



# NYSE Arca Options

User's Manual

**February 10, 2009**

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# Market Maker Quoting

## Appointment of Market Makers

Market Makers may select from among any option issues traded on the Exchange for inclusion in their appointment, subject to the approval of the Exchange. In considering the approval of the appointment of a Market Maker, the Exchange will consider financial resources, experience, expertise and past performance in making markets and operational capability. The Exchange may appoint an unlimited number of Market Makers in each class. The Exchange reserves the right to limit the number of Market Makers appointed to a particular option class due to system constraints.

The number of issues a Market Maker or Lead Market Maker (LMM) can trade is determined by the number of Option Trading Permits (OTPs) acquired.

OTPs	Issues
1	100
2	250
3	750
4	All issues

Market Makers may change the option issues that are included in their Primary Appointment periodically, subject to the approval of the Exchange. The OTP Firm has full discretion in distributing issues among its Authorized Traders and Market Makers. However, Market Makers, Lead Market Makers and Authorized Traders in the same firm are not allowed to trade the same issue simultaneously.

Market Makers may withdraw from trading an option issue that is within their Primary Appointment by providing the Exchange with three business days' written notice of such withdrawal. Market Makers who fail to give advance written notice of withdrawal to the Exchange may be subject to disciplinary action.

## Quoting Obligations

### Within Primary Appointment

All Market Makers must contribute to the maintenance of a fair and orderly market.

Market Makers must honor the number of contracts entered into the system in all series of options classes within their Primary Appointment. Any change to a quote (including reduction of volume) causes the quote to lose priority. The minimum size is one contract.

### **Lead Market Makers**

Lead Market Maker must provide continuous two-sided quotes 90% of the time the Exchange is open for trading in each issue. Lead Market Makers can operate from on or off the trading floor. These obligations will apply to all of the Lead Market Maker's appointed issues collectively, rather than on an issue-by-issue basis. Compliance with this obligation will be determined on a per-calendar-quarter basis. Lead Market Makers must be actively streaming quotes throughout every business day and, in addition, designate an approved LMM to act as a back-up LMM and notify a Trading Official of such designation.

### **Market Makers**

Market Makers must provide continuous two-sided quotations 60% of all times during which the Exchange is open. These obligations are applied collectively to all series for each issue in the Market Maker's primary. Although Market Makers are not required to quote in each series, the amount of time a Market Maker provides quotes in all series will be aggregated to determine compliance with the quoting obligation requirement. Additionally, compliance with the 60% quoting obligation is measured on a per-calendar-quarter basis.

A Market Maker may be called upon by a Trading Official to submit a single quote or maintain continuous quotes in one or more series of an option issue within its Primary Appointment whenever it is deemed that it is necessary to do so in the interest of maintaining fair and orderly market.

### **Quote Width**

With the exception of the Opening Auction, the spread differential (difference between the bid and offer) of Market Maker quotes may not exceed \$5. During the Opening Auction, spread differentials shall be as follows:

<b>Premium Price</b>	<b>Maximum Range</b>
0 to \$2.00	\$0.25
\$2.00 to \$5.00	\$0.40
\$5.00 – \$10.00	\$0.50
\$10.00 – \$20.00	\$0.80
\$20.00 or greater	\$1.00

In the event the bid/ask differential in the underlying security is greater than the bid/ask differential set forth above, the price differential for any in-the-money option series may

be identical to those in the underlying security. In the case of the at-the-money and out-of-the-money series, a Trading Official may waive this requirement when the bid/ask differential for the underlying security is greater than .50. In such instances, the bid/ask differentials for the at-the-money series and the out-of-the-money series may be half as wide as those in the underlying security in the primary market. A Trading Official may waive the requirements in this paragraph in the interest of maintaining a fair and orderly market.

## **Trading Obligations**

At least 75% of the trading activity of a Lead Market Maker and/or Market Maker (measured in terms of contract volume per quarter) must be in classes within the Market Maker's Primary Appointment. In computing the percentage specified herein, a weighting factor may be assigned based upon relative inactivity of one or more classes or series of option contracts. A Market Maker's trades to accommodate Non-Facilitation crosses do not count for or against the 75% requirement regardless of whether the trades are within one's primary.

Market Makers and Lead Market Makers cannot enter quotes in issues outside their primary appointment. Market Makers who wish to trade outside their primary may do so with orders. Market Makers should consult with their Clearing Firm for information related to margin treatment of orders vs. quotes.

Additionally, Market Makers should not engage in transactions for an account in which they have an interest that are disproportionate in relation to, or in derogation of, the performance of their obligations as specified in this Rule with respect to the classes in their Primary Appointment. Additionally, Market Makers should not individually (or as a group) intentionally or unintentionally, dominate the market in option contracts of a particular class.

## **Lead Market Maker Rights**

LMMs will be allocated 40% participation (or such lesser percentage as the Exchange may establish as a condition in allocating an issue to an LMM) when quoting at the top of the Book and the NBBO prior to order entry. LMMs will be entitled to their 40% participation on "open outcry" trades only when present in the trading crowd. LMM participation may be greater than 40% as a result of successful competition by means of "open outcry." LMMs at their own discretion may direct some or all of their participation to competing public orders in the crowd.

