EXHIBIT 5

New text is underlined; deleted text is in brackets.

Nasdaq PHLX LLC Rules ***** Options Rules ***** Options 2 Options Market Participants *****

Section 6. Market Maker Orders

(a) Market Makers [and Lead Market Makers] may enter all order types defined in Options 3, Section 7(b) and 14 in the options classes to which they are appointed and non-appointed, except for [Market Orders as provided in Options 3, Section 7(b)(1), Stop Orders as provided in Options 3, Section 7(b)(4), All-or-None Orders as provided in Options 3, Section 7(b)(5), Directed Orders as provided for in Options 2, Section 10, and Public Customer-to-Public] Customer Cross Orders subject to Options 3, Section <u>12(a)[13(a) and (f)]</u> and Reserve Orders subject to Options 3, Section 7(g).

(b) The total number of contracts executed during a quarter by a Market Maker and Lead Market Maker in options series to which it is not appointed may not exceed twenty-five percent (25%) of the total number of contracts executed by the Market Maker and Lead Market Maker in options series.

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Options 3 Options Trading Rules

Section 4. Entry and Display of Quotes

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(b) Quotes are subject to the following requirements and conditions:

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(6) **Trade-Through Compliance and Locked or Crossed Markets**. A quote will not be executed at a price that trades through another market or displayed at a price that would lock or cross another market. If, at the time of entry, a quote would cause a locked or crossed market violation or would cause a trade-through violation, it will be re-priced to the

current national best offer (for bids) or the current national best bid (for offers) as nondisplayed and displayed at one minimum price variance above (for offers) or below (for bids) the national best price, or immediately cancelled, as configured by the member organization.

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(8) Quotes submitted to the System are subject to the following: minimum increments provided for in Options 3, Section 3, and risk protections provided for in Options 3, Section 15[and Quote Exhaust provided for in Options 3, Section 6].

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Section 6. [Firm Quotations]Collection and Dissemination of Quotes

(a) Each Market Maker shall communicate to the Exchange its bid and offers in accordance with the requirements of Rule 602 of Regulation NMS under the Exchange Act and the Rules of the Exchange.

(b) The Exchange will disseminate to quotation vendors the highest bid and the lowest offer, and the aggregate quotation size associated therewith that is available to Public Customer Orders, in accordance with the requirements of Rule 602 of Regulation NMS under the Exchange Act.

(c) Unusual Market Conditions.

(1) An Exchange official designated by the Board shall have the power to determine that the level of trading activities or the existence of unusual market conditions is such that the Exchange is incapable of collecting, processing, and making available to quotation vendors the data for the option in a manner that accurately reflects the current state of the market on the Exchange. Upon making such a determination, the Exchange shall designate the market in such option to be "fast." When a market for an option is declared fast, the Exchange will provide notice that its quotations are not firm by appending an appropriate indicator to its quotations.

(2) If a market is declared fast, designated Exchange officials shall have the power to: (i) direct that one or more trading rotations be employed pursuant to Options 3, Section 8; (ii) suspend the minimum size requirement of Options 2, Section 5(c)(1); or (iii) take such other actions as are deemed in the interest of maintaining a fair and orderly market.

(3) The Exchange will monitor the activity or conditions that caused a fast market to be declared, and a designated Exchange official shall review the condition of such market at least every thirty (30) minutes. Regular trading procedures shall be resumed by the Exchange when a designated Exchange official determines that the conditions supporting a

fast market declaration no longer exist. The Exchange will provide notice that its quotations are once again firm by removing the indicator from its quotations.

(4) If the conditions supporting a fast market declaration cannot be managed utilizing one or more of the procedures described above, then a designated Exchange official shall halt trading in the class or classes so affected.

(a) Definitions.

- (1) The term "disseminated price" shall mean the bid (or offer) price for an options series that is made available by the Exchange and displayed by a quotation vendor on a terminal or other display device.
- (2) The term "disseminated size" shall mean with respect to the disseminated price for any quoted options series:
 - (A) Except as provided in sub-paragraph (a)(ii)(C)(3) below, at least the sum of the size associated with Limit Orders, Lead Market Makers' quotations, SQTs' quotations, and RSQTs' (as defined in Options 1, Sections 1(b)(54) and (49), respectively) quotations.

(B)

- (1) If an SQT or RSQT's (other than a Directed SQT or RSQT) quotation size in a particular series in a Streaming Quote Option is exhausted or removed by the Automated Quotation Adjustments pursuant to Options 3, Section 15(c)(2), such SQT or RSQT's quotation shall be deleted from the Exchange's disseminated quotation until the time the SQT or RSQT revises his/her quotation.
- (2) Quote Exhaust. Respecting options that are traded on the System, Quote Exhaust occurs when the Exchange's disseminated market at a particular price level includes a quote, and such market is exhausted by an inbound contra-side quote or order ("initiating quote or order"), and following such exhaustion, contracts remain to be executed from the initiating quote or order through the initial execution price. The initial execution price that gives rise to Quote Exhaust is known as the "reference price." Under Quote Exhaust, any order volume that is routed to away markets will be marked as an ISO.
 - (a) Quote Exhaust Timer. When a Quote Exhaust occurs, the System will initiate a "Quote Exhaust Timer" that will apply to all options traded on the System, not to exceed one second, during which any participant (including any participant(s) whose size was exhausted) may submit quotes, sweeps or orders at any price level.

- (b) During the Quote Exhaust Timer, the Exchange will disseminate the reference price for the remaining size, provided that such price does not lock an away market, in which case, the Exchange will disseminate a bid and offer that is one Minimum Price Variation ("MPV") from the away market price. The Exchange will disseminate, on the opposite side of the market from remaining unexecuted contracts: (i) a non-firm bid for the price and size of the next available bid(s) on the Exchange if the remaining size is a seller, or (ii) a nonfirm offer for the price and size of the next available offer(s) on the Exchange if the remaining size is a buyer.
- If the remaining contracts in the initiating quote or order are either traded or cancelled during the Quote Exhaust Timer, the Quote Exhaust Timer will be terminated and normal trading will resume.
- (c) New Interest on the Opposite Side of the Market. If the Exchange receives an order, quote or sweep on the opposite side of the market from the initiating quote or order during the Quote Exhaust Timer that locks or crosses the reference price at any time during the Quote Exhaust Timer, it will execute immediately against the initiating quote or order at the reference price. If the initiating quote or order that caused the Quote Exhaust is exhausted, the Quote Exhaust Timer will be terminated. With respect to any order, quote or order during the Quote Exhaust Timer that is inferior to the reference price, the system will place any non-IOC order onto the book. Such non-IOC order on the book will be included in the first PBBO calculation following the end of the Quote Exhaust Timer. All non-marketable sweeps and IOC orders will be cancelled immediately if not executed and will not participate in the Quote Exhaust process.
- (d) New Interest on the Same Side of the Market. If the Exchange receives an order, quote or sweep on the same side of the market as the initiating quote or order during the Quote Exhaust Timer, the System will cancel any such sweep or IOC order. If such new quote or order, other than an IOC order, is a market or marketable Limit Order or marketable quote (i.e., priced at or through the reference price) the System will display it at the reference price, with a disseminated size that is the sum of such order and/or quote plus the remaining contracts in the initiating order or quote.
- (e) End of the Quote Exhaust Timer. At the end of the Quote Exhaust Timer, if there are still unexecuted contracts remaining in the initiating quote or order or any new interest on the same side of the market, the System will calculate a new Phlx Best Bid/Offer ("PBBO"). The PBBO will include the remaining unexecuted portion of the initiating quote or order plus any new interest received on the same side of the market at the reference price, or if locking or

crossing the ABBO, at one minimum trading increment away from the ABBO, for the full available size. The other side of the PBBO will be the actual Exchange interest at the best price.

- The System will conduct an Acceptable Range price "test" (as described below) to determine whether there is a valid next available price at which the System may execute the remaining unexecuted contracts.
- (f) Acceptable Range Test. The System will conduct an Acceptable Range Test to determine if the next available price on the Exchange is within an Acceptable Range. The System will calculate the Acceptable Range for the next available price by taking the reference price, plus or minus a value to be determined by the Exchange. (*i.e.*, the reference price - (x) for sell orders and the reference price + (x) for buy orders).
- (g) Quote Exhaust Resolution. The System will first determine whether to trade at the next available Phlx price by comparing it to the Acceptable Range price (defined as, with respect to an initiating buy order, the highest price of the Acceptable Range, and, with respect to an initiating sell order, the lowest price of the Acceptable Range) and the Away Best Bid/Offer ("ABBO") price to establish a "Best Price."
 - (1) With respect to an initiating buy order, the Best Price is the lowest price of: (A) the next available Exchange offer; (B) the ABBO offer; or (C) the Acceptable Range price on the offer side of the market. With respect to an initiating sell order, the Best Price is the highest price of (D) the next available Exchange bid; (E) the ABBO bid; or (F) the Acceptable Range price on the bid side of the market.
 - (2) Initiating quote or order does not lock or cross Best Price. If the price of the initiating quote or order (if a Limit Order) does not lock or cross the Best Price, the System will post the remaining portion of the initiating quote or order at its limit price and normal trading will resume.
 - (3) Initiating quote or order locks Best Price. If the initiating quote or order locks the Best Price, the system will execute, route if a routable order, and/or post, the initiating quote or order as follows:
 - (A) If the Best Price is the Exchange's next available price:
 - (1) standing alone, the system will execute the initiating quote or order at the Exchange's next available price up to the Exchange's disseminated size

- (2) and is equal to the ABBO price, any remaining unexecuted routable order volume from the execution on the Exchange will be routed away. After such routing, any remaining unexecuted contracts will be posted on the Exchange at the ABBO price;
- (3) and is equal to the Acceptable Range price, any remaining unexecuted contracts from the execution on the Exchange will be posted at the Acceptable Range price;
- (4) and is equal to both the ABBO price and the Acceptable Range price, any remaining order volume from the execution on the Exchange will be routed away and, after such routing, any remaining unexecuted contracts will be posted on the Exchange at the Acceptable Range price.
- (B) If the Best Price is the ABBO where the ABBO is not equal to the next Phlx price:
 - (1) standing alone, the initiating order will be routed away up to the size of the ABBO and, after routing, any remaining unexecuted contracts from the initiating order will be posted on the Exchange at the ABBO price;
 - (2) and is equal to the Acceptable Range price, the initiating order will be routed away and, after such routing, any remaining unexecuted contracts will be posted on the Exchange at the ABBO price;
 - (3) if the Best Price is the Acceptable Range Price standing alone, the initiating quote or order will be posted on the Exchange at the Acceptable Range Price.
- (4) Initiating quote or order crosses Best Price. If the initiating quote or order erosses the Best Price, the System will execute, route order volume, and/or post the initiating quote or order as set forth below:
 - (A) If the Best Price is the Exchange's next available price
 - (1) standing alone, the System will execute the initiating quote or order at the Exchange's next available price up to the Exchange's disseminated size;
 - (2) and is equal to the ABBO price, the System will execute the initiating quote or order at the Exchange's next available price up to the Exchange's disseminated size, and any remaining order volume from the execution on the Exchange will be routed away to the ABBO market(s);

