

EXHIBIT 5

New text is underlined; deleted text is in brackets.

Nasdaq PHLX LLC Rules

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Options Rules**Options 1 General Provisions****Section 1. Applicability, Definitions and References**

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(b) **Definitions.** The following terms as used in the Rules shall, unless the context otherwise indicates, have the meanings herein specified:

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(45) The term “[p]**Professional**” means any person or entity that (i) is not a broker or dealer in securities, and (ii) places more than 390 orders in listed options per day on average during a calendar month for its own beneficial account(s). Member organizations must indicate whether orders are for Professionals.

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(46) The term “**Public Customer**” means a person or entity that is not a broker or dealer in securities and is not a Professional as defined within Options 1, Section (b)([46]45).

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(49) A “**Remote Streaming Quote Trader**” or “**RSQT**” means a Market Maker that is a member affiliated with an Remote Streaming Quote Trader Organization with no physical trading floor presence who has received permission from the Exchange to generate and submit option quotations electronically in options to which such RSQT has been assigned. A qualified RSQT may function as a Remote Lead Market Maker upon Exchange approval. An RSQT is also known as a Remote Market Maker (“RMM”) pursuant to Options 2, Section 11. A Remote Streaming Quote Organization (“RSQTO”) or Remote Market Maker Organization (“RMO”) are Exchange member organizations that have qualified pursuant to Options 2, Section 1.

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(54) A “**Streaming Quote Trader**” or “**SQT**” means a Market Maker who has received permission from the Exchange to generate and submit option quotations electronically in options to which such SQT is assigned. An SQT may only submit such quotations while such SQT is physically present on the trading floor of the Exchange. An SQT may only submit quotes in classes of options in which the SQT is assigned.

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Options 2 Options Market Participants

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Section 4. Obligations of Market Makers

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(c) **Appointment.** Without limiting the foregoing, a Lead Market Maker and a Market Maker is expected to perform the following activities in the course of maintaining a fair and orderly market. The following bid/ask differentials only apply to electronic quotations following the Opening Process.

(1) **Intra-Day Bid/Ask Differentials (Quote Spread Parameters)**. Options on equities (including Exchange-Traded Fund Shares), index options and options on U.S. dollar-settled FCOs may be quoted electronically with a difference not to exceed \$5 between the bid and offer regardless of the price of the bid, provided that the foregoing bid/ask differentials shall not apply to in-the-money series where the market for the underlying security is wider than the differentials set forth above. For such series, the bid/ask differentials may be as wide as the spread between the national best bid and offer in the underlying security[, or its decimal equivalent rounded down to the nearest minimum increment]. The Exchange may establish differences other than the above for one or more series or classes of options.

(d) No change.

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Section 6. Market Maker Orders

(a) [ROTs and Specialists]Market Makers and Lead Market Makers may enter all order types defined in Options 3, Section 7(b) 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 13(a) and (f). The total number of contracts executed during a quarter by a [ROTs and Specialists]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 [ROTs and Specialists]Market Maker and Lead Market Maker in options series.

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Options 3 Options Trading Rules

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Section 6. Firm Quotations*(a) Definitions.*

([i]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.

([ii]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) – (f) No change.

(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."

([i]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.

([ii]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.

([iii]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) and (B) No change.

([iv]4) Initiating quote or order crosses Best Price. If the initiating quote or order crosses 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) – (3) No change.

(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[the remainder will be posted on the Phlx at the Acceptable Range price for a period not to exceed ten seconds, and then 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.]

(B) and (C) No change.

([v]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.

([vi]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.

([4]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 [cancelled immediately]rejected, and an electronic report of such cancellation will be transmitted to the sender.

(b) No change.

(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 [7]10(b).

(d) No change.

(C) No change.

([iii]3) The term "SEC Quote rule" shall mean rule 602 of Regulation NMS under the Exchange Act, as amended.

([iv]4) The terms "customer," "responsible broker or dealer," and "specified persons" shall have the meaning set forth in the SEC Quote rule.

(b) ([i]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.

([ii]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) and (d) No change.