LMMs may function as both a Market Maker and Floor Broker in designated option issues. While acting as a Floor Broker, LMMs must fulfill their obligations to use due diligence and all other obligations of Floor Brokers pursuant to Rules 6.43 through 6.48. LMMs may not accept discretionary orders.

## Market Maker Risk Limitation (MMRL)

NYSE Arca will maintain a “trade counter” for each Market Maker in each class within the Market Maker’s Primary Appointment. The trade counter will be incremented by one every time the Market Maker executes a trade on any series in the appointed class. The MMRL is configurable by the Market Maker and will be activated when the trade counter has reached “n” executions within one second. This counter applies to trades against Market Maker quotes only; it does not apply to trades against Market Maker orders. However, once the threshold has been met, quotes will be cancelled. The minimum setting is 5 executions per second and the maximum is 100. The Exchange will automatically default the “n” setting to 50 executions per second if the Market Maker does not submit a setting.

When the threshold is met, the trading engine will automatically cancel all quotes posted by the Market Maker in that class by generating a “bulk cancel” message. Contra-side incoming orders or quotes received by NYSE Arca after receipt of the bulk cancel message will not be executed against the Market Maker. Once the MMRL has been activated for an option class, any bulk quote messages sent by the Market Maker on that class will be rejected until the Market Maker submits a system message to enable new quotes.

In the event that there are no Market Makers quoting in the issue, the best bids and offers of orders residing in the Book will be disseminated as the BBO. If there are no Market Maker quotes and no orders in the book, the exchange will disseminate a bid of zero and an offer of zero.

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## Order Entry

### Order Types and Automation

Execution of all accepted order types will be fully automated. If an order cannot achieve the NBBO on NYSE Arca, the trading engine will route these orders to competing exchanges. Orders will be routed via the Intermarket Linkage or the Exchange routing broker, depending on order type (Customer, Firm, MM), efficiency, and cost. This will eliminate manual handling of orders and provide expedited reporting of executions.

### Order Entry Protocols

Order flow providers currently sending orders to the exchange will not need to make any system changes; NYSE Arca will continue to support all existing interfaces and current order types. FIX is the standard protocol for order entry; versions 4.0, 4.1 and 4.2 are supported. Specifications are posted on the NYSE Arca website at [www.nyse.com/FIX](http://www.nyse.com/FIX).

### Market Data

ArcaBook<sup>sm</sup> provides limit order book information for NYSE Arca and ArcaEdge (OTCBB) as well as information from the NYSE Arca auction process, including imbalance and pricing information. This information can be obtained through a direct data feed from NYSE Arca or via data vendors. In addition, NYSE Arca provides end of day ArcaBook information through the Delayed (Historical) Market Information subscription. For more information, visit [www.nysedata.com/ArcaBook](http://www.nysedata.com/ArcaBook).

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## Order Types

The following order types will be accepted and fully automated for launch. Additional order types will be added in future phases.

Order Type	Descriptions
<b>All or None (AON)</b>	A Limit Order that is to be executed in its entirety or not at all. Non-marketable AON orders will rest in the working book but not be displayed. AON orders will not route to other exchanges.
<b>Day Order</b>	An order to buy or sell which, if not executed, expires at the end of the day on which it was entered. All orders by their terms are Day Orders unless otherwise specified.
<b>Fill or Kill (FOK)</b>	A Market or Limit Order that is to be executed in its entirety on NYSE Arca as soon as the order is received, and if not so executed is to be cancelled. FOK orders will not route to other exchanges.
<b>Good till Cancelled Order (GTC)</b>	An order to buy or sell that remains in force until the order is filled, cancelled or the option contract expires. GTC Orders will be cancelled in the event of a corporate action that results in an adjustment to the terms of the option contract.
<b>Immediate or Cancel (IOC)</b>	A Market or Limit Order immediately executed, in whole or part on NYSE Arca, with the unexecuted amount cancelled. IOC orders are not routed to other exchanges.
<b>Limit</b>	Limit Orders that cannot be filled in their entirety at the NBBO on NYSE Arca will be routed to other exchanges. Any unfilled portion of the order will not be routed to the next best price level until all quotes at the current best bid or offer are exhausted. If the order is no longer marketable it will be ranked in the NYSE Arca Book.
<b>Market</b>	An order to buy or sell a stated number of contracts that is to be executed at the best price obtainable when the order reaches NYSE Arca. If the order cannot achieve the NBBO on NYSE Arca, it will be routed to other exchanges.
<b>NOW</b>	A Market or Limit Order that is to be executed in whole or in part on NYSE Arca and any unexecuted portion will be routed to other exchanges for immediate execution. Any portion not immediately executed by the other exchange shall be cancelled. If a NOW Order is not marketable when it is submitted to NYSE Arca, it will be cancelled.