- (3) and is equal to the Acceptable Range price, the System will execute the initiating quote or order at the Exchange's next available price up to the Exchange's disseminated size, and any remaining volume from the execution on the Exchange will be posted at the Acceptable Range price for the remaining size, for a period of time not to exceed ten seconds and then cancelled after such period of time has elapsed, unless the member that submitted the original order has instructed the Exchange in writing to re-enter the remaining size, in which case the remaining size will be automatically submitted as a new order. During this up to ten second period, the System will disseminate on the opposite side of the market from remaining unexecuted contracts: (i) a non-firm bid for the price and size of the next available bid(s) on the Exchange if the remaining size is a seller, or (ii) a non-firm offer for the price and size of the next available bid(s) on the Exchange if a buyer.
- (4) and is also equal to both the ABBO price and the Acceptable Range price, any remainder order volume from the execution on the Exchange will be routed away, and if after such routing, there still remain unexecuted contracts, the unexecuted contracts would post to the Order Book at their Limit Order price, with a new timestamp, subject to order entry price checks.
- (B) If the Best Price is the ABBO:
 - (1) standing alone, the initiating order will be routed away to the ABBO market(s);
 - (2) and is equal to the Acceptable Range price, the initiating order will be routed away and if after routing there remain unexecuted contracts, the remainder of the order will be posted on the Phlx at the ABBO price for a period not to exceed ten seconds, and cancelled after this time has elapsed, unless the member that submitted the original order has instructed the Exchange in writing to re-enter the remaining size, in which case the remaining size will be automatically submitted as a new order. During this period, the System will disseminate, on the opposite side of the market from remaining unexecuted contracts: (i) a non-firm bid for the price and size of the next available bid(s) on the Exchange if the remaining size is a seller, or (ii) a non-firm offer for the price and size of the next available offer(s) on the Exchange if the remaining size is a buyer.
- (C) If the Best Price is the Acceptable Range Price standing alone, the initiating quote or order will be posted on the Exchange at the Acceptable Range Price for a period of time not to exceed ten seconds, and cancelled

after this time has elapsed, unless the member that submitted the original order has instructed the Exchange in writing to re-enter the remaining size, in which case the remaining size will be automatically submitted as a new order. During this up to ten second period, the System will disseminate, on the opposite side of the market from remaining unexecuted contracts: (i) a non-firm bid for the price and size of the next available bid(s) on the Exchange if the remaining size is a seller, or (ii) a non-firm offer for the price and size of the next available offer(s) on the Exchange if the remaining size is a buyer.

- (5) Non-routable orders. If the initiating order is non-routable when the order would otherwise be routed according to the process described above, the order will be posted on the Exchange at a price that is one minimum trading increment inferior to the Best Price so as not to lock an away market.
- (6) If, after trading at the Phlx and/or routing, there is a remainder of the initiating order, and such remainder is still marketable, the entire process of evaluating the Best Phlx price and the ABBO will be repeated until: (A) the order size is exhausted, or (B) the order reaches its limit price. If there still remain unexecuted contracts after routing but the order has reached its limit price, the remainder will be posted at the order's limit price, except that, when the limit price crosses the Acceptable Range Price, the remainder will be posted at the Acceptable Range Price for a period of time not to exceed ten seconds. During this up to ten second period, the System will disseminate on the opposite side of the market from remaining unexecuted contracts: (i) a non-firm bid for the price and size of the next available bid(s) on the Exchange if the remaining size is a seller, or (ii) a non-firm offer for the price and size of the next available offer(s) on the Exchange if the remaining size is a buyer. After such time period, the Acceptable Range Price becomes the **Reference Price and Acceptable Trade Range (pursuant to Options 3, Section** 15) is applied to the remaining size of the order.

(3)

- (a) If there are no offers both on the Exchange and on away markets in the affected series, Market Orders to buy in the affected series will be rejected, and an electronic report of such cancellation will be transmitted to the sender.
- (b) If there are no offers on the Exchange and there are offers on away markets in the affected series, Market Orders to buy will be handled pursuant to Exchange Options 5, Section 4.
- (c) If there are no bids or a zero priced bid on the Exchange and there are no bids on away markets in the affected series, the Exchange will disseminate a bid

price of zero, and Market Orders to sell will be handled pursuant to Options 3, Section 10(b).

- (d) If there are no bids or a zero priced bid on the Exchange and there are bids on away markets in the affected series, Market Orders to sell will be handled pursuant to Options 5, Section 4.
- (C) The Exchange shall disseminate an updated bid and offer price, together with the size associated with such bid and offer, when:
 - (1) the Exchange's disseminated bid or offer price increases or decreases;
 - (2) the size associated with the Exchange's disseminated bid or offer decreases; or
 - (3) the size associated with the Exchange's bid (offer) increases by an amount greater than or equal to a percentage (never to exceed 20%) of the size associated with previously disseminated bid (offer). Such percentage, which shall never exceed 20%, shall be determined on an issue-by-issue basis by the Exchange and announced to membership via Exchange circular.
- (3) The term "SEC Quote rule" shall mean rule 602 of Regulation NMS under the Exchange Act, as amended.
- (4) The terms "customer," "responsible broker or dealer," and "specified persons" shall have the meaning set forth in the SEC Quote rule.

(b)

(1) Except as provided in paragraph (c) of this Rule, all quotations made available by the Exchange and displayed by quotation vendors shall be firm for customer and broker-dealer orders at the disseminated price in an amount up to the disseminated size. If the responsible broker or dealer is representing (as agent) a Limit Order, such responsible broker or dealer shall be responsible (as agent) up to the size of such Limit Order, but may be responsible as principal for all or a portion of the excess of the disseminated size over the size of such Limit Order to the extent provided in General 2, Section 17.

(2) In the event an SQT, RSQT or Lead Market Maker in a Streaming Quote Option has electronically submitted on the Exchange bids or offers for a Streaming Quote Option, each such SQT, RSQT or Lead Market Maker member shall be considered a "responsible broker or dealer" for that bid or offer, up to the size associated with such responsible broker or dealer's bid or offer.

(c) The requirements of paragraph (b) or (d) of this Rule shall not apply to displayed quotations: (i) when the level of trading activities or the existence of unusual market conditions is such that the Exchange is incapable of collecting, processing, and making available to quotation vendors the data for a subject security required to be made available pursuant to the SEC Quote Rule in a manner that accurately reflects the current market on the Exchange as determined by an Options Exchange Official; (ii) during a trading rotation; (iii) if any of the circumstances provided in paragraph (c)(3) of the SEC Quote Rule exist; or (iv) on a case by case basis where it is determined that an exemption is warranted for an obvious error in the posting of the disseminated price or disseminated size due to reporter error or system malfunction. The Exchange shall immediately notify all specified persons of such a determination. Regular trading procedures shall be resumed when an Options Exchange Official determines that the conditions supporting that declaration no longer exist. The Exchange shall immediately notify all specified persons of such a determination.

Any exemption granted pursuant to paragraph (c)(iv) shall be in writing and shall set forth the basis upon which the exemption is granted.

(d) If responsible brokers or dealers receive an order to buy or sell a listed option at the disseminated price in an amount greater than the disseminated size, such responsible broker or dealer shall, within thirty (30) seconds of receipt of the order, (i) execute the entire order at the disseminated price (or better), or (ii) execute that portion of the order equal to the disseminated size at the disseminated price (or better), and revise its bid or offer.

Supplementary Material to Options 3, Section 6

.01 For purposes of this Rule, the term "broker-dealer orders" includes orders for the account(s) of market makers on another exchange and Market Makers on the Exchange.

.02 Locked Markets. In the event that an SQT, RSQT, and/or Lead Market Maker's electronically submitted quotations interact with the electronically submitted quotations of other SQTs, RSQTs and/or the Lead Market Maker, the locked quotations will automatically execute against each other in accordance with the allocation algorithm set forth in Options 3, Section 10.

.03 Crossed Markets. The Exchange will not disseminate an internally crossed market (e.g., \$1.10 bid, 1.00 offer). If an SQT, RSQT or Lead Market Maker electronically submits a quotation ("incoming quotation") that would cross an existing quotation ("existing quotation"), the Exchange will change the incoming quotation such that it locks the existing quotation and automatically execute the locked quotations against each other in accordance with the allocation algorithm set forth in Options 3, Section 10.]

Section 7. Types of Orders and Order and Quote Protocols

The Exchange may determine to make certain order types and time-in-force, respectively, available on a class or System basis. <u>Orders may not be unbundled, nor may a firm solicit a customer to unbundle an order for this purpose.</u>

(a) **Market Orders**. A Market Order is an order to buy or sell a stated number of options contracts that is to be executed at the best price obtainable when the order reaches the Exchange. Member organizations can designate that their Market Orders not executed after a pre-established period of time, as established by the Exchange, will be cancelled back to the member organization once an options series has opened for trading. Market Orders on the order book would be immediately cancelled if an options series is halted, provided the member organization designated the cancellation of Market Orders.

(b) Limit Orders. A Limit Order is an order to buy or sell a stated number of options contracts at a specified price or better.

- (1) Marketable Limit Orders. A Marketable Limit Order is a Limit Order to buy (sell) at or above (below) the best offer (bid) on the Exchange.
- (2) **Fill-or-Kill Orders**. A Fill-or-Kill Order is a Limit Order that is to be executed in its entirety as soon as it is received and, if not so executed, treated as cancelled.
- (3) Intermarket Sweep Orders. An Intermarket Sweep Order (ISO) is a Limit Order that meets the requirements of Options 5, Section 1(h). Orders submitted to the Exchange as ISO are not routable and will ignore the ABBO and trade at allowable prices on the Exchange. ISOs must have a TIF designation of IOC. ISOs may not be submitted during the Opening Process pursuant to Options 3, Section 8. ISOs may be entered on the single leg order book or into the Price Improvement Mechanism, pursuant to Supplementary Material .08 to Options 3, Section 13.

(c) All-Or-None Orders. An All-Or-None ("AON") Order is a Limit or Market Order that is to be executed in its entirety or not at all. An AON Order may only be entered as an Immediate-or-Cancel Order. AON Orders will only execute against multiple, aggregated orders if the executions would occur simultaneously. AON Orders may not be submitted during the Opening Process.

(d) **Stop Orders**. A Stop Order is an order that becomes a Market Order when the stop price is elected. A Stop Order to buy is elected when the option is bid or trades on the Exchange at, or above, the specified stop price. A Stop Order to sell is elected when the option is offered or trades on the Exchange at, or below, the specified stop price. A Stop Order shall be cancelled if it is immediately electable upon receipt. A Stop Order shall not be elected by a trade that is reported late or out of sequence or by a Complex Order trading with another Complex Order.

(e) **Stop Limit Orders** A Stop Limit Order is an order that becomes a Limit Order when the stop price is elected. A Stop Limit Order to buy is elected when the option is bid or trades on the

Exchange at, or above, the specified stop price. A Stop Limit Order to sell becomes a sell limit order when the option is offered or trades on the Exchange at, or below, the specified stop price. A Stop Limit Order shall be cancelled if it is immediately electable upon receipt. A Stop Limit Order shall not be elected by a trade that is reported late or out of sequence or by a Complex Order trading with another Complex Order.

(f) **Cancel and Replace Orders**. Cancel and Replace Orders shall mean a single message for the immediate cancellation of a previously received order and the replacement of that order with a new order. If the previously placed order is already filled partially or in its entirety, the replacement order is automatically canceled or reduced by the number of contracts that were executed. The replacement order will retain the priority of the cancelled order, if the order posts to the Order Book, provided the price is not amended or size is not increased. In the case of Reserve Orders, the replacement order will retain the priority of the cancelled order, if the order posts to the Order Book, provided the price is not amended or size (displayed and non-displayed) is not changed. If the replacement portion of a Cancel and Replace Order does not satisfy the System's price or other reasonability checks (e.g. Options 3, Section 15(a)(1) and Options 3, Section 15(a)(2) the existing order shall be cancelled and not replaced.

(g) **Reserve Orders**. A Reserve Order is a limit order that contains both a displayed portion and a non-displayed portion.

