CP") PROGRAM PAYMENTS

Amount of Total Daily CP Payment	Allocation of Daily CP Payment
An amount not to exceed the following: The CP Program Fee paid to the Exchange by an issuer under Rule 7.25, less a 5% Exchange administration fee, divided by the number of trading days in the calendar year. Half of this amount shall be for bid SETs and half shall be for offer SETs.	70% of the bid (offer) SET amount to the CP with the highest number of Winning Bid (Offer) SETs (as defined in paragraph (f) of Rule 7.25); 30% of the bid (offer) SET amount to the CP with the second-highest number of Winning Bid (Offer) SETs. If only one CP is eligible for the bid (offer) SET amount, 100% of such amount shall be provided to such CP. If more than two CPs have an equal number of Winning Bid (Offer) SETs, the CP with the higher executed volume in the ETP on the Exchange on the particular trading day shall be awarded the applicable daily CP Payment. A CP Payment shall not be provided if no eligible CPs exist.

The Exchange shall credit a CP for the CP Payment at the end of each month. If the ETP is withdrawn from the CP Program pursuant to paragraph (i) of NYSE Arca Equities Rule 7.25 during the month, then the CP shall not be eligible for a CP Payment after the date of such withdrawal.

If an issuer does not pay its quarterly installments to the Exchange on time and the ETP continues to be included in the CP Program, the Exchange shall continue to credit CPs in accordance with the Trading Fee Schedule.

NYSE ARCA MARKETPLACE: OTHER FEES AND CHARGES

Connectivity Fees

Line Connection	(Variable pass-through charge for each line installation)
RealTick Interface	Variable pass-through charge(s) for each product requested per workstation.
Port Fee (not applicable to ports used for Risk Management Gateway ("RMG"SM), which are not charged) Ports for order/quote entry: Ports for drop copies:	 $200 per port per month for users of 1-5 ports, $500 per port per month for users of 6 or more ports, 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. $500 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
Risk Management Gateway: Number of Connections (Monthly): First Connection (up to 1000 messages per second) Every additional Connection (up to 1000 messages per second)	Amount of Charge: $3,000.00 $1,000.00

Co-Location Fees**

** A user that incurs co-location fees for a particular co-location service pursuant to this Fee Schedule shall not be subject to co-location fees for the same co-location service charged pursuant to the NYSE Arca Options Fee

Schedule or by the Exchange's affiliates NYSE MKT LLC and New York Stock Exchange LLC.

Initial Fee per Cabinet	
Dedicated Cabinet	$5,000
8-Rack Unit of a Partial Cabinet	$2,500

Monthly Fee per Cabinet	
Dedicated Cabinet	
Number of kWs	**Per kW Fee Monthly**
4 - 8	$1,200
9 - 20	$1,050
21 – 40	$950
41+	$900

8-Rack Unit of a Partial Cabinet

Number of kWs	**Total Fee Monthly**
1	$1,500
2	$2,700

Cabinet Upgrade Fee	
Dedicated Cabinet	$9,200 ($4,600 for a User that submits a written order for a Cabinet Upgrade by January 31, 2014, provided that the Cabinet Upgrade becomes fully operational by March 31, 2014)
PNU Cabinet	monthly charge of $360 per kW allocated to PNU Cabinet

Cage Fees	
2 –14 Cabinets	$5,000 initial charge plus $2,700 monthly charge
15 – 28 Cabinets	$10,000 initial charge plus $4,100 monthly charge
29+ Cabinets	$15,000 initial charge plus $5,500 monthly charge

Type of Service	**Description**	**Amount of Charge**
LCN Access	1 GB Circuit	$6,000 per connection initial charge plus $5,000 monthly per connection
LCN Access	10 GB Circuit	$10,000 per connection initial charge plus $12,000 monthly per connection.