<b>Post No Preference (PNP)</b>	A Limit Order that is to be executed in whole or in part on NYSE Arca. Any portion not executed is posted in the NYSE Arca Book without routing any portion of the order to another exchange. PNP Orders that would lock or cross the NBBO will be cancelled.
<b>Reserve</b>	A Limit Order with a portion of the size displayed and with a reserve portion of the size that is not displayed on NYSE Arca.
<b>Stop</b>	A Stop Order becomes an active Market Order when the stop price is reached. A Stop Order to buy is triggered when the option is bid on NYSE Arca or trades on NYSE Arca (or any exchange) at or above the specified stop price. A Stop Order to sell is activated when the option is offered on NYSE Arca or trades on NYSE Arca (or any exchange) at or below the specified stop price. Order execution is fully automated.
<b>Stop Limit</b>	A Stop Limit Order becomes an active Limit Order when the stop price is reached. A Stop Limit Order to buy is triggered when the option is bid or trades on NYSE Arca (or any exchange) at or above the specific stop price. A Stop Limit Order to sell becomes a Limit Order when the option is offered or trades on NYSE Arca (or any exchange) at or below the specified stop price. Order execution is fully automated. If the active limit order is not marketable it will post in the NYSE Arca Book.

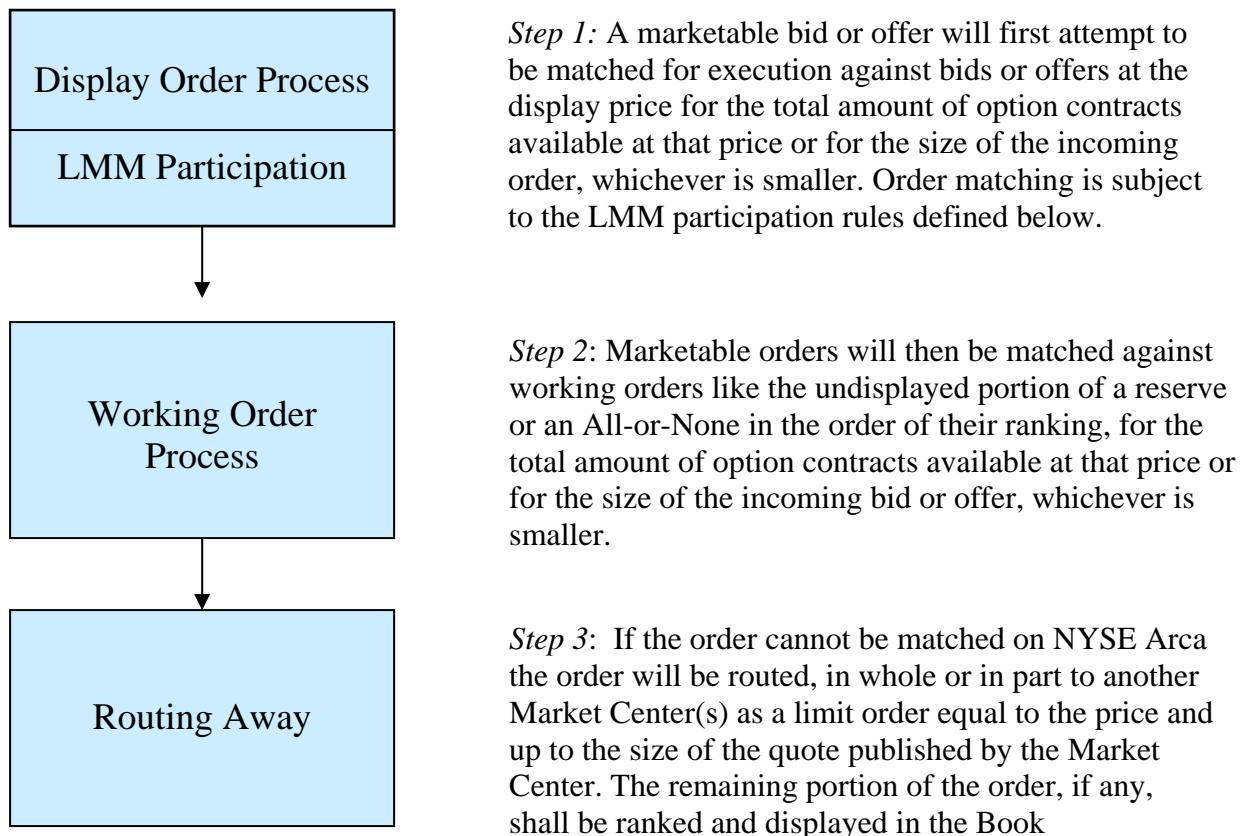
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## Trade Allocation

### Order/Quote Ranking

Orders and quotes are treated equally and maintained in the NYSE Arca Book according to price-time priority. The Book (except for certain working orders with conditional prices or sizes) will be displayed to all Users. Market orders and/or marketable limit orders will be matched for execution using the following algorithm. All orders executed in Step 1 or 2 must achieve the NBBO, or be routed according to Step 3.

*Diagram 1: Order Matching Process*



If there is no LMM quoting at the NBBO in the option series, the incoming marketable bid or offer will be matched against orders and quotes in the Display Order Process based upon their price-time rankings. Example:

Market order for 500 entered.