- (1) Both the displayed and non-displayed portions of a Reserve Order are available for potential execution against incoming marketable orders. A non-marketable Reserve Order will rest on the order book.
- (2) The displayed portion of a Reserve Order shall be ranked at the specified limit price and the time of order entry.
- (3) The displayed portion of a Reserve Order will trade in accordance with Options 3, Section 10(a)(1)(A) for Public Customer Orders, and Options 3, Section 10(a)(1)(F) for non-Public Customer Orders.
- (4) Reserve Orders may be entered with an instruction for the displayed portion of the order to be refreshed: (A) upon full execution of the displayed portion or upon any partial execution; and (B) up to the initial size of the displayed portion or with a random refresh quantity within a range determined by the member organization.
- (5) When the displayed portion of a Reserve Order is decremented, either in full or in part, it shall be refreshed from the non-displayed portion of the resting Reserve Order. If the displayed portion is refreshed in part, the new displayed portion shall include the previously displayed portion. Upon any refresh, the entire displayed portion shall be ranked at the specified limit price and obtain a new time stamp, i.e., the time that the new displayed portion of the order was refreshed. The new displayed portion will trade in accordance with

Options 3, Section 10(a)(1)(A) for Public Customer Orders, Options 3, Section 10(a)(1)(E) for Market Makers, and Options 3, Section 10(a)(1)(F) for non-Public Customer Orders.

(6) The initial non-displayed portion of a Reserve Order rests on the order book and is ranked based on the specified limit price and time of order entry. Thereafter, non-displayed portions, if any, always obtain the same time stamp as that of the new displayed portion in paragraph (5) above. The non-displayed portion of any Reserve Order is available for execution only after all displayed interest has been executed. The non-displayed portion of any Reserve Order will trade in accordance with Options 3, Section 10(a)(1)(A) for Public Customer Orders, Options 3, Section 10(a)(1)(E) for Market Makers, and Options 3, Section 10(a)(1)(F) for non-Public Customer Orders.

(h) Attributable Orders. An Attributable Order is a market or limit order which displays the user firm ID for purposes of electronic trading on the Exchange. Use of Attributable Orders is voluntary. Attributable Orders may not be available for all Exchange Systems. The Exchange will issue an Options Regulatory Alert specifying the Systems for which the Attributable Order type shall be available.

(1) Directed Orders. A Directed Order is as described in Options 2, Section 10.

(m) Reserved.

(n) Add Liquidity Orders. An Add Liquidity Order is a limit order that is to be executed in whole or in part on the Exchange (i) only after being displayed on the Exchange's limit order book; and (ii) without routing any portion of the order to another market center. Member organizations may specify whether an Add Liquidity Order shall be cancelled or re-priced to the minimum price variation above the national best bid price (for sell orders) or below the national best offer price (for buy orders) if, at the time of entry, the order (i) is executable on the Exchange; or (ii) the order is not executable on the Exchange, but would lock or cross the national best bid or offer. If at the time of entry, an Add Liquidity Order would lock or cross one or more non-displayed orders or quotes on the Exchange, the Add Liquidity Order shall be cancelled or re-priced to the minimum price variation above the best non-displayed bid price (for sell orders) or below the best non-displayed offer price (for buy orders). Notwithstanding the aforementioned, if an Add Liquidity Order would not lock or cross an order or quote on the System but would lock or cross the NBBO, the order will be handled pursuant to Options 3. Section 5(d). An Add Liquidity Order will be ranked in the Exchange's limit order book in accordance with Options 3, Section 10. Add Liquidity Orders may only be submitted when an options series is open for trading.

(o) Reserved.

(p) Reserved.

(q) Reserved.

(r) Reserved.

(s) Reserved.

(t) Reserved.

(u) **Opening Sweep**. An Opening Sweep is a one-sided order entered by a Market Maker through SQF for execution against eligible interest in the System during the Opening Process. This order type is not subject to any protections listed in Options 3, Section 15, except for Automated Quotation Adjustments and Market Wide Risk Protection. The Opening Sweep will only participate in the Opening Process pursuant to Options 3, Section 8(b)(i) and will be cancelled upon the open if not executed.

(w) Reserved.

(x) Reserved.

(y) **PIXL Order**. A PIXL Order is as described in Options 3, Section 13(a).

Supplementary Material to Options 3, Section 7

.02 **Time in Force**. The term "Time in Force" or "TIF" shall mean the period of time that the System will hold an order for potential execution, and shall include:

- (a) **Day**. An order to buy or sell entered with a TIF of "DAY," 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. Day orders may be entered through FIX.
- (b) **Good-Till-Canceled**. An order to buy or sell entered with a TIF of "GTC" remains in force until the order is filled, canceled or the option contract expires; provided, however, that GTC orders will be canceled in the event of a corporate action that results in an adjustment to the terms of an option contract.
- (c) Good-Till-Date. An order to buy or sell entered with a TIF of "GTD," which, if not executed, will be cancelled at the sooner of the end of the expiration date assigned to the order, or the expiration of the series; provided, however, that GTD orders will be canceled in the event of a corporate action that results in an adjustment to the terms of an option contract.
- (d) **Immediate-or-Cancel**. An order entered with a TIF of "IOC" that is to be executed in whole or in part upon receipt. Any portion not so executed is to be treated as cancelled.

(1) Orders entered with a TIF of IOC are not eligible for routing.

(2) IOC orders may be entered through FIX or SQF, provided that an IOC order entered by a Market Maker through the SQF protocol will not be subject to the (A) Order Price Protection, Market Order Spread Protection, and Size Limitation Protection as defined in Options 3, Section 15(a)(1), (a)(2), and (b)(2) respectively, for single leg orders.

(e) **Opening Only**. An Opening Only ("OPG") order is entered with a TIF of "OPG." This order can only be executed in the Opening Process pursuant to Options 3, Section 8. This order type is not subject to any protections listed in Options 3, Section 15, except Size Limitation and Market Wide Risk Protection. Any portion of the order that is not executed during the Opening Process is cancelled. OPG Orders may not route.

[(a) Entry and Display of Orders and Quotes. member organizations may enter orders and quotes into the System as specified below.]

(ii).03 The Exchange offers members the following protocols for entering orders and quotes respectively:

(A) "**Financial Information eXchange**" or "**FIX**" is an interface that allows members and their Sponsored Customers to connect, send, and receive messages related to orders and auction orders and responses to and from the Exchange. Features include the following: (1) execution messages; (2) order messages; and (3) risk protection triggers and cancel notifications; and (4) post trade allocation messages.

(B) "**Specialized Quote Feed**" or "**SQF**" is an interface that allows Lead Market Makers, Streaming Quote Traders ("SQTs") and Remote Streaming Quote Traders ("RSQTs") to connect, send, and receive messages related to quotes, Immediate-or-Cancel Orders, and auction responses into and from the Exchange. Features include the following: (1) options symbol directory messages (e.g., underlying and complex instruments); (2) system event messages (e.g., start of trading hours messages and start of opening); (3) trading action messages (e.g., halts and resumes); (4) execution messages; (5) quote messages; (6) Immediate-or-Cancel Order messages; (7) risk protection triggers and purge notifications; (8) opening imbalance messages; (9) auction notifications; and (10) auction responses. The SQF Purge Interface only receives and notifies of purge requests from the Lead Market Maker, SQT or RSQT. Lead Market Makers, SQTs and RSQTs may only enter interest into SQF in their assigned options series. Immediate-or-Cancel Orders entered into SQF are not subject to the Order Price Protection, the Market Order Spread Protection, or Size Limitation in Options 3, Section 15(a)(1), (a)(2) and (b)(2), respectively.

(C) **Options Floor Based Management System or ("FBMS")** is a component of the System designed to enable members and/or their employees to enter, route and report transactions stemming from options orders received on the Exchange. The FBMS also is designed to establish an electronic audit trail for options orders negotiated, represented and executed by members on the Exchange, to the extent permissible pursuant to Options 8, Section 22(a), such that the audit trail provides an accurate, time-sequenced record of

electronic and other orders, quotations and transactions on the Exchange, beginning with the receipt of an order by the Exchange, and further documenting the life of the order through the process of execution, partial execution, or cancellation of that order. The features of FBMS are described in Options 8, Sections 28(e) and 29. In addition, a non-member or member may utilize an FBMS FIX interface to create and send an order into FBMS to be represented by a Floor Broker for execution.

.04 Routing Strategies. Orders may be entered on the Exchange with a routing strategy of FIND or SRCH, or, in the alternative, an order may be marked as Do-Not-Route ("DNR") as provided in Options 5, Section 4 through FIX only.

- **[(b)** Order Types. The following order types may be submitted to the System:
 - (1) Market Order. A Market Order is an order to buy or sell a stated number of options contracts that is to be executed at the best price obtainable when the order reaches the Exchange. Lead Market Makers, Market Makers and Off-Floor Broker-Dealers may not submit Market Orders.
 - (2) Limit Order. A Limit Order is an order to buy or sell a stated number of options contracts at a specified price or better.
 - (3) Intermarket Sweep Order. An Intermarket Sweep Order (ISO) is a Limit Order that meets the requirements of Options 5, Section 1. Orders submitted to the Exchange as ISO are not routable and will ignore the ABBO and trade at allowable prices on the Exchange. ISOs may be entered on the regular order book or into the Price Improvement XL Mechanism ("PIXL") pursuant to Options 3, Section 13 (b)(11). ISO Orders may not be submitted during the Opening Process pursuant to Options 3, Section 8.
 - (4) Stop Order. A Stop Order is a Limit Order or Market Order to buy or sell at a limit price when interest on the Exchange for a particular option contract reaches a specified price. A Stop Order shall be cancelled if it is immediately electable upon receipt. A Stop Order shall not be elected by a trade that is reported late or out of sequence or by a Complex Order trading with another Complex Order. Lead Market Makers and Maker Makers may not submit a Stop Order. Off-Floor Broker-Dealers may not enter a Stop Market Order.
 - (A) A Stop-Limit Order to buy becomes a Limit Order executable at the limit price or better when the option contract trades or is bid on the Exchange at or above the stop-limit price. A Stop-Limit Order to sell becomes a Limit Order executable at the limit price or better when the option contract trades or is offered on the Exchange at or below the stop-limit price.

- (B) A Stop Market Order is similar to a stop-limit except it becomes a Market Order when the option contract reaches a specified price.
- (C) A Stop Order is a non-displayed, contingency order until elected.
- (5) All-or-None Order. An All-or-None Order is a Limit Order or Market Order that is to be executed in its entirety or not at all. An All-or None Order may only be submitted by a Public Customer as an Immediate-or-Cancel Order. The Acceptable Trade Range protection in Options 3, Section 15(a) is not applied to All-Or-None Orders.
- (6) Opening Sweep. An Opening Sweep is a one-sided order entered by a Lead Market Maker or Market Maker through SQF for execution against eligible interest in the System during the Opening Process. This order type is not subject to any protections listed in Options 3, Section 15, except for Automated Quotation Adjustments. The Opening Sweep will only participate in the Opening Process pursuant to Options 3, Section 8 and will be cancelled upon the open if not executed.
- (7) Cancel-Replacement Order. A Cancel-Replacement Order is a single message for the immediate cancellation of a previously received order and the replacement of that order with a new order with new terms and conditions. If the previously placed order is already filled partially or in its entirety, the replacement order is automatically canceled or reduced by the number of contracts that were executed. The replacement order will result in a loss of priority.

* * * * *

(9) PIXL Order. A PIXL Order is as described in Options 3, Section 13.