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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, [resulting in the dissemination of a "locked" quotation (e.g., \$1.00 bid - 1.00 offer),] the locked quotations will automatically execute against each other in accordance with the allocation algorithm set forth in Options 3, Section 10.

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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.

(a) No change.

(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. [Specialists, ROTs]Lead Market Makers, Market Makers and Off-Floor Broker-Dealers may not submit Market Orders.

(2) and (3) No change.

(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. [Specialists and ROTs]Lead Market Makers and Maker Makers may not submit a Stop Order. Off-Floor Broker-Dealers may not enter a Stop Market Order.

(A) and (B) No change.

(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. All-or-None Orders are [non-displayed and] non-routable. The Exchange does not disseminate bids or offers of All-or-None Orders to OPRA and Top of PHLX Options feed however All-or-None Orders are displayed in the PHLX Orders and PHLX Depth of Book feed. All-or-None Orders are executed in price-time priority among all Public Customer orders if the size contingency can be met. If an All-or-None Order contingency cannot be met, the All-or-None Order would be bypassed until such time as the contingency could be met. The Acceptable Trade Range protection in Options 3, Section 15(a) is not applied to All-Or-None Orders.

(i) **Non-Displayed Contingency Orders.** A Non-Displayed Contingency Order shall be defined to include the following non-displayed order types: (1) Stop Orders; and (2) All-or-None Orders.

(6) **Opening Sweep.** An Opening Sweep is a one-sided order entered by a [Specialist or ROT]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) – (13) No change.

(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) No change.

(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) No change.

(B) IOC orders may be entered through FIX or SQF, provided that an IOC Order entered by a [ROT or Specialist] Market Maker or Lead Market Maker through SQF is not subject to the Order Price Protection or the Market Order Spread Protection in Options 3, Section 15(a).

(C) No change.

(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 for Automated Quotation Adjustments]. Any portion of the order that is not executed during the Opening Process is cancelled. OPG orders may not route.

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Section 10. Electronic Execution Priority and Processing in the System

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(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, excluding All-or-None Orders[s] that cannot be satisfied, 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.

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Section 13. Price Improvement XL (“PIXL”)

A member may electronically submit for execution an order it represents as agent on behalf of a Public Customer, broker-dealer, or any other entity (“PIXL Order”) against principal interest or against any other order (except as provided in sub-paragraph (a)(6) below) it represents as agent (an “Initiating Order”) provided it submits the PIXL Order for electronic execution into the PIXL Auction (“Auction”) pursuant to this Rule. The execution of a PIXL Order that is comprised of a Public Customer order to buy and a Public Customer to sell at the same price and for the same quantity will be governed by [Rule 1087] Options 3, Section 13(a) and (f) (“Public Customer-to-Public Customer Cross Order”).

- (a) Auction Eligibility Requirements. All options traded on the Exchange are eligible for PIXL. A member (the "Initiating Member") may initiate an Auction provided all of the following are met:
- (1) If the PIXL Order (except if it is a Complex Order) is for less than 50 option contracts, and if the difference between the National Best Bid and National Best Offer ("NBBO") is \$0.01, the Initiating Member must stop the entire PIXL Order at \$0.01 [one minimum price improvement increment] better than the NBBO on the opposite side of the market from the PIXL Order, and better than any Limit Order on the Limit Order book on the same side of the market as the PIXL Order.
 - (2) If the PIXL Order (except if it is a Complex Order) is for the account of a Public Customer and such order is for 50 option contracts or more, or if the difference between the NBBO is greater than \$0.01, the Initiating Member must stop the entire PIXL Order (except if it is a Complex Order) at a price that is equal to or better than the NBBO and the internal market PBBO (the "Reference BBO,"²[³]) which excludes All-or-None Orders) on the opposite side of the market from the PIXL Order, provided that such price must be at least \$0.01[one minimum price improvement increment (as determined by the Exchange but not smaller than one cent)] better than any Limit Order on the Limit Order book on the same side of the market as the PIXL Order.
 - (3) If the PIXL Order (except if it is a Complex Order) is for the account of a broker dealer or any other person or entity that is not a Public Customer and such order is for 50 option contracts or more, or if the difference between the NBBO is greater than \$0.01, the Initiating Member must stop the entire PIXL Order (except if it is a Complex Order) at a price that is the better of: (A) the Reference BBO price improved by at least \$0.01[one minimum price improvement increment] on the same side of the market as the PIXL Order, or (B) the PIXL Order's limit price (if the order is a Limit Order), provided in either case that such price is at or better than the NBBO and the Reference BBO.