<b>Submitter Ranked in Time of Entry</b>	<b>Price</b>	<b>Size</b>	<b>Execution</b>
Broker Dealer 1 order	1.00	200	200
Customer 1 order	1.00	200	200
Market Maker 1 quote	1.00	300	100
Customer order	1.00	1,000	0
Market Maker 2 quote	1.00	400	0

1. Broker Dealer 1 order buys 200 (leaves 300 on incoming order) – price time
2. Customer 1 order buys 200 (leaves 100 on incoming order) – price time
3. Market Maker 1 quote buys 100 (incoming order filled) – price time

### **LMM Participation in the Display Order Process**

If there is an LMM quoting at the best price in the option series, an incoming marketable bid or offer will be matched against all customer orders ranked ahead of the LMM, provided that the execution(s) must occur at a price equal to or better than the NBBO. The remaining balance of the incoming marketable bid or offer will be matched against the quote of the LMM for either an amount equal to 40% of the remaining balance of the incoming bid or offer up to the LMM's disseminated quote size; or the LMM's share in the order of ranking, whichever is greater. The remaining balance of the incoming marketable bid or offer will be matched against remaining orders and quotes in the Display Order Process in the order of their ranking.

Market order for 500 entered

<b>Submitter Ranked in Time of Entry</b>	<b>Price</b>	<b>Size</b>	<b>Execution</b>
Broker Dealer 1 order	1.00	200	180
Customer 1 order	1.00	200	200
Market Maker 1 quote	1.00	300	0
Lead Market Maker	1.00	300	120
Customer 2 order	1.00	1,000	0
Market Maker 2 quote	1.00	400	0

1. Customer 1 order buys 200 (leaves 300 on incoming order) – Customer 1 priority ahead of LMM in price time
2. Lead Market Maker buys 120 (leaves 180 on incoming order) – LMM guarantee, 40% of volume remaining (300) after Customer 1 allocation
3. Broker Dealer 1 order buys 180 (incoming order filled) – price time

LMMs can receive more than the 40% guarantee. If an LMM has price-time priority, they receive 40% of the incoming order (up to the LMM's disseminated quote size) or the LMM's share in the order of ranking, whichever is greater.

Market order for 200 entered.

<b>Submitter Ranked in Time of Entry</b>	<b>Price</b>	<b>Size</b>	<b>Execution</b>
Lead Market Maker	1.00	150	150
Customer 1 order	1.00	25	25
Market Maker 1 quote	1.00	50	25

- (1) LMM receives 150, the greater of 40% guarantee or share in order or price-time ranking.
- (2) Customer 1 receives 25 – price time
- (3) Market Maker 1 receives 25 – price time

### **Open Outcry – Priority and Order Allocation**

The Trading Floor in San Francisco will be available for consummation of trades that are not eligible for electronic trading or orders that a customer wishes to have negotiated. However, in order to reward fully disclosed trading interest, the NYSE Arca book, including any orders and quotes, will have priority over same price trading interest on the Floor.

A Floor Broker who wishes to cross orders at the Book price must trade against all NYSE Arca interest at the price before crossing. Additionally, once the book has been satisfied, the crowd may not join or match the book price unless the Floor Broker allows this. Crosses within the electronic market's quotes will continue to be conducted as they have traditionally.

### **Locked or Crossed Markets**

Internally locked or crossed quotes trade immediately with orders or other quotes on NYSE Arca when executions are possible. The system will not prevent Market Maker quotes from trading with orders or other Market Maker quotes. NYSE Arca posts and disseminates quotes that lock or cross the quotes of other options exchanges. Individual market makers are responsible for taking appropriate actions to avoid locking or crossing other exchange's markets as required by Linkage rules.

### **Crossing**

Four manual crossing scenarios are available: Non Facilitation, Facilitation, Solicitation and Mid-point. All scenarios require that the Agency Order is executed at a price equal to or better than the NBBO, and the Floor Broker may not trade through any orders on the Book.

### **Non-Facilitation (Regular Way) Crosses**

A Floor Broker who is holding orders to buy and sell the same option contract may cross such orders, provided that he/she proceeds in the following manner:

- (1) Both orders must be entered into The Electronic Order Capture system (EOC) or the Electronic Tablet.
- (2) Request bids and offers and make the trading crowd and the Trading Official aware of the request for a market via open outcry.
- (3) Bid above the highest bid or offer below the lowest offer in the crowd by at least the MPV and give a corresponding offer at the same price or at prices differing by the MPV.
- (4) If such higher bid or lower offer is not taken by members of the trading crowd, the Floor Broker may, after satisfying any orders that may be at the same price in the consolidated book, cross the orders (or any part remaining unexecuted) by announcing it via open outcry.

### **Facilitation Crosses**

Floor Brokers holding a customer order (“Agency Order”) and an order of 50 contracts or more for the proprietary account of an OTP Holder/Firm or an organization under common control with a Market Maker that is representing that customer (the “Facilitation Order”) may cross those orders. The proprietary account must be willing to facilitate the entire size of the Agency Order.

- (1) Both the Facilitation Order and the Agency Order must be entered into EOC or the Electronic Tablet.
- (2) The Agency Order must be represented in the trading crowd by public outcry. Members of the trading crowd will be given a reasonable time to respond.
- (3) If there are members of the trading crowd willing to execute the *entire size* of the Agency Order at an improved price, the Facilitation Order may participate in at least 40% of the Agency Order at the improved price. Thereafter, the trading crowd members may participate in the balance of the Agency Order based upon price-time priority.
- (4) If there is not sufficient size in the trading crowd to execute the entire Agency Order at an improved price, the Agency Order will be executed against the Facilitation Order.
- (5) If, at the time of execution, there is sufficient size to execute the entire Agency Order at an improved price, the Agency Order will be executed at the improved price. Customer orders will be executed first, followed by Non-Customer orders in time priority.