* * * * *

(11) Directed Orders. A Directed Order is as described in Options 2, Section 10.

<u>* * * * *</u>

(c) Time in Force or "TIF." The term "Time in Force" shall mean the period of time that the System will hold an order for potential execution, and shall include:

(1) Day. If not executed, an order entered with a TIF of "Day" expires at the end of the day on which it was entered. All orders by their terms are Day Orders unless otherwise specified. Day orders may be entered through FIX.

- (2) Immediate-or-Cancel. An Immediate-or-Cancel ("IOC") Order entered with a TIF of "IOC" is a Market Order or Limit Order to be executed in whole or in part upon receipt. Any portion not so executed is cancelled.
 - (A) Orders entered with a TIF of IOC are not eligible for routing.
 - (B) IOC orders may be entered through FIX or SQF, provided that an IOC Order entered by a Market Maker or Lead Market Maker through SQF is not subject to the Order Price Protection, the Market Order Spread Protection, or Size Limitation in Options 3, Section 15(a)(1), (a)(2), and (b)(2), respectively, or Size Limitation within Options 3, Section 16(e).
 - (C) Orders entered into the Price Improvement XL ("PIXL") Mechanism and Qualified Contingent Cross ("QCC") Mechanism are considered to have a TIF of IOC. By their terms, these orders will be: (1) executed either on entry or after an exposure period, or (2) cancelled.
- (3) Opening Only. An Opening Only ("OPG") order is entered with a TIF of "OPG". This order can only be executed in the Opening Process pursuant to Options 3, Section 8. This order type is not subject to any protections listed in Options 3, Section 15, except Size Limitation. Any portion of the order that is not executed during the Opening Process is cancelled. OPG orders may not route.
- (4) Good Til Cancelled. A Good Til Cancelled ("GTC") Order entered with a TIF of GTC, if not fully executed, will remain available for potential display and/or execution unless cancelled by the entering party, or until the option expires, whichever comes first. GTC Orders shall be available for entry from the time prior to market open specified by the Exchange until market close.

(d) Routing Strategies. Orders may be entered on the Exchange with a routing strategy of FIND, SRCH or Do-Not-Route ("DNR") as provided in Options 5, Section 4 through FIX only.

(c) Off-Floor Broker-Dealer Order. An off-floor broker-dealer order may be entered for a minimum size of one contract. Off-floor broker-dealers may enter all order types defined in Options 3, Section 7(b) except for All-or-None Orders, Market Orders, Stop Market Orders, and public customer-to-public customer cross orders subject to Options 3, Section 13(a) and (f).

(f) Orders may not be unbundled, nor may a firm solicit a customer to unbundle an order for this purpose.]

Section 8. Options Opening Process

* * * * *

(b) Eligible interest during the Opening Process includes Valid Width Quotes, Opening Sweeps and orders, including Opening Only Orders, but excluding orders with a Time in Force of "Immediate-or-Cancel" and Add Liquidity Orders. Quotes, other than Valid Width Quotes, will not be included in the Opening Process. <u>The displayed and non-displayed portions of Reserve</u> Orders are considered for execution and in determining the Opening Price throughout the Opening Process. Non-SQT Market Makers may submit orders.

* * * * *

(h) **Potential Opening Price**. The Potential Opening Price indicates a price where the System may open once all other Opening Process criteria is met. To calculate the Potential Opening Price, the System will take into consideration all Valid Width Quotes and orders (including Opening Sweeps and displayed and non-displayed portions of Reserve Orders) for the option series and identify the price at which the maximum number of contracts can trade ("maximum quantity criterion"). In addition, paragraphs (i)(A)(iii) and (j)(5) - (7) below contain additional provisions related to Potential Opening Price.

(A) More Than One Potential Opening Price. When two or more Potential Opening Prices would satisfy the maximum quantity criterion and leave no contracts unexecuted, the System takes the highest and lowest of those prices and takes the mid-point; if such mid-point is not expressed as a permitted minimum price variation, it will be rounded up to the minimum price variation [that is closest to the closing price for the affected series from the immediately prior trading session. If there is no closing price from the immediately prior trading session, the System will round up to the minimum price variation to determine the Opening Price].

* * * * *

(j) The System will calculate an Opening Quote Range ("OQR") for a particular option series that will be utilized in the Price Discovery Mechanism described below, if the Exchange has not opened subject to any of the provisions above. OQR is constrained by the least aggressive limit prices within the broader limits of OQR such that the least aggressive buy order or Valid Width Quote bid and least aggressive sell order or Valid Width Quote offer within the OQR further bounds the OQR.

* * * * *

(7) If the Exchange determines that non-routable interest can execute the maximum number of contracts against Exchange interest, after routable interest has been determined by the System to satisfy the away market, then the Potential Opening Price is the price at which the maximum number of contracts can execute, excluding the interest which will be routed to an away market, which may be executed on the Exchange as described in paragraph (h) above.

The System will route routable [Public Customer and Professional] interest pursuant to Options 3, Section 10(a)[(1)(A)].

(k) **Price Discovery Mechanism**. If the Exchange has not opened pursuant to paragraphs (f) or (i) above, after the OQR calculation in paragraph (j), the Exchange will conduct the following Price Discovery Mechanism.

* * * * *

(C) Next, provided the option series has not opened pursuant to (k)(B) above, the System will:

* * * * *

(6) The System will execute orders at the Opening Price that have contingencies (such as, without limitation, Reserve Orders) and non-routable orders, such as a "Do Not Route" or "DNR" Orders, to the extent possible. The System will only route non-contingency
[Public Customer and Professional] orders, except that Reserve Orders may route up to their full volume.

* * * * *

(D) Pursuant to Options 3, Section 8(k)(C)(6), the System will re-price Do Not Route orders (that would otherwise have to be routed to the exchange(s) disseminating the ABBO for an opening to occur) to the current away best offer (for bids) or the current away best bid (for offers) as non-displayed, and display at a price that is one minimum trading increment inferior to the ABBO, and disseminate the re-priced DNR Order as part of the new PBBO. The System will cancel any order or quote that is priced through the Opening Price. All other interest will be eligible for trading after opening.

* * * * *

(1) Opening Process Cancel Timer. The Opening Process Cancel Timer represents a period of time since the underlying market has opened, and shall be established and disseminated by Phlx on its website. If an option series has not opened before the conclusion of the Opening Process Cancel Timer, a member may elect to have orders returned by providing written notification to the Exchange. These orders include all non Good <u>-Til-Cancel</u> Orders and Good-Till-Date Orders received over the FIX protocol.

* * * * *

Section 9. Trading Halts

* * * * *

(d) Capitalized terms used in this paragraph shall have the same meaning as provided for in the Plan to Address Extraordinary Market Volatility Pursuant to Rule 608 of Regulation NMS, as it may be amended from time to time ("LULD Plan"). During a Limit State and Straddle State in the Underlying NMS stock:

(1) The Exchange will not open an affected option.

* * * * *

- (3) After the [o]Opening Process, if a Stop Order is elected, [the Exchange shall elect Stop Orders,] as defined in Options 3, Section 7(d)[32(e)(2), and,] because they become Market Orders, the System shall cancel them back and notify market [P]participants of the reason for such [rejection]cancellation
- (4) When evaluating whether a Market Maker or Lead Market Maker has met the continuous quoting obligations of Options 2, Section 5(c)(2)(A) and (B), respectively, in options overlying NMS stocks, the Exchange will not consider as part of the trading day the time that an NMS stock underlying an option was in a Limit State or Straddle State.
- (5) Electronic trades are not subject to an obvious error or catastrophic error review pursuant to Options 3, Section 20(c) or (d). Nothing in this provision shall prevent electronic trades from review on Exchange motion pursuant to Options 3, Section 20(c)(3), or subject to nullification or adjustment pursuant to Options 3, Section 20(e) (k).

* * * * *

(f) During a halt, the Exchange will maintain existing orders on the book (but not existing quotes) **[, except as noted in Options 5, Section 4]**, accept orders and quotes, and process cancels. During a halt, existing quotes are cancelled and auction orders and auction responses, as well as Crossing Orders, are rejected.

* * * * *

Section 10. Electronic Execution Priority and Processing in the System

(a) Execution Algorithm - The Exchange will apply a Size Pro-Rata execution algorithm to electronic orders, unless otherwise specified. The System shall execute trading interest within the System in price priority, meaning it will execute all trading interest at the best price level within the System before executing trading interest at the next best price. If the result is not a whole number, it will be rounded [down]up to the nearest whole number[, unless otherwise specified]. Size Pro-Rata Priority shall mean that resting orders and quotes in the order book are prioritized according to price. If there are two or more resting orders or quotes at the same price, the System allocates contracts from an incoming order or quote to resting orders and quotes beginning with the resting order or quote displaying the largest size proportionally according to displayed size,

based on the total number of contracts displayed at that price proportionally according to size, based on the total number of contracts available to be executed at that price]. If there are still contracts to be allocated after the displayed size of all orders at that price has been executed, the remaining size from the incoming order will be allocated proportionally against nondisplayed interest according to remaining total size of each resting order at such price, beginning with the order which has the largest total size remaining.

(1) Priority Overlays Applicable to Size Pro-Rata Execution Algorithm: the Exchange will apply the following designated market participant priority overlays. No participant shall be entitled to receive a number of contracts that is greater than the displayed size that is associated with their quotation or order.

* * * * *

(B) Enhanced Lead Market Maker Priority: A Lead Market Maker may be assigned by the Exchange in each option class in accordance with Options 2, Section 12. After all Public Customer orders have been fully executed, provided the Lead Market Maker's quote is at the better of the internal PBBO or the NBBO the Lead Market Maker may be afforded a participation entitlement. The Lead Market Maker shall not be entitled to receive a number of contracts that is greater than the displayed size associated with such Lead Market Maker. The Lead Market Maker shall be entitled to receive the allocation described in this paragraph (a)(1)(B)(i), unless the order is a Directed Order and the Lead Market Maker is not the Directed Market Maker.

* * * * *

When the Lead Market Maker is also the <u>Directed Market Maker</u> the Lead Market Maker/Directed Market Maker does not participate in the below Market Maker Priority at (a)(i)(E).

(C) Directed Market Maker Priority: After all Public Customer orders have been fully executed, upon receipt of a Directed Order pursuant to Options 2, Section 10, provided the Directed Market Maker's quote [or market maker order] is at the better of the internal PBBO or the NBBO, the Directed Market Maker will be afforded a participation entitlement. This participation entitlement will be considered after the Opening Process.

* * * * *

If there are multiple quotes **[or orders]** for the same Directed Market Maker at the same price which are at the better of the internal PBBO or the NBBO when the Directed Order is received, the Directed Market Maker participation entitlement shall apply only to the Directed Market Maker quote **[or order]** which has the highest priority. The Directed Market Maker quote **[or order]** that received the Directed Order may not receive any further allocation of the Directed Order, except as noted in subparagraph (a)(1)(E) below.

[If rounding would result in an allocation of less than one contract, the Directed Market Maker shall receive one contract.]

(D) Entitlement for Orders of 5 contracts or fewer. This Entitlement for Orders of 5 contracts or fewer shall be allocated to the Lead Market Maker as described below. The allocation will only apply after the Opening Process and shall not apply to auctions. A Lead Market Maker is not entitled to receive a number of contracts that is greater than the size that is associated with its quote. On a quarterly basis, the Exchange will evaluate what percentage of the volume executed on the Exchange is comprised of orders for 5 contracts or fewer allocated to Lead Market Makers, and will reduce the size of the orders included in this provision if such percentage is over [25]40%.