LCN Access	10 GB LX Circuit	$15,000 per connection initial charge plus $20,000 monthly per connection. A User that submits a written order for a 10 GB LX Circuit between December 3, 2013 and January 31, 2014 shall not be subject to the initial charge
LCN Access	40 GB Circuit	$15,000 per connection initial charge plus $20,000 monthly per connection.
LCN CSP Access	10 GB Circuit	$10,000 per connection initial charge plus $5,000 monthly per connection
CSP Subscriber		$950 per LCN CSP initial charge plus $300 monthly per LCN CSP
Bundled Network Access, Option 1 (2 LCN connections, 2 IP network connections, and 2 optic connections to outside access center)	1GB Bundle	$25,000 initial charge plus $13,000 monthly charge
	10 GB Bundle	$50,000 initial charge plus $47,000 monthly charge
Bundled Network Access, Option 2 (2 LCN Connections, 2 IP network connections, and 2 optic connections in data center)	10 GB Bundle	$50,000 initial charge plus $61,500 monthly charge
IP Network Access	1 Gb Circuit	$2,500 per connection initial charge plus $2,500 monthly per connection
IP Network Access	10 Gb Circuit	$10,000 per connection initial charge plus $10,000 monthly per connection
Testing and certification IP Network Access	IP network circuit for testing and certification. Circuit can only be used for testing and certification and testing and certification period is limited to three months.	No charge.
Hosting Fee		$500 monthly charge per Hosted User
Data Center Fiber Cross Connect	Furnish and install 1 cross connect	$500 initial charge plus $500 monthly charge
	Furnish and install bundle of 6 cross connects	$500 initial charge plus $1,500 monthly charge
	Furnish and install bundle of 12 cross connects	$500 initial charge plus $2,500 monthly charge
	Furnish and install bundle of 18 cross connects	$500 initial charge plus $3,200 monthly charge
	Furnish and install bundle of 24 cross connects	$500 initial charge plus $3,900 monthly charge

Expedite Fee	Expedited installation/completion of a User's co-location service	$4,000 per request
Change Fee	Change to a co-location service that has already been installed/completed for a User	$950 per request
Initial Install Services (Required per cabinet)	Dedicated Cabinet: Includes initial racking of equipment in cabinet and provision of cables (4 hrs).	$800 per dedicated cabinet
	Partial Cabinet: Includes initial racking of equipment in cabinet and provision of cables (2 hrs).	$400 per eight-rack unit in a partial cabinet

Type of Service	**Description**	**Amount of Charge**
Hot Hands Service	Allows Users to use on-site data center personnel to maintain User equipment, support network troubleshooting, rack and stack, power recycling, and install and document cable.	$100 per half hour
Shipping and Receiving	Receipt of one shipment of goods at data center from User/supplier. Includes coordination of shipping and receiving.	$100 per shipment
Badge Request	Request for provision of a permanent data center site access badge for a User representative.	$50 per badge
External Cabinet Cable Tray	Engineer, furnish and install Rittal 5"H x 12"W cable tray on cabinet.	$400 per tray
Custom External Cabinet Cable Tray	Engineer, furnish and install 4" H x 24" W custom basket cable tray above client's cabinet rows.	$100 per linear foot

Type of Service	**Description**	**Amount of Charge**
Visitor Security Escort	NYSE Arca employee escort, which is required during User visits to the data center. (Note: all User representatives are required to have a visitor security escort during visits to the data center, including User representatives who have a permanent data center site access badge.)	$75 per hour
Custom External Cabinet Cable Tray	Engineer, furnish and install 4" H x 24" W custom basket cable tray above client's cabinet rows.	$100 per linear foot

Market Data Revenue Sharing Credit[12]

[12] LMMs will not be eligible for a market data revenue credit in securities for which they are registered as the LMM except for executions against Directed Fills. Open orders (e.g., GTC

Cross Order: Tape A Securities	50% tape revenue credit per qualifying trade (applicable to any Cross Order, as defined in NYSE Arca Equities Rule 7.31(s), where the ETP Holder or Sponsored Participant represents all of one side of the transaction and all or a portion of the other side)
Cross Order: Tape B Securities	50% tape revenue credit per qualifying trade (applicable to any Cross Order, as defined in NYSE Arca Equities Rule 7.31(s), where the ETP Holder or Sponsored Participant represents all of one side of the transaction and all or a portion of the other side)
Cross Order: Tape C Securities	A percentage of ETP Operating Revenue ("ETPOR") associated with Cross Orders in Tape C Securities shall be eligible for sharing with ETP Holders. ETPOR is defined as operating revenue that is generated by ETP Holders and consists of transaction fees and market data revenue that is attributable to ETP Holders' Cross Order executions. ETPOR shall not include any investment income or regulatory monies. The sharing of ETPOR shall be based on each ETP Holder's pro rata contribution to ETPOR and the amount shared shall not exceed ETPOR.
Late Payment of Dues, Fees, Fines and Charges[13]	
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

NYSE ARCA MARKETPLACE: GENERAL

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).

Orders) will not be eligible for a market data revenue credit if such orders are executed after the trading date on which they were entered.

[13] Transaction fees are excluded from the late payment of dues, fees, fines and charges.

(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.

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