The availability of the Facilitation Procedure does not alter an OTP Firm’s best execution duty. Should a firm cancel a Facilitation Order when there was a superior price available on the Exchange and subsequently re-enter the Facilitation Order at the same price after the better price was no longer available, there would be a presumption that the Firm did so to avoid execution of its Customer Order at the better price.

### **Solicited Order Crosses**

A Floor Broker who holds an order for a customer of an OTP Holder or OTP Firm (the “Original Order”) may solicit an opposing side for such order (the “Solicited Order”). The Solicited Order shall be entitled to priority of execution on the Original Order, provided the following criteria are met.

- (1) The Original Order shall first be represented in the trading crowd by public outcry. The Original Order must remain active in the trading crowd during the entire solicitation process. If a Floor Broker announces an original order in the trading crowd, and then steps out of the trading crowd to solicit interest, but continues to be within hearing distance, the Floor Broker need not re-announce the original order upon returning to the trading crowd.
- (2) Members of the trading crowd will be given a reasonable time to respond with the prices and sizes at which they would be willing to participate in the execution of the Original Order.
- (3) If at the time of execution there is insufficient size to execute the entire Original Order at an improved price (or prices), the Original Order will be executed against the Solicited Order at the proposed execution price
- (4) If at the time of execution there is sufficient size on the Exchange to execute the entire Original Order at an improved price (or prices), the Original Order will be executed at the improved price(s), provided the execution price is equal to or better than the best bid or offer on the Exchange, and the Solicited Order will be cancelled. The aggregate size of all orders and quotes at each price will be used to determine whether the entire Original Order can be executed at an improved price (or prices).
- (5) When executing the Original Order against bids or offers in accordance with paragraph (3) above, or at an improved price in accordance with paragraph (4) above, Customer orders will be executed first. Non-Customers participate in the execution of the Original Order based upon time priority as determined by the Floor Broker.
- (6) “Solicited” must be entered in the “Optional Data” field of the EOC or the Electronic Tablet.

### **Mid-Point Cross**

Orders to buy or sell an option contract(s) may carry instructions to be executed at the mid-point between the electronically disseminated bid and offer in the subject option series (“Mid-Point Order”). A Floor Broker may cross the Mid-Point Order with a matching order provided that the Floor Broker proceeds in a manner consistent with sections (a), (b), or (c) of this rule, as appropriate.

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## Opening Auction

At 3:30 a.m. Eastern Time, the system will begin accepting quotes and orders for inclusion in the opening auction process. The opening auction is a process whereby trading is initiated in each series. Contingency Orders will not participate in the Auction Process. Any eligible open orders residing in the Book from the previous trading session (GTC's) will be included in the Opening Auction. After the primary market for the underlying security disseminates the opening trade and a logical bid/ask market, the related option series will be opened automatically based on the following:

1. Time is equal to or greater than 9:30 a.m. Eastern Time.
2. At least one legal width NYSE Arca Market Maker quote that has made a round trip to OPRA or an away exchange market quote is present and includes an offer.

Once these requirements have been met, the system will determine the price at which a particular option series will be opened. For the purposes of auction only, orders will have priority over Market Maker quotes. Orders and quotes in the system will be matched up with one another based on price-time priority

To determine the opening price in a series, upon receipt of the first consolidated trade of the underlying security, the system will check for an OPRA NBBO market or an NYSE Arca BBO. If OPRA NBBO market is present, NYSE Arca will base the opening auction price on the better of the OPRA NBBO market or the internal NYSE Arca BBO. NYSE Arca will generate an opening trade if possible or open a series on the quoted market. NYSE Arca then will send the BBO quote to OPRA.

The opening price is determined as the price at which the most volume can be traded, within the auction parameter.

1. The opening prices must be within a configurable parameter based on:  
The Best Bid (MM quotes only) or National Best Bid  
The Best Offer (MM quotes only) or National Best Offer
2. In the case of crossed markets on NYSE Arca and no OPRA, parameter to either side of *the inverted market* will be used. e.g. 1.20 - 1.00 yields parameter based on 1.20 for buy imbalances and 1.00 for sell imbalances. If no auction occurs, no opening trade will be reported to OPRA.

For cases when no buy or sell imbalance exists, the opening price of a series will be the price at which the greatest number of contracts will trade at or nearest to the midpoint of the initial NBBO disseminated by OPRA, if any, or the midpoint of the best quoted bids and offers in the Book. The same process will be followed to reopen an option class after a trading halt.

Unmatched orders and Marker Maker quotes that are marketable against the initial NBBO will “sweep” through the Book and be executed in price/time priority. If the best price is at an away Market Center(s), orders will be routed away to the relevant Market Center(s). Orders in the Book that were not executed during the Auction Process will be eligible for the Core Trading Session immediately after the conclusion of the Auction Process.

# 6

# Option Trading Permits

## Introduction

Trading rights are granted through Options Trading Permits (OTPs); market participants are not required to purchase or lease seats. These permits entitle holders of OTPs to trade options on the options trading facilities of the Exchange, including the electronic platform and the physical trading floor. The NYSE Arca platform provides for four types of Market Participants: Lead Market Makers, Market Makers, Authorized Traders and Order Flow Providers.