* * * * *

(ii) If the Lead Market Maker's quote is at the better of the internal PBBO or the NBBO, with other Public Customer (including when the Lead Market Maker is also the Directed Market Maker) or other Directed Market Maker interest with a higher priority at the time of execution, a Lead Market Maker is not entitled to priority with respect to Orders of 5 contracts or fewer, however the Lead Market Maker is eligible to receive such contracts pursuant to paragraph (a)(1)(E)[; thereafter orders will be allocated pursuant to paragraph (a)(1)(F)].

* * * * *

[(F) Odd Lot Allocation: If there are contracts remaining after Market Maker Priority is applied, such contracts shall be allocated by randomly assigning all Market Makers (including the Lead Market Maker or Directed Market Maker) an order of allocation each trading day, and allocating orders, quotes and sweeps in accordance with the trading day's order assignment, provided the Market Maker, is at the best price at which the order, quote or sweep is being traded.]

([G]F) All Other Remaining Interest: If there are contracts remaining after all Market Maker interest has been fully executed, <u>notwithstanding Options 3</u>, Section 7(g)(3) and (k)(2), such contracts shall be executed based on the Size Pro-Rata execution algorithm <u>as</u> described in Options 3, Section 10(a). [In the event that there are remaining contracts to be allocated for interest after rounding, which includes orders of all remaining market participants, such remaining contracts will be allocated in time priority provided the interest is at the best price at which the order is being traded.]Legging Orders will be allocated after all other non-displayed interest, pursuant to Options 3, Section 7(k)(3).

(2) A [m]Market M[m]aker is entitled only to an Enhanced Lead Market Maker Allocation pursuant to paragraph (a)(1)(B) or the Entitlement for Orders of 5 contracts or fewer pursuant to paragraph (a)(1)(D) on a quote, or the Directed Market Maker Priority pursuant to paragraph (a)(1)(C) on a quote [or market maker order].

* * * * *

Section 15. Simple Order Risk Protections

The following order protections apply to Simple Orders.

- (a) The following are order protections on Phlx:
 - (1) Order Price Protection ("OPP"). OPP is a feature of the System that prevents Limit Orders at prices outside of pre-set standard limits from being accepted by the System. OPP applies to all options but does not apply to Stop-Limit Orders <u>until elected</u>, <u>Intermarket</u> <u>Sweep Orders or Complex Orders</u>].
 - (A) OPP is operational each trading day after the Opening Process until the close of trading, except during trading halts. <u>OPP may be temporarily deactivated on an intra-day basis at the Exchange's discretion.</u>
 - (B) OPP will reject incoming orders that exceed certain parameters according to the following algorithm.
 - (i) If the better of the NBBO or the internal market BBO (the "Reference BBO") on the contra-side of an incoming order is greater than \$1.00, orders with a limit more than [50% through such contra-side Reference BBO] the greater of the below will cause the order to be rejected by the System upon receipt.

(A) 50% less (greater) than such contra-side Reference Best Bid (Offer); or

(B) a configurable dollar amount not to exceed \$1.00 less (greater) than such contra-side Reference Best Bid (Offer) as specified by the Exchange announced via an Options Trader Alert.

(ii) If the Reference BBO on the contra-side of an incoming order is less than or equal to \$1.00, orders with a limit more than [100% through such contra-side Reference
BBO] the greater of the below will cause the order to be rejected by the System upon receipt.

(A) 100% less (greater) than such contra-side Reference Best Bid (Offer); or

(B) a configurable dollar amount not to exceed \$1.00 less (greater) than such contra-side Reference Best Bid (Offer) as specified by the Exchange announced via an Options Trader Alert.

(C) For purposes of this rule, the NBBO is defined as the PBBO for singly-listed issues.

* * * * *

(3) Market Wide Risk Protection. All member organizations must provide parameters for the order entry and execution rate protections described in this Rule. The Exchange will also establish default values for each of these parameters that apply to member organizations that do not submit the required parameters, and will announce these default values in an Options Trader Alert to be distributed to member organizations. The System will maintain one or more counting programs for each member organization that count orders entered and contracts traded on Phlx. Member organizations can use multiple counting programs to separate risk protections for different groups established within the member organizations. The counting programs will maintain separate counts, over rolling time periods specified by the member organization for each count, of: (1) the total number of orders entered in the regular order book. The minimum and maximum duration of the applicable time period will be established by the Exchange and announced via an Options Trader Alert.

- (A) If, during the applicable time period, the member organization exceeds thresholds that it has set for any of the order entry or execution counts described above on Phlx, the System will automatically reject all subsequent incoming orders entered by the member organization on Phlx.
- (B) Member organizations may also choose to have the System automatically cancel all of their existing orders on Phlx when the Market Wide Risk Protection is triggered.
- (C) The Market Wide Risk Protection will remain engaged until the member organization manually notifies the Exchange to enable the acceptance of new orders. For member organizations that still have open orders on the book that have not been cancelled pursuant to subparagraph (B) above, the System will continue to allow those member organizations to interact with existing orders entered before the protection was triggered, including sending cancel order messages and receiving trade executions for those orders.
- (b) The following are order and quote protections on Phlx:

(1) Acceptable Trade Range.

(A) After the Opening Process, the System will calculate an Acceptable Trade Range to limit the range of prices at which an order or quote (except an All-or-None Order) will be allowed to execute. The Acceptable Trade Range is calculated by taking the Reference Price, plus or minus a value to be determined by the Exchange. (i.e., the Reference Price - (x) for sell orders/quotes and the Reference Price + (x) for buy orders/quotes). Upon receipt of a new order/quote, the Reference Price is the better of the National Best Bid ("NBB") or internal best bid for sell orders/quotes or the last price at which the order/quote is

posted whichever is higher for a buy order/quote or lower for a sell order/quote. <u>The</u> <u>Acceptable Trade Range will not be available for All-or-None Orders.</u>

(B) If an order/quote reaches the outer limit of the Acceptable Trade Range (the "Threshold Price") without being fully executed, it will be posted at the Threshold Price for a brief period, not to exceed one second ("Posting Period"), to allow more liquidity to be collected[, unless a Quote Exhaust has occurred, in which case the Quote Exhaust process in Options 3, Section 6(a)(ii)(B)(3) will ensue, triggering a new Reference **Price**. Upon posting, either the current Threshold Price of the order or an updated NBB for buy orders or the NBO for sell orders (whichever is higher for a buy order/lower for a sell order) then becomes the Reference Price for calculating a new Acceptable Trade Range. If the order/quote remains unexecuted after the Posting Period, a New Acceptable Trade Range will be calculated and the order/quote will execute, route, or post up to the new Acceptable Trade Range Threshold Price, unless a member organization has requested that their quotes or orders be returned if posted at the outer limit of the Acceptable Trade Range (in which case, the quote/order will be returned). This process will repeat until either (i) the order/quote is executed, cancelled, or posted at its limit price or (ii) the order/quote has been subject to a configurable number of instances of the Acceptable Trade Range as determined by the Exchange (in which case it will be returned).

* * * * *

(c) The following protections apply to Lead Market Makers and Market Makers on Phlx:

(1) Anti-Internalization - Quotes and orders entered by Lead Market Makers and Market Makers (as defined in Options 2, Section 4) [using the same market participant identifier] will not be executed against quotes and orders entered on the opposite side of the market by the same Lead Market Maker or Market Maker using the same Lead Market Maker or Market Maker or Market Maker or ganization, the same Exchange account number of member organization identifier. In such a case, the System will cancel the resting quote or order back to the entering party prior to execution. This functionality shall not apply in any auction, with respect to complex order transactions or during an Opening Process.

(2) Automated Quotation Adjustments.

(A) **Rapid Fire**. Market Makers are required to utilize the Percentage or Volume Threshold, each a Threshold, described in (i) and (ii) below. In addition, Market Makers may utilize the Delta and Vega Thresholds, each a Threshold, described in (iii) and (iv) below. For each of these features, the System will automatically remove a Market Maker's quotes in all series in an options class when any of the Percentage Threshold, Volume Threshold, Delta Threshold or Vega Threshold, as described below, has been exceeded. A Market Maker is required to specify a period of time not to exceed 30

seconds ("Specified Time Period") during which the System will automatically remove a Market Maker's quotes in all series of an options class. The Specified Time Period will commence for an options class every time an execution occurs in any series in such option class and will continue until the System removes quotes as described in paragraphs (D) and (E) below or the Specified Time Period expires. The Specified Time Period operates on a rolling basis among all series in an options class in that there may be Specified Time Periods occurring simultaneously for each Threshold and such Specified Time Periods may overlap. The Specified Time Periods will be the same value for each protection described in (i) - (iv) below.

(i) **Percentage Threshold**. A Market Maker must provide a specified percentage ("Percentage Threshold"), of not less than 1%, by which the System will automatically remove a Market Maker's quotes in all series of an options class. For each series in an options class, the System will determine (1) during a Specified Time Period and for each side in a given series, a percentage calculated by dividing the size of a Market Maker's quote size executed in a particular series (the numerator) by the Marker Maker's quote size available at the time of execution plus the total number of the Market Marker's quote size previously executed during the unexpired Specified Time Period (the denominator) ("Series Percentage"); and (2) the sum of the Series Percentage in the options class ("Issue Percentage") during a Specified Time Period. The System tracks and calculates the net impact of positions in the same options class; long call percentages are offset by short call percentages, and long put percentages are offset by short put percentages in the Issue Percentage. If the Issue Percentage exceeds the Percentage Threshold the System will automatically remove a Market Maker's quotes in all series of the options class during the Specified Time Period.

(ii) **Volume Threshold**. A Market Maker must provide a Volume Threshold by which the System will automatically remove a Market Maker's quotes in all series of an options class when the Market Maker executes a number of contracts which exceeds the designated number of contracts in all series in an options class.

(iii) **Delta Threshold**. A Market Maker may provide a Delta Threshold by which the System will automatically remove a Market Maker's quotes in all series of an options class. For each class of options, the System will maintain a Delta counter, which tracks the absolute value of the difference between (1) purchased call contracts plus sold put contracts and (2) sold call contracts plus purchased put contracts. If the Delta counter exceeds the Delta Threshold established by the member organization, the System will automatically remove a Market Maker's quotes in all series of the options class.

(iv) **Vega Threshold**. A Market Maker may provide a Vega Threshold by which the System will automatically remove a Market Maker's quotes in all series of an options class. For each class of options, the System will maintain a Vega counter, which tracks the absolute value of purchased contracts minus sold contracts. If the Vega counter

exceeds the Vega Threshold established by the member organization, the System will automatically remove a Market Maker's quotes in all series of the options class.

(B) Active Quote Protection. In lieu of Rapid Fire, a Market Maker may provide an executed contract limit ("Contract Limit") that, if exceeded, the System will automatically remove the Market Maker's quotes in all series of an options class submitted through SQF. The System will apply the Contract Limit for the duration of the trading day. For each class of options, the System will maintain an active limit counter that will track the current number of contracts executed through the Market Maker's quotes ("Limit Counter"). If the Limit Counter exceeds the Contract Limit established by the Market Maker, the System will automatically remove the Market Maker's quotes as described in Section 15(c)(2)(D). Market Makers may submit a request (i) to decrement their Limit Counter by a specified number of contracts, or (ii) to fully decrement their Limit Counter to zero, including to reenter the System as described in Section 15(c)(2)(E). For Market Makers that elect to utilize the Contract Limit, the Percentage Threshold, Volume Threshold, Delta Threshold, and Vega Threshold will not be available for use on the Market Maker's badge.