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- (b) Auction Process. Only one Auction may be conducted at a time in the same series or same strategy, otherwise the orders will be rejected. Once commenced, an Auction may not be cancelled and shall proceed as follows:

(1) Auction Period and PIXL Auction Notification ("PAN").

- (A) To initiate the Auction (except if it is a Complex Order), the Initiating Member must mark the PIXL Order for Auction processing, and specify either: (i) a single price at which it seeks to execute the PIXL Order (a "stop price"); (ii) that it is willing to automatically match as principal or as agent

on behalf of an Initiating Order the price and size of all PAN responses, and trading interest ("auto-match") in which case the PIXL Order will be stopped at the better of the NBBO or the Reference BBO on the Initiating Order side; or (iii) that it is willing to either: a) stop the entire order at a single stop price and auto-match PAN responses and trading interest at a price or prices that improve the stop price to a specified price (a "Not Worse Than" or "NWT" price); b) stop the entire order at a single stop price and auto-match all PAN responses and trading interest at or better than the stop price; or c) stop the entire order at the better of the NBBO or Reference BBO on the Initiating Order side, and auto-match PAN responses and trading interest at a price or prices that improve the stop price up to the NWT price. In all cases, if the PBBO on the same side of the market as the PIXL Order represents a Limit Order on the book, the stop price must be at least \$0.01[one minimum price improvement increment] better than the booked Limit Order's limit price. Once the Initiating Member has submitted a PIXL Order for processing pursuant to this subparagraph, such PIXL Order may not be modified or cancelled. Under any of the circumstances described in subparagraphs (i)-(iii) above, the stop price or NWT price may be improved to the benefit of the PIXL Order during the Auction, but may not be cancelled. Under no circumstances will the Initiating Member receive an allocation percentage, at the final price point, of more than 50% with one competing quote, order or PAN response or 40% with multiple competing quotes, orders or PAN responses, when competing quotes, orders or PAN responses have contracts available for execution.

When starting an Auction, the Initiating Member may submit the Initiating Order with a designation of "surrender" to the other PIXL participants ("Surrender") which will result in the Initiating Member forfeiting the priority and trade allocation privileges which he is otherwise entitled to as per paragraph (b)(5)(B)(i). If Surrender is specified the Initiating Order will only trade if there is not enough interest available to fully execute the PIXL Order at prices which are equal to or improve upon the stop price. The Surrender function will never result in more than the maximum allowable allocation percentage to the Initiating Member than that which the Initiating Member would have otherwise received in accordance with the allocation procedures set forth in this Rule. Surrender will not be applied if both the Initiating Order and PIXL Order are Public Customer orders. Surrender information will not be available to other market participants and may not be modified.

(B) To initiate the PIXL Complex Order Auction, the Initiating Member must mark the PIXL Order for Auction processing, and specify either: (i) a single price at which it seeks to execute the PIXL Order (a "stop price"); or (ii) that it is willing to either: a) stop the entire order at a single stop price and auto-match PAN responses and trading interest at a price or prices that improve the stop price to a specified price (a "Not Worse Than" or "NWT"

price); or (b) stop the entire order at a single stop price and auto-match all PAN responses and trading interest at or better than the stop price. Once the Initiating Member has submitted a PIXL Complex Order for processing pursuant to this subparagraph, such PIXL Order may not be modified or cancelled. Under any of the circumstances described in sub-paragraphs (i)-(ii) above, the stop price or NWT price may be improved to the benefit of the PIXL Order during the Auction, but may not be cancelled.