### **Market Makers**

A Market Maker is an OTP Holder or OTP Firm registered with the Exchange for the purpose of submitting quotes electronically and making transactions as a dealer-specialist. Market Makers can operate on or off the exchange trading floor.

### **Lead Market Makers**

Lead Market Makers (“LMMs”) are approved Market Makers deemed qualified by the Exchange for acting in such capacity. LMMs quoting obligations are more stringent than Market Makers and they receive participation guarantees in some cases. Lead Market Makers can operate on or off the exchange trading floor and perform Floor Broker functions if specific requirements are met. Any OTP Holder/Firm registered as a Market Maker may apply to become a LMM. LMMs must maintain specified cash or liquid assets based upon the number of issues traded.

### **Market Maker Authorized Traders**

Market Maker Authorized Traders (MMATs) shall be an individual OTP Holder or officer, partner, employee or associated person of the OTP firm authorized to enter quotes and orders on the Exchange for the account of a registered Market Maker firm. MMATs must register with the Exchange and pass the appropriate Market Maker exam.

### **Order Flow Providers**

If your firm currently enters option orders on the exchange, no additional OTPs or changes are required. Current ETP Holders on the Arca equity platform that want to start entering option orders, must either acquire an OTP or become a “Sponsored Participant” by entering into a agreement with an approved OTP Holder (“Sponsoring OTP”). Sponsoring OTP Holders are broker-dealers that have been designated by a Sponsored Participant to execute, clear and settle transactions on NYSE Arca on their behalf. Authorized Traders (ATs) are individuals designated by the OTP Holders and/or Sponsored Participants to enter orders on their behalf.

## Application Procedures

Every individual or organization applying to become the holder of an OTP must complete an Exchange prescribed application. To expedite the process, applications and forms may be remitted via fax to Client Registration Services at (312) 960-9647. Original documents must also be forwarded to the following address:

NYSE Arca, Inc.  
c/o Client Registration Services  
115 Sansome Street, 3rd Floor  
San Francisco, CA 94104

If you have questions regarding the application process, please e-mail your questions to [crs@nyse.com](mailto:crs@nyse.com).

Applicants must complete General Application Forms 1 and 2, as applicable. Other forms listed may be completed based on the applicant's organizational structure and intentions in trading on the facilities of the Exchange.

### General Application Forms

Form 1 - Nominee Application  
Individuals applying as a Nominee of an OTP Firm

Form 2 - OTP Firm Application (Partnership, Corporation, Limited Liability Company, Sole Proprietor) Broker-Dealers (Corporations, LLCs, Partnerships, or Sole Proprietors) applying for an OTP at NYSE Arca.

### SEC Forms

Form BD  
The Form BD is the Uniform Application for Broker-Dealer Registration. Broker-Dealers must file this form to register with the SEC, self-regulatory organizations (SROs) and jurisdictions through the Central Registration Depository (CRD) system, operated by the NASD.

Form U-4  
The Form U-4 is the Uniform Application for Securities Industry Registration or Transfer. Representatives of broker-dealers, investment advisers, or issuers of securities must use this form to become registered in the appropriate jurisdictions and/or SROs. A full Form U-4 is required when filing for the first time. An applicant is under a continuing obligation to update information on their Form U-4 as changes occur.

### Market Maker Application & Forms

Form 4 – Market Maker Initial Registration Application

The Market Maker Initial Registration Application provides a Market Maker applicant with a designation of 1 OTP, covering up to 100 issues. If additional option issues are desired, Additional Issue Appointment Forms may be submitted with the Market Maker Initial Registration Application. Market Makers may select from among any option issue traded on the exchange.

#### Form 5 – Market Maker Additional Issue Appointments Form

This form provides the MM with additional issue designations based on number of OTPs held.

#### Form 6 - Market Maker Change of Issues Form

A Market Maker may change and/or add option issues in primary appointments at any time, subject to Exchange approval. Three-day notice is required to drop an issue.

#### Form 7 - Market Maker Issue Relinquishment Form

A Market Maker may withdraw from trading an option issue that is within their primary appointment by providing NYSE Arca with a three-day written notice of such withdrawal.

#### Form 8 - Lead Market Maker Application

This form supports applications from approved OTP Firms seeking Lead Market Maker status

### **Broker Dealers**

Broker-dealer applicants must file a hard-copy version of the Form BD to the Securities and Exchange Commission. Once the initial filing is received, all pertinent broker-dealer information will be entered in the Central Registration Depository ("Web-CRD"). The Web-CRD is a database operated by the National Association of Securities Dealers for the purpose of maintaining registration information regarding broker-dealers for use by the Securities and Exchange Commission, self-regulatory organizations and state securities regulators. In order to file subsequent amendments to the Form BD, broker-dealers must complete a User Account Acknowledgment Form (UAAF) designating a representative as an Account Administrator. Once entitlement has been established for the Account Administrator, they will be responsible for accessing the broker-dealer account on Web-CRD and filing subsequent amendments to their Form BD. The account administrator will serve as the contact person between the broker-dealer and Web-CRD. For the Initial Registration, mail your Form BD to the following Address:

NASD Central Registration Depository  
P.O. Box 9495  
Gaithersburg, MD 20898-9495

### **Orientation and Testing**

Market Maker Authorized Traders and Authorized Traders are required to pass either the Series 7 or Series 44 examination. The Series 44 is required for Market Makers; the Series 7 is required for order entry firms. Both tests are multiple choice and applicants must achieve a score of 75% or higher on the Series 44 examination and/or 70% or higher on the Series 7 examination to pass. Once the exchange

has received the application and Options Orientation Fee, the applicant will be sent a Training Manual. The test is administered at NASD offices nationwide.