[(A) A Lead Market Maker, Streaming Quote Trader or Remote Streaming Quote Trader (collectively "Market Maker") may provide a specified time period and a specified percentage (as these terms are defined below) by which the Exchange's System ("System") will automatically remove a Market Maker's quotes and SOF interest in all series of an underlying security submitted through designated Phlx protocols, as specified by the Exchange, during a specified time period established by the Market Maker not to exceed 15 seconds ("Percentage-Based Specified Time Period"). For each series in an option, the System will determine: (i) the percentage that the number of contracts executed in that series represents relative to the disseminated size, the original size quoted by the Market Maker, of each side in that series ("Series Percentage"); and (ii) the sum of the Series Percentage in the option issue ("Issue Percentage"). The System tracks and calculates the net impact of positions in the same option issue; long call percentages are offset by short call percentages, and long put percentages are offset by short put percentages in the Issue Percentage. If the Issue Percentage, rounded to the nearest integer, equals or exceeds a percentage established by a Market Maker, not less than 1% ("Specified Percentage"), the System will automatically remove a Market Maker's quotes and SQF interest in all series of the underlying security submitted through designated Phlx protocols, as specified by the Exchange, during the Percentage-Based Specified Time Period ("Percentage- Based Threshold"). A Percentage-Based Specified Time Period will commence for an option every time an execution occurs in any series in such option and will continue until the System removes quotes and SQF interest as described in (iv) or (v) or the Percentage-Based Specified Time Period expires. A Percentage -Based Specified Time Period operates on a rolling basis among all series in an option in that there may be multiple Percentage-Based Specified Time Periods

occurring simultaneously and such Percentage-Based Specified Time periods may overlap.

(B) A Lead Market Maker, Streaming Ouote Trader or Remote Streaming Ouote Trader (collectively "Market Maker") may provide a specified time period and a volume threshold by which the Exchange's System will automatically remove a Market Maker's quotes and SQF interest in all series of an underlying security submitted through designated Phlx protocols, as specified by the Exchange, during a specified time period established by the Market Maker not to exceed 15 seconds ("Volume-Based Specified Time Period") when the Market Maker executes a number of contracts which equals or exceeds the designated number of contracts in all options series in an underlying security ("Volume-Based Threshold"). The Market Maker's Volume-Based Specified Time Period must be the same length of time as designated for purposes of the Percentage-Based Threshold. A Volume-Based Specified Time Period will commence for an option every time an execution occurs in any series in such option and will continue until the System removes quotes and SQF interest as described in (iv) or (v) or the Volume-Based Specified Time Period expires. A Volume-Based Specified Time Period operates on a rolling basis among all series in an option in that there may be multiple Volume-Based Specified Time Periods occurring simultaneously and such Volume-Based Specified **Time periods may overlap.**]

(C) Multi-Trigger. A Market Maker or Market Maker Group (multiple affiliated Market Makers is a "Group" as defined by a Phlx member and provided by such member to the Exchange) may provide a Specified Time Period and number of allowable triggers by which the Exchange will automatically remove quotes **and SOF interest** in all options series in all underlying issues submitted through designated Phlx protocols, as specified by the Exchange ("Multi-Trigger Threshold"). During a specified time period established by the Phlx Market Maker not to exceed [15]30 seconds ("Multi- Trigger Specified Time Period"), the number of times the System automatically removes the Phlx Market Maker's or Group's quotes in all options series will be based on the number of triggers of the Percentage -Based Threshold, described in paragraph (fA)(i) above, as well as the Volume -Based Threshold described in paragraph (ff A)(ii) above, the Delta Threshold described in paragraph (A)(iii) above, **[and]**the Vega Threshold described in paragraph (A)(iv) above, and the Contract Limit described in paragraph (B) above. Once the System determines that the number of triggers [equals or] exceeds a number established by either the Phlx Market Maker or Group, during a Multi-Trigger Specified Time Period, the System will automatically remove all quotes in all options series in all underlying issues for that Phlx Market Maker or Group. A trigger is defined as the event which causes the System to automatically remove quotes in all options series in an underlying issue. A Multi-Trigger Specified Time Period will commence after every trigger of **[either]** the Percentage [-Based] Threshold, for the Volume [-Based] Threshold, Delta Threshold, Vega Threshold, or Contract Limit and will continue until the System removes quotes as described in paragraph (D) below [(f)(iv)] or the Multi-Trigger

Specified Time Period expires. The System counts triggers within the Multi-Trigger Specified Time Period across all triggers for the Phlx Market Maker or Group. A Multi-Trigger Specified Time Period operates on a rolling basis in that there may be multiple Multi-Trigger Specified Time Periods occurring simultaneously and such Multi-Trigger Specified Time Periods may overlap.

(D) The System will automatically remove quotes in all options in an underlying security when the Percentage [-Based] Threshold, [or] Volume [-Based] Threshold, Delta <u>Threshold, Vega Threshold or Contract Limit</u> has been [reached]exceeded. The System will automatically remove quotes in all options in all underlying securities when the Multi-Trigger Threshold has been [reached]exceeded. The System will send a Purge Notification Message to the Phlx Market Maker for all affected options when the above thresholds have been [reached]exceeded.

(i) The Percentage [-Based] Threshold, [or] Volume [-Based] Threshold, <u>Delta</u> <u>Threshold</u>, <u>Vega Threshold</u>, <u>Contract Limit</u> and Multi-Trigger Threshold [,] are considered independently of each other.

(ii) [Quotes will be automatically executed up to the Phlx Market Maker's size regardless of whether the execution exceeds the Percentage-Based Threshold or Volume-Based Threshold]The System will execute any marketable orders or quotes that are executable against a Market Maker's quote and received prior to the time the Percentage Threshold, Volume Threshold, Delta Threshold, Vega Threshold, or Contract Limit is triggered up to the size of the Market Maker's quote, even if such execution results in executions in excess of the Market Maker's applicable Threshold or Contract Limit with respect to any parameter.

(E) Notwithstanding subparagraph (c)(2)(A) and (D) above, [H]if a Phlx Market Maker requests the System to remove quotes in all options series in an underlying issue, the System will automatically reset the [Percentage-Based Threshold or Volume-Based] Specified Time Period(s) for the Percentage, Volume, Delta, or Vega Threshold. The Multi-Trigger Specified Time Period(s) will not automatically reset for the Multi-Trigger Threshold.

(F) When the System removes quotes as a result of <u>exceeding</u> the Percentage[-Based] Threshold, [or] Volume[-Based] Threshold, <u>Delta Threshold</u>, or <u>Vega Threshold</u>, the Phlx Market Maker must send a re-entry indicator to re-enter the System. <u>When the System</u> removes quotes as a result of exceeding the Contract Limit, the Market Maker must submit a request to fully decrement their Limit Counter to zero in order to re-enter the <u>System</u>. When the System removes quotes as a result of the Multi-Trigger Threshold, the System will not accept quotes through designated protocols until the Phlx Market Maker or Group manually requests re-entry. After quotes are removed as a result of the Multi-Trigger Threshold, Exchange staff must set a re-entry indicator in this case to enable reentry, which will cause the System to send a Reentry Notification Message to the Phlx

Market Maker <u>or Group</u> for all options series in all underlying issues. The Market Maker's Clearing Firm will be notified regarding the trigger and re-entry into the System after quotes are removed as a result of the Multi-Trigger Threshold, provided the Market Maker's Clearing Firm has requested to receive such notification.

(G) The Exchange will require Phlx Market Makers to utilize either the Percentage[-Based] Threshold, [or] the Volume[-Based] Threshold, or the Contract Limit. For Market Makers that elect to utilize the Contract Limit, the Percentage Threshold, Volume Threshold, Delta Threshold, and Vega Threshold will not be available for use on the Market Maker's badge. The Delta, Vega, and Multi-Trigger Thresholds [is] are optional.

(3) **Post-Only Quoting Protection**. Phlx Market Makers may elect to configure their SQF protocols to prevent their quotes from removing liquidity ("Post-Only Quote Configuration"). A Post-Only Quote Configuration would re-price or cancel a Phlx Market Maker's quote that would otherwise lock or cross any resting order or quote on the Phlx order book upon entry. When configured for re-price, quotes would be re-priced to one minimum price variation below the current low offer (for bids) or above the current best bid (for offers) and displayed by the System at one minimum price increment below the current low offer (for bids) or above the current low offer (for bids) or above the current best bid (for offers). Notwithstanding the aforementioned, as is the case today, if a quote with a Post-Only Quote Configuration would not lock or cross an order on the System but would lock or cross the NBBO, the quote will be handled pursuant to Options 3, Section 4(b)(6). When configured for cancel, members and member organizations will have their quotes returned whenever the quote would lock or cross the NBBO or be placed on the book at a price other than its limit price. This functionality shall not apply during an Opening Process.

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Section 23. Data Feeds and Trade Information

(a) The following data feeds are offered by Phlx:

(1) [Top of PHLX Options]Nasdaq Phlx Top of Market ("TOPO") is a direct data feed product that includes the Exchange's best bid and offer price, with aggregate size, based on displayable order and quoting interest on Phlx and last sale information for trades executed on Phlx. The data contained in the TOPO data feed is identical to the data simultaneously sent to the processor for the OPRA and subscribers of the data feed. The data provided for each options series includes the symbols (series and underlying security), put or call indicator, expiration date, the strike price of the series, and whether the option series is available for trading on Phlx and identifies if the series is available for closing transactions only.

(2) [PHLX]Nasdaq Phlx Order[s] Feed is a real-time full Limit Order book data feed that provides pricing information for orders on the [PHLX]Phlx Order book for displayed order types as well as market participant capacity. [PHLX]Nasdaq Phlx Order[s]Feed is currently provided

as part of the TOPO Plus Orders data product. **[PHLX]** The Nasdaq Phlx Order **[s]** Feed provides real-time information to enable users to keep track of the single and complex order book(s). The data provided for each options series includes the symbols (series and underlying security), put or call indicator, expiration date, the strike price of the series, leg information on complex strategies and whether the option series is available for trading on Phlx and identifies if the series is available for closing transactions only. The feed also provides auction and exposure notifications and order imbalances on opening/reopening (size of matched contracts and size of the imbalance).

(3) **[PHLX]Nasdaq Phlx Depth of Market** is a data product that provides: (i) order and quotation information for individual quotes and orders on the order book; (ii) last sale information for trades executed on Phlx; (iii) auction; and (iv) an Imbalance Message which includes the symbol, side of the market, size of matched contracts, size of the imbalance, and price of the affected series. The data provided for each options series includes the symbols (series and underlying security), put or call indicator, expiration date, the strike price of the series, and whether the option series is available for trading on Phlx and identifies if the series is available for closing transactions only. The feed also provides order imbalances on opening/reopening (size of matched contracts and size of the imbalance) and exposure notifications, with market participant capacity.

(b) The following order and execution information is available to members:

* * * * *

(2) <u>Reserved.</u>[TradeInfo PHLX Interface, a user interface, permits a member to: (i) search all orders submitted in a particular security or all orders of a particular type, regardless of their status (open, canceled, executed, etc.); (ii) cancellation of open orders at the order, port or firm mnemonic level; (iii) a view of orders and executions; and (iv) download of orders and executions for recordkeeping purposes.]

* * * * *

Section 28. [Reserved]Optional Risk Protections

(a) The following are optional order risk protections:

- (1) Notional dollar value per order (quantity x limit price x number of underlying shares);
- (2) Daily aggregate notional dollar value;
- (3) Quantity per order; and
- (4) Daily aggregate quantity

(b) member organization or member organizations may elect one or more of the above optional risk protections by contacting Market Operations and providing a value (for (a)(1) and (a)(3)) or

daily aggregate value (for (a)(2) or (a)(4)) for each order protection. A member or member organizations may modify their settings through Market Operations.