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- (G) (i) The minimum price increment for PAN responses and for an Initiating Member's stop price and/or NWT price (except if it is a Complex Order) shall be \$0.01.
- (ii) The minimum price increment for PAN responses and for an Initiating Member's stop price and/or NWT price in the case of a Complex Order shall be \$0.01.
- (H) A PAN response size at any given price point may not exceed the size of the PIXL Order. A PAN response with a size greater than the size of the PIXL Order will be immediately cancelled.
- (I) A PAN response (except if it is a Complex Order) must be equal to or better than the NBBO and the Reference BBO at the time of receipt of the PAN response. A Complex Order PAN response must be equal to or better than the cPBBO, as defined in Options 3, Section 14(a) at the time of receipt of the PAN response. PAN responses may be modified or cancelled during the Auction. A PAN response (except if it is a Complex Order) submitted with a price that is outside the better of the NBBO or Reference BBO will be immediately cancelled. A Complex Order PAN response submitted with a price that is outside the cPBBO will be rejected. A PAN or Complex Order PAN response which is inferior to the stop price of the PIXL order will be cancelled.

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- (2) Conclusion of Auction. The PIXL Auction shall conclude at the earlier to occur of (A) through (D) below, with the PIXL Order executing pursuant to paragraph (2)(A) through (D) below.
- (A) The end of the Auction period;
- (B) For a PIXL Auction (except if it is a Complex Order), any time the Reference BBO crosses the PIXL Order stop price on the same side of the market as the PIXL Order;

(C) For a Complex Order PIXL Auction, any time the cPBBO including Reference BBO or the Complex Order book crosses the PIXL Order stop price on the same side of the market as the PIXL Order (defined for these purposes as a "Complex PIXL Order" or, as the context requires, a "PIXL Order"); or

(D) Any time there is a trading halt on the Exchange in the affected series.

(3) If the situations described in sub-paragraphs (2)(B), (C), or (D) above occur, the entire PIXL Order will be executed at: (A) in the case of the Reference BBO crossing the PIXL Order stop price, the best response price(s) or, if the stop price is the best price in the Auction, at the stop price, unless the best response price is equal to or better than the price of a Limit Order resting on the PHLX book on the same side of the market as the PIXL Order, in which case the PIXL Order will be executed against that response, but at a price that is at least \$0.01[one minimum price improvement increment] better than the price of such Limit Order at the time of the conclusion of the Auction; (B) in the case of the cPBBO or the Complex Order book crossing the Complex PIXL Order stop price on the same side of the market as the Complex PIXL Order, the stop price against executable PAN responses and executable Complex Orders using the allocation algorithm in subparagraph (5)(B)(iv)(a) through d); or (C) in the case of a trading halt on the Exchange in the affected series, the stop price, in which case the PIXL Order will be executed solely against the Initiating Order. Any unexecuted PAN responses will be cancelled.

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(5) **Order Allocation.** At the conclusion of the Auction, the PIXL Order will be allocated at the best price(s) as follows:

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(B) After Public Customer interest at a particular price level has been satisfied, remaining contracts will be allocated among all Exchange quotes, orders and PAN responses as follows:

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(iii) In the case of a PIXL (except if it is a Complex Order), if the Initiating Member selected the "stop and NWT" option of the PIXL Auction, contracts shall be allocated as follows:

a. first to quotes, orders and PAN responses at prices better than the NWT price (if any), beginning with the best price, pursuant to the algorithm set forth in Options 3, Section 10(a)(1)(A) and (E) – (G) at each price point;