## **Exchange Conduct**

OTP Holders/Firms and their employees shall not engage in conduct inconsistent with the maintenance of a fair and orderly market or in a manner apt to impair public confidence in the operations of NYSE Arca. The Exchange will periodically conduct an evaluation of Market Makers to determine whether they have fulfilled performance standards relating to, among other things, quality of markets, competition among Market Makers, observance of ethical standards, supervision of employees and administrative factors. If the Exchange finds any failure by a Market Maker to meet minimum performance standards, the Exchange may

- Restrict appointments to additional option issues
- Suspend or terminate appointment in one or more option issues
- Suspend, terminate or restrict Market Maker's registration in general

If the Market Maker's appointment in an option issue or issues has been terminated due to failure to meet performance standards, the Market Maker may not be re-appointed in that option issue or issues for a period not to exceed six months.

The Exchange reserves the right to suspend or withdraw registration of an MMAT if the designated person has caused the market maker to fail to comply with the Rules of the Exchange or if the Exchange believes it is in the best interest of fair and orderly markets. If the Exchange suspends the registration of a person designated as an MMAT, the market maker must not allow the person to submit quotes and orders into NYSE Arca.

# 7

## Connectivity

NYSE Arca offers a variety of application and connectivity options for Market Makers and Order Flow Providers.

### Networking Options

- Managed Solution/Dedicated Line - Connecting to NYSE Arca using a dedicated line provides a dependable, robust and effective way to access the Market Maker API, FIX Gateway, ArcaBook market data feeds or the RealTick interface. The NYSE Arca provisioning group can provide a quote and the forms required to order the connection. Please contact [provisioning@nyse.com](mailto:provisioning@nyse.com) or call (888) 689-7739 option 3 for more information.
- Extranet Providers - NYSE Arca currently offers connectivity through Radianz, TNS and Sector (NYSE Arca Weehawken Data Center only). Please contact your local representative for costs and requirements. If you need a contact at either of these firms, please contact [provisioning@nyse.com](mailto:provisioning@nyse.com) or call (888) 689-7739 option 3.
- NYSE Arca Hosting/Co-Location - Hosting services are available at a state-of-the-art data center in New Jersey. This facility offers cabinet housing for multiple servers, conditioned and back up power, multi-layered physical security and fire suppression systems. For more information about Hosting services, please contact [Clientservices@nyse.com](mailto:Clientservices@nyse.com) or call (888) 689-7739.
- My Tech Solutions - MyTech Solutions will host a West Coast Point of Presence (POP) for execution platforms that deliver quotes and trades to the NYSE Arca execution systems in New Jersey. The MyTech POP will also include access to multiple Market Data services and clearing firms as well as remote connectivity via an Internet VPN. Contact Keith LaFaver for more information and pricing. He can be reached at 415-962-3540 or 800-790-1383 or [keith@mytech-solutions.com](mailto:keith@mytech-solutions.com).

### Market Maker Direct API

The NYSE Arca Market Maker Direct API allows users to make markets on the Exchange in assigned classes through quote messaging. The API uses fixed length messages and variable-length bulk messages over the TCP IP protocol with binary numeric and fixed length ASCII fields. The API

provides receipt of execution reports against quotes and receipt of market-maker-only administrative messages. The API provides execution reports for all electronic trades and also supports Drop Copy duplicate execution reports to parties assigned by market maker firms. Trades that are executed manually on the trading floor (complex orders, crosses, phone orders, strategy trades) are entered into the exchanges Electronic Order Capture system prior to representation in the trading crowd. These executions are delivered via Online Extract.

Market Makers may also choose to receive the ArcaBook. This multicast data feed disseminates top and depth of the limit order book and auction process data including imbalance and pricing information. This information can be obtained through a direct data feed from NYSE Arca, online via vendors. In addition, end of day ArcaBook information can be obtained through the Delayed (Historical) Market Information subscription. For more information, visit <http://www.nysedata.com/ArcaBook>.

Market Makers wishing to enter orders should use FIX, described below.

## Order Entry

**FIX** - The FIX order entry host application runs on an NYSE Arca proprietary protocol. NYSE Arca's fully automated certification platform guides users through all the required test scripts. To begin the process, call the FIX connectivity team at (888) 689-7739 or email at [fix@nyse.com](mailto:fix@nyse.com). For more information, visit [www.nyse.com/connectivity](http://www.nyse.com/connectivity).

## Testing Procedures

**Certification** - A fully automated, web-based certification platform is available for clients to certify their applications on the NYSE Arca options and equities platforms. Market Maker Direct and FIX order entry clients must certify prior to trading on NYSE Arca .

**UAT (User Acceptance Testing)** - This production-like system runs on test data and is available for testing purposes only. The environment consists of Market Maker Direct, FIX order entry, ArcaBook, and drop copy applications.

To request logons and instructions please contact the FIX hotline at 888-689-7739.