(c) The System will reject all incoming aggregated member or member organization orders for any of the (a)(2) and (a)(4) risk protections after the value configured by the member or member organization is exceeded.

(d) The System will reject all incoming member or member organization orders for any of the (a)(1) and (a)(3) risk protections upon arrival if the value configured by the member or member organization is exceeded by the incoming order.

 (e) If a member or member organization sets a notional dollar value, a Market Order would not be accepted from that member or member organization.
(f) The risk protections are only available for orders entered through FIX. Additionally, all settings are firm-level.

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Options 5 Order Protection; Locked and Crossed Markets Definitions

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Section 4. Order Routing

(a) Phlx offers two routing strategies, FIND and SRCH. Each of these routing strategies will be explained in more detail below. An order may in the alternative be marked Do Not Route or "DNR". The Exchange notes that for purposes of this rule the System will route FIND and SRCH Orders with no other contingencies. Immediate or Cancel ("IOC") Orders will be cancelled immediately if not executed, and will not be routed. The System checks the Order Book for available contracts for potential execution against the FIND or SRCH orders. After the System checks the Order Book for available contracts, orders are sent to other available market centers for potential execution. For purposes of this rule, the Phlx's best bid or offer or "PBBO" does not include Stop Orders and Stop-Limit Orders which have not been triggered. The "internal PBBO" shall refer to the actual better price of an order resting on Phlx's Order Book, which is not displayed, but available for execution, excluding Stop Orders and Stop-Limit Orders which have not been triggered. When checking the order book, the System will seek to execute at the price at which it would send the order to an away market. For purposes of this rule, a Route Timer shall not exceed one second and shall begin at the time orders are accepted into the System, and the System will consider whether an order can be routed at the conclusion of each Route Timer. Finally, for purposes of this rule, "exposure" or "exposing" an order shall mean a notification sent to participants with the price, size, and side of interest that is available for execution. An order exposure alert is sent if the order size is modified. Exposure notifications will be sent to participants in accordance with the routing procedures described in Options 5. Section 4(a)(iii) below except if an incoming order is joining an already established PBBO price when the ABBO

is locked or crossed with the PBBO, in which case such order will join the established PBBO price and no exposure notification will be sent. For purposes of this rule Phlx's opening process is governed by Options 3, Section 8 and includes an opening after a trading halt ("Opening Process"). Routing options may be combined with all available order types and times-in-force, with the exception of order types and times-in-force whose terms are inconsistent with the terms of a particular routing option. The order routing process shall be available to members from 9:30 a.m. Eastern Time until market close and shall route orders as described below. Member organizations can designate orders as either available for routing or not available for routing. All routing of orders shall comply with Options 5, Options Order Protection and Locked and Crossed Market Rules.

(i) **Priority of Routed Orders**. Orders sent to other markets do not retain time priority with respect to other orders in the System and the System shall continue to execute other orders while routed orders are away at another market center. Once routed by the System, an order becomes subject to the rules and procedures of the destination market including, but not limited to, order cancellation. A routed order can be for less than the original incoming order's size. If a routed order is subsequently returned, in whole or in part, that routed order, or its remainder, shall receive a new time stamp reflecting the time of its return to the System, unless any portion of the original order remains on the System, in which case the routed order shall retain its timestamp and its priority.

(ii) Entering member organizations whose orders are routed to away markets shall be obligated to honor such trades that are executed on away markets to the same extent they would be obligated to honor a trade executed on the Exchange.

* * * * *

(iii) The following order types are available:

* * * * *

- (B) FIND Order. A FIND Order is an order that is: (i) routable at the conclusion of an Opening Process; and (ii) routable upon receipt during regular trading, after an option series is open. FIND Orders submitted after an Opening Process initiate their own Route Timers and are routed in the order in which their Route Timers end. FIND Orders that are not marketable with the ABBO upon receipt will be treated as DNR for the remainder of the trading day and post to the order book, even in the event that there is a new Opening Process after a trading halt.
 - (1)[With respect to an Opening Process, only a Public Customer and Professional FIND Order on the Order Book, whether it is received prior to the opening or it is a GTC FIND Order from a prior day, may be routed at the conclusion of an Opening Process. Non-Public Customer and non-Professional FIND Orders are not eligible for routing at the conclusion of an Opening Process.] At the end of an

Opening Process, any FIND Order that is priced through the Opening Price, pursuant to Phlx Options 3, Section 8(a)(iii), will be cancelled, and any FIND Order that is at or inferior to the Opening Price will [be]execute[d] or book pursuant to Options 3, Section 8(k). [Such FIND Order will not be eligible for routing until the next time the option series is subject to a new Opening Process.]

- (2) With respect to an Opening Process, if during a route timer at the conclusion of an Opening Process pursuant to Options 3. Section 8(k) markets move such that Generally, a FIND Order will be included in the displayed BBO at its limit price, unless the FIND Order locks or crosses the ABBO, in which case it will be entered into the order book at the ABBO price and displayed one MPV inferior to the ABBO. If there exists a locked ABBO when the FIND Order is entered into the order book executable against Exchange interest, the FIND Order will fimmediately executel be entered into the order book at the ABBO price and displayed one MPV inferior to the ABBO. If during a route timer, ABBO markets move such that the FIND Order is no longer marketable against the ABBO nor marketable against the PBBO, the FIND Order will post at its limit price. If the FIND Order is locked or crossed by away quotes, it will route at the completion of the route timer. If the ABBO worsens but remains better than the PBBO, the FIND Order will reprice and be re-exposed at the new price(s) without interrupting the route timer. If, during the route timer, any new interest arrives opposite the FIND Order that is equal to or better than the ABBO price, the FIND Order will trade against such new interest at the ABBO price, unless the ABBO is improved to a price which crosses the FIND Order's already displayed price, in which case the incoming order will execute at the previous ABBO price as the away market crossed a displayed price.
- (3) A FIND Order received after an Opening Process that is not marketable against the PBBO or the ABBO will be entered into the Order Book at its limit price. The FIND Order will be treated as DNR for the remainder of the trading day, even in the event that there is a new Opening Price after a trading halt.
- (4) A FIND Order received after an Opening Process that is marketable against the internal PBBO when the ABBO is inferior to the internal PBBO will be traded at the Exchange at or better than the PBBO price. If the FIND Order has size remaining after exhausting the PBBO, it may: (1) trade at the next PBBO price (or prices) if the order price is locking or crossing that price (or prices) up to and including the ABBO price, (2) be entered into the Order Book at its limit price, or (3) if locking or crossing the ABBO, be entered into the Order Book at the ABBO price and displayed one MPV away from the ABBO. The FIND Order will be treated as DNR for the remainder of the trading day, even in the event that there is a new Opening Price after a trading halt.
- (5) A FIND Order received after an Opening Process that is marketable against the internal PBBO when the ABBO is equal to the internal PBBO will be traded at the Exchange at the internal PBBO. If the FIND Order has size remaining after exhausting

the PBBO, it will initiate a Route Timer, and expose the FIND Order at the ABBO to allow market participants an opportunity to interact with the remainder of the FIND Order. During the Route Timer, the FIND Order will be included in the PBBO at a price one MPV away from the ABBO. If, during the Route Timer, any new interest arrives opposite the FIND Order that is equal to or better than the ABBO price, the FIND Order will trade against such new interest at the ABBO price. If during the Route Timer any new interest arrives opposite the FIND Order that is marketable against the FIND Order such interest will trade against the FIND Order at the ABBO price unless the ABBO is improved to a price which crosses the FIND Order's already displayed price, in which case the incoming order will execute at the previous ABBO price as the away market crossed a displayed price.] If during the Route Timer, the ABBO markets move such that the FIND Order is no longer marketable against the ABBO, it may: (i) trade at the next PBBO price (or prices) if the FIND Order price is locking or crossing that price (or prices), and/or (ii) be entered into the Order Book at its limit price if not locking or crossing the PBBO. [A FIND Order will be included in the displayed PBBO at its limit price, unless the FIND Order locks or crosses the ABBO, in which case it will be entered into the Order Book at the ABBO price and displayed one MPV inferior to the ABBO. If there exists a locked ABBO when the FIND Order is entered onto the Order Book, the FIND Order will be entered into the Order Book at the ABBO price and displayed one MPV inferior to the ABBO].

- (6) If, at the end of the Route Timer pursuant to subparagraph (5) above, the FIND Order is still marketable with the ABBO, the FIND Order will route to an away market up to a size equal to the lesser of either (1) an away market's size or (2) the remaining size of the FIND Order. If the FIND Order still has remaining size after routing, it will (i) trade at the next PBBO price or better, subject to the order's limit price, and, if contracts still remain unexecuted, the remaining size will be routed to away markets disseminating the same price as the PBBO, or (ii) be entered into the Order Book and posted either at its limit price or re-priced one MPV away if the order would otherwise lock or cross the ABBO. If size still remains, the FIND Order will not be eligible for routing until the next time the option series is subject to a new Opening Process, which may include a re-opening after a trading halt. [The remaining size of a non-Public Customer and non-Professional FIND Order will be cancelled upon an intra-day trading halt.]
- (7) A FIND Order received after an Opening Process that is marketable against the ABBO when the ABBO is better than the internal PBBO will initiate a Route Timer, and expose the FIND Order at the ABBO to allow participants and other market participants an opportunity to interact with the FIND Order. [During the Route Timer, the FIND Order will be included in the PBBO at a price that is the better of one MPV away from the ABBO or the PBBO. If, during the Route Timer, any new interest arrives opposite the FIND Order that is equal to or better than the ABBO price, the FIND Order will trade against such new interest at the ABBO price.]

(8) If, at the end of the Route Timer pursuant to subparagraph (7) above, the ABBO is still the best price and is marketable with the FIND Order, the order will route to the away market(s) whose disseminated price(s) is better than the PBBO, up to a size equal to the lesser of either: (1) the away markets' size, or (2) the remaining size of the FIND Order. If the FIND Order still has remaining size after such routing, it will (i) trade at the PBBO price or better, subject to the order's limit price, and, if contracts still remain unexecuted, the remaining size will be routed to away markets disseminating the same price as the PBBO, or (ii) be entered into the Order Book and posted either at its limit price or re-priced one MPV away if the order would otherwise lock or cross the ABBO. If size remains, the FIND Order will not be eligible for routing until the next time the option series is subject to a new Opening Process, which may include a reopening after a trading halt. [The remaining size of a non-Public Customer and non-Professional FIND Order will be cancelled upon an intra-day trading halt.]

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- (C) SRCH Order. A SRCH Order is [a Public Customer and Professional order that is] routable at any time. A SRCH Order on the Order Book during an Opening Process (including a re-opening following a trading halt), whether it is received prior to an Opening Process or it is a GTC or GTD SRCH Order from a prior day, may be routed as part of an Opening Process. Orders initiate their own Route Timers and are routed in the order in which their Route Timers end.
 - (1) At the end of an Opening Process, any SRCH Order that is priced through the Opening Price will be cancelled, and any SRCH Order that is at or inferior to the Opening Price, <u>pursuant to Options 3</u>, <u>Section 8(a)(iii)</u>, will <u>[be]</u> execute[<u>d]</u> or book pursuant to Options 3, Section 8(k).
 - (2) Generally, a SRCH Order will be included in the displayed BBO at its limit price, unless the SRCH Order locks or crosses the ABBO, in which case it will be entered into the order book at the ABBO price and displayed one MPV inferior to the ABBO. If there exists a locked ABBO when the SRCH Order is entered onto the order book, the SRCH Order will be entered into the order book at the ABBO price and displayed one MPV inferior to the ABBO. Once on the order book, the SRCH Order is eligible for routing if it is locked or crossed by an away market. If during a Route Timer, ABBO markets move such that the SRCH Order is no longer marketable against the ABBO nor marketable against the PBBO, the SRCH Order will book at its limit price. If, **[the SRCH Order]** during the Route Timer, any new interest arrives opposite the SRCH Order that is equal to or better than the ABBO price, the SRCH Order will trade against such new interest at the ABBO price, unless the ABBO is improved to a price which crosses the SRCH Order's already displayed price, in which case the incoming order will execute at the previous ABBO price as the away market crossed a displayed price. If the ABBO worsens but remains better than the BBO, the SRCH Order will reprice and be re-exposed at the new price(s) without interrupting the Route Timer. If

an ABBO locks or crosses the SRCH Order during a new Route Timer, which would subsequently initiate at the conclusion of any Route Timer if interest remains, the SRCH Order may route to the away market at the ABBO at the conclusion of such Route Timer. If the SRCH Order is locked or crossed by away quotes, it will route at the completion of the Route Timer. [If the ABBO worsens but remains better than the PBBO, the SRCH Order will reprice and be re-exposed at the new price(s) without interrupting] The System will route and execute contracts contemporaneously at the end of the Route Timer.

- (1213) A SRCH Order received after an Opening Process that is not marketable against the PBBO or the ABBO will be entered into the Order Book <u>at its limit price</u>. Once on the Order Book, the SRCH Order is eligible for routing if it is locked or crossed by an away market.
- ([3]4) A SRCH Order received after an Opening Process that is marketable against the PBBO when the ABBO is inferior to the PBBO will be traded [at]on the Exchange at or better than the PBBO price. If the SRCH Order has size remaining after exhausting the PBBO, it may: (1) trade at the next PBBO price (or prices) if the order price is locking or crossing that price (or prices) up to and including the [price equal to the] ABBO price, and/or (2) be routed, subject to a Route Timer, to away markets if all Phlx interest at better or equal prices has been exhausted, and/or (3) be entered into the Order Book at its limit price if not locking or crossing the PBBO or the ABBO. [Once on the Order Book, the SRCH Order is eligible for routing if it is locked or crossed by an away market.]
- ([4]5) A SRCH Order received after an Opening Process that is marketable against the PBBO when the ABBO is equal to the internal PBBO will be traded [at]on the Exchange at the internal PBBO price. If the SRCH Order has size remaining after exhausting the PBBO, it will initiate a Route Timer and expose the SRCH Order at the ABBO to allow participants and other market participants an opportunity to interact with the remainder of the SRCH Order. During the timer, the SRCH Order will be included in the PBBO at a price one MPV away from the ABBO. [If, during the Route Timer, any new interest arrives opposite the SRCH Order that is equal to or better than the ABBO price. If during the Route Timer any new interest arrives opposite the SRCH Order such interest at the ABBO price. If during the Route Timer any new interest arrives opposite the SRCH Order such interest will trade against the SRCH order at the ABBO price. If during the Route Timer any new interest arrives opposite the SRCH Order such interest will trade against the SRCH order at the ABBO price, in which case the incoming order will execute at the previous ABBO price as the away market crossed a displayed price.]
- ([5]6) If, at the end of the Route Timer pursuant to subparagraph (4) above, the SRCH Order is still marketable with the ABBO, the SRCH Order will route to an away <u>market</u> up to a size equal to the lesser of either: (1) the away markets' size, or (2) the

remaining size of the SRCH Order. If the SRCH Order is [locked or crossed by away quotes, it will route at the completion of the Route Timer. If the ABBO worsens but remains better than the PBBO, the SRCH Order will reprice and be reexposed at the new price(s) without interrupting the Route Timer. If the SRCH Order] still has remaining size after [such] routing, it may: ([1]i) trade at the next PBBO price (or prices) if the order price is locking or crossing that price (or prices) up to the ABBO price, and/or ([2]ii) be entered into the <u>order</u> book at its limit price if not locking or crossing the PBBO or the ABBO. [The System will route and execute contracts contemporaneously at the end of the Route Timer. Once on the book, the SRCH Order is eligible for routing if it is locked or crossed by an away market.]

- (1617) A SRCH Order received after an Opening Process that is marketable against the ABBO when the ABBO is better than the PBBO will initiate a Route Timer, and expose the SRCH Order at the ABBO to allow participants and other market participants an opportunity to interact with the SRCH Order. [During the Route Timer, the SRCH Order will be included in the PBBO at a price that is the better of one MPV inferior to the ABBO or at the PBBO. If, during the Route Timer, any new interest arrives opposite the SRCH Order that is equal to or better than the ABBO price, the SRCH Order will trade against such new interest at the ABBO **price.** If during the Route Timer, the ABBO markets move such that the SRCH Order is no longer marketable against the ABBO, it may: (i) trade at the next PBBO price (or prices) if the SRCH Order price is locking or crossing that price (or prices), and/or (ii) be entered into the Order Book at its limit price if not locking or crossing the PBBO. [A SRCH Order will be included in the displayed PBBO at its limit price, unless the SRCH Order locks or crosses the ABBO, in which case it will be entered into the Order Book at the ABBO price and displayed one MPV inferior to the ABBO. If there exists a locked ABBO when the SRCH Order will be entered into the Order Book at the ABBO price and displayed one MPV inferior to the ABBO. If during the Route Timer any new interest arrives opposite the SRCH Order that is marketable against the SRCH Order such interest will trade against the SRCH order at the ABBO price unless the ABBO is improved to a price which crosses the SRCH Order's already displayed price, in which case the incoming order will execute at the previous ABBO price as the away market crossed a displayed price.]
- ([7]8) If, at the end of the Route Timer pursuant to subparagraph ([6]7) above, the ABBO is still the best price and is marketable with the SRCH Order, the order will route to the away market(s) whose disseminated price(s) is better than the PBBO, up to a size equal to the lesser of either: ([1]i) the away markets' size, or ([2]ii) the remaining size of the SRCH Order. If the SRCH Order still has remaining size after such routing, it may: (1) trade at the next PBBO price (or prices) if the order price is locking or crossing that price (or prices) up to the ABBO price, and/or (2) be entered into the Order Book at its limit price if not locking or crossing the PBBO including. [Once on the Order Book,

the SRCH Order is eligible for routing if it is locked or crossed by an away market.]

- [(8) A SRCH Order on the Order Book may be routed to an away market if it is locked or crossed by an away market. If an ABBO locks or crosses the SRCH Order during a new Route Timer, which would subsequently initiate at the conclusion of any Route Timer if interest remains, the SRCH Order may route to the away market at the ABBO at the conclusion of such Route Timer. If, during such Route Timer, any new interest arrives opposite the SRCH Order that is equal to or better than the ABBO price, the SRCH Order will trade against such new interest at its SRCH Order price.
- (9) If, at the end of the Route Timer pursuant to subparagraph (8) above, the ABBO is still the best price, the SRCH Order will route to the away market(s) up to a size equal to the lesser of either: (1) the away markets' size, or (2) the remaining size of the SRCH Order. If the SRCH Order still has remaining size after such routing, it may: (i) trade at the next PBBO price (or prices) if the order price is locking or crossing that price (or prices) up to the ABBO price, and/or (ii) be entered into the Order Book at its limit price if not locking or crossing the PBBO or the ABBO.]
- ([10]9) A SRCH Order that is routed to an away market(s) will be marked as an ISO and designated as an IOC order.

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Options 6 Options Trade Administration

Section 1. Authorization to Give Up

(a) *General*. For each transaction in which a member organization participates, the member organization may indicate, at the time of the trade[, with respect to floor trading only], or through post trade allocation, any Options Clearing Corporation ("OCC") number of a Clearing Member through which a transaction will be cleared ("Give Up"), provided the Clearing Member has not elected to Opt In, as defined and described in paragraph (b) below, and restrict one or more of its OCC number(s) ("Restricted OCC Number"). A member organization may Give Up a Restricted OCC Number provided the member organization has written authorization as described in paragraph (b)(ii) below ("Authorized Member Organization").

* * * * *

(c) *System*. The System will not allow an unauthorized member organization to Give Up a Restricted OCC Number. <u>If an unauthorized Give Up with a Restricted OCC Number is</u>

submitted to the System, the System will process that transaction using the Member's default OCC clearing number.

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[(ii) For all other orders, the System will not allow an unauthorized Give Up with a Restricted OCC Number to be submitted at the firm mnemonic level at the point of order entry.]

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Options 7 Pricing Schedule

Section 9. Other member organization Fees

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B. Port Fees

A port is a logical connection or session that enables a market participant to send inbound messages and/or receive outbound messages from the Exchange using various communication protocols. Port Fees are assessed in full month increments and are not prorated.

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[(2) TradeInfo Interface \$95 per user per month]

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Options 8 Floor Trading

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Section 32. Types of Floor-Based (Non-System) Orders

The Exchange may determine to make certain order types and time-in-force, respectively, available on a class or System basis.

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([b]5) *Contingency Order*. A contingency order is a Limit or Market Order to buy or sell that is contingent upon a condition being satisfied while the order is at the post.

([1]) *Stop-Limit Order*. A Stop-Limit Order is a contingency order to buy or sell at a limited price when a trade or quote on the Exchange for a particular option contract reaches a specified price. A Stop-Limit Order to buy becomes a Limit Order executable at the limit price or better when the option contract trades or is bid on the Exchange at or above the stop-limit price. A Stop-Limit Order to sell becomes a Limit Order executable at the limit price or better when the option contract trades or is offered on the Exchange at or below the stop-limit price.

([2]ii) Stop (stop-loss) Order. A Stop Order is a contingency order to buy or sell when a trade or quote on the Exchange for a particular option contract reaches a specified price. A Stop Order to buy becomes a Market Order when the option contract trades or is bid on the Exchange at or above the stop price. A Stop Order to sell becomes a Market Order when the option contract trades or is offered on the Exchange at or below the stop price.

Notwithstanding the foregoing, a Stop or Stop-Limit Order shall not be elected by a trade that is reported late or out of sequence.

([3]<u>iii</u>) *All or None Order*. An All-or-None Order is a Market or Limit Order which is to be executed in its entirety or not at all. [An All-or-None Order may only be submitted by a Public Customer.] Further, pursuant to Options 8, Section 39, A-3, an All-or-None Order has no standing respecting executions in the trading crowd except with respect to other All-or-None Orders. When represented in the trading crowd, All-or-None Orders are not included as part of the bid or offer.

([4]<u>iv</u>) *Cancel-Replacement Order*. A Cancel-Replacement Order is a contingency order consisting of two or more parts which require the immediate cancellation of a previously received order prior to the replacement of a new order with new terms and conditions. If the previously placed order is already filled partially or in its entirety the replacement order is automatically canceled or reduced by such number.

([5]<u>V</u>) *Immediate or Cancel Order*. An immediate-or-cancel ("IOC") order is a limit order that is to be executed in whole or in part upon receipt. Any portion not so executed shall be cancelled. IOC Orders are not routable and shall not be subject to any routing process described in these Rules.

([c]b) *Time in Force* or "*TIF*." The term "Time in Force" shall mean the period of time that the System will hold an order for potential execution, and shall include:

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(4) Opening Only ("OPG") Order. An Opening Only ("OPG") order is entered with a TIF of "OPG." This order can only be executed in the Opening Process pursuant to Options 3, Section <u>8.</u>

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([d]c) *Not Held Order*. A not held order is an order marked "not held", "take time" or which bears any qualifying notation giving discretion as to the price or time at which such order is to be executed.

(d) Reserved.

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