## Specifications

Specifications for all Market Maker APIs and order entry protocols are available on the NYSE website at [www.nyse.com/connectivity](http://www.nyse.com/connectivity).

# 8

## Rates and Charges

<b>One Time Costs</b>	Orientation/Exam fee	\$1,000
<b>Monthly Costs</b>	Market Maker fees (per OTP)	\$4,000
	Order sending firm	\$1,000

### Transaction Fees (per contract)

	Standard Executions <sup>1</sup>	Electronic Executions in Penny Pilot Issues <sup>2</sup>	
		<u>Post Liquidity</u>	<u>Take Liquidity</u>
LMM <sup>3</sup>	\$0.09	-\$0.30	\$0.50
NYSE Arca Market Maker	\$0.16	-\$0.30	\$0.50
BD/Firm Electronic	\$0.50	-\$0.25	\$0.50
BD/Firm Manual	\$0.26	N/A	N/A
Customer Electronic	\$0.00	-\$0.25	\$0.50
Customer Manual	\$0.00	N/A	N/A
Firm Facilitation <sup>4</sup>	\$0.15	-\$0.25	\$0.50

Royalty Fees	Issue	Per contract rate
	ONEQ	\$0.12
	XLFX, XLK, XLV	\$0.10

**Marketing Charges** The charge for equity options is \$.65 per contract side and applies when a NYSE Arca Market Maker trades against a public customer order. The charge for SPY it is \$1.00 per contract side. The fee applies to all Market Maker transactions (excluding Market Maker to Market Maker). There is no per trade cap.

<sup>1</sup> Standard Executions include all executions in non-Penny Pilot issues and all manual executions in Penny Pilot issues.

<sup>2</sup> Standard Execution transaction fees do not apply to electronic executions in Penny Pilot issues. Trading interest that adds liquidity to the book receives a credit upon execution. Trading interest that takes liquidity pays a debit.

<sup>3</sup> LMMs are subject to LMM Rights Fee ranging from \$150/mo. to \$3000/mo. per issue.

<sup>4</sup> The Firm fee applies to any transaction involving a proprietary trading account of an OTP Firm, that has a customer of that OTP Firm on the contra side of the transaction.

# 9

## Definitions

**BBO** - The best bid or offer on NYSE Arca.

**Core Trading Hours** - The regular trading hours for business set forth in the rules of the primary markets underlying those option classes listed on the Exchange; provided, however, that transactions may be effected on the Exchange until the regular time set for the normal close of trading in the primary markets with respect to equity option classes and ETF option classes, and 15 minutes after the regular time set for the normal close of trading in the primary markets with respect to index option classes, or such other hours as may be determined by the Exchange from time to time.

**Customer** - The term “Customer” shall not include a broker or dealer.

**Lead Market Maker (LMM)** - An individual or entity that has been deemed qualified by the Exchange for the purpose of making transactions on the Exchange in accordance with Rule 6.82. Each LMM must be registered with the Exchange as a Market Maker. Any OTP Holder or OTP Firm registered as a Market Maker with the Exchange is eligible to be qualified as an LMM.

**Market Center** - A national securities exchange that has qualified for participation in the Options Clearing Corporation pursuant to the provisions of the rules of the Options Clearing Corporation.

**Marketable** - For a Limit Order, the price matches or crosses the NBBO on the other side of the market. Market orders are always considered marketable.

**Market Maker** - An OTP Holder that acts as a Market Maker pursuant to Rule 6.32A

**Minimum Price Variation (MPV)** - The minimum trading increment as established by the exchange and pursuant to Rule 6.72. Currently \$.05 cents for series trading below \$3.00 and \$.10 for series trading above \$3.00.

**NBBO** - The national best bid or offer.

**NOW Orders** - An IOC order that sweeps all markets at the NBBO. These orders do not wait in the book during routing, the balance is immediately canceled back to the user.

**NOW Recipient** - Any Market Center (1) with which the Exchange maintains an electronic linkage, and (2) that provides instantaneous responses to NOW Orders routed from NYSE Arca. The Exchange

shall designate from time to time those Market Centers that qualify as NOW Recipients and shall periodically publish such information via its website.

**NYSE Arca Book** - The NYSE Arca's electronic file of orders and quotes, which contains all of the orders in each of the Display Order and Working Order Processes and all of the Market Makers' quotes in the Display Order Process.

**Sponsored Participant** - A person that has entered into a sponsorship arrangement with a Sponsoring OTP Holder pursuant to Rule 6.2A.

**Sponsoring OTP Holder** - A broker-dealer that has been issued an OTP by the Exchange who has been designated by a Sponsored Participant to execute, clear and settle transactions executed on NYSE Arca. The Sponsoring OTP Holder shall be either (i) a clearing firm with membership in a clearing agency registered with the Commission that maintains facilities through which transactions may be cleared or (ii) a correspondent firm with a clearing arrangement with any such clearing firm.

**Sponsorship Provisions** - The term "Sponsorship Provisions" shall mean the provisions set forth in Rule 6.2A(c). For a Sponsored Participant to obtain authorized access to NYSE Arca, the Sponsored Participant and its Sponsoring OTP Holder must enter into an agreement that incorporates the Sponsorship Provisions.

**User** - Any OTP Holder or Sponsored Participant that is authorized to obtain access to NYSE Arca pursuant to Rule 6.2A.