- b. next, to quotes, orders and PAN responses at prices at the Initiating Member's NWT price and better than the Initiating Member's stop price, beginning with the NWT price. The Initiating Member shall be allocated an equal number of contracts as the aggregate size of all other quotes, orders and PAN responses at each price point, except that the Initiating Member shall be entitled to receive up to 40% (if there are multiple competing quotes, orders or PAN responses) or 50% (if there is only one competing quote, order or PAN response) of the contracts remaining at the final price point (including situations where the final price is the stop price) after Public Customer interest has been satisfied but before remaining interest. In the case of an Initiating Order with a NWT price at the market, the Initiating Member shall be allocated an equal number of contracts as the aggregate size of all other quotes, orders and PAN responses at all price points, except that the Initiating Member shall be entitled to receive up to 40% (if there are multiple competing quotes, orders or PAN responses) or 50% (if there is only one competing quote, order or PAN response) of the contracts remaining at the final price point (including situations where the final price is the stop price) after Public Customer interest has been satisfied but before remaining interest. If there are other quotes, orders and PAN responses at the final price point the contracts will be allocated to such interest pursuant to the algorithm set forth in paragraph Options 3, Section 10(a)(1)(E) – (G). Any remaining contracts shall be allocated to the Initiating Member.

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- (v) In the case of a Complex Order PIXL, if the Initiating Member selected the "stop and NWT" option of the PIXL Auction, contracts shall be allocated as follows:

- a. First to Complex Orders and PAN responses at prices better than the NWT price, as well as to quotes and orders which comprise the cPBBO at the end of the Auction, if such cPBBO is better than the NWT price, pursuant to the algorithm set forth above in (b)(5)(B)(iv)(a) through d) of this rule;

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- (7) If the execution PIXL Auction price (except if it is a Complex Order) would be[is] the same or better [as that of] than an order on the Limit Order book represented in the PBBO on the same side of the market as the PIXL Order, the PIXL Order may only be executed at a price that is at least \$0.01[one minimum price improvement increment] better than the resting order's limit price. [or, i]If such resting order's limit price is equal to or crosses

the stop price, then the entire PIXL Order will trade at the stop price with all better priced interest being considered for execution at the stop price.

(8) If the execution Complex Order PIXL Auction price [is]would be the same or better [as that of a]than a Complex Order on the Complex Order Book on the same side of the market as the PIXL Order, the PIXL Order may only be executed at a price that is at least \$0.01[one minimum price improvement increment] better than the resting order's limit price.]; or i]If such resting order's limit price is equal to or crosses the stop price, then the entire PIXL Order will trade at the stop price with all better priced interest being considered for execution at the stop price.

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(f) In lieu of the procedures in paragraphs (a) - (b) above, an Initiating Member may enter a PIXL Order for the account of a Public Customer paired with an order for the account of a Public Customer and such paired orders will be automatically executed without a PIXL Auction, provided there is not currently an Auction in progress in the same series or same strategy, in which case the orders will be rejected. The execution price for such a PIXL Order (except if it is a Complex Order) must be expressed in the quoting increment applicable to the affected series. Such an execution may not trade through the better of the NBBO or Reference BBO, including All-or-None Orders that can be satisfied, or at the same price as any resting Public Customer order. The execution price for such a Complex Order PIXL may be in .01 increments and may not trade at a price equal to or through the cPBBO including Reference BBO or at the same price as a resting Public Customer Complex Order including All-or-None Orders that can be satisfied.

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Section 15. Simple Order Risk Protections

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(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 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, [or] with respect to complex order transactions or during an Opening Process.

(2) Automated Quotation Adjustments.

(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 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 ("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 Quote Trader or Remote Streaming Quote 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) 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 SQF 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(s) established by the Market Maker not to exceed 15 seconds ("Multi-Trigger Specified Time Period"), the number of times the System automatically removes the Market Maker's or Group's quotes and SQF interest in all options series will be based on the number of triggers of the Percentage-Based Threshold, described in (i) above, as well as the Volume-Based Threshold described in (ii) above. Once the System determines that the number of triggers equals or exceeds a number established by either the Market Maker or Group, during a Multi-Trigger Specified Time Period, the System will automatically remove all quotes and SQF interest in all options series in all underlying issues for that Market Maker or Group. A trigger is defined as the event which causes the System to automatically remove 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 or the Volume-Based Threshold and will continue until the System removes quotes and SQF interest as described in (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 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 and SQF interest in all options in an underlying security when the Percentage-Based Threshold or Volume-Based Threshold has been reached. The System will automatically remove quotes and SQF interest in all options in all underlying securities when the Multi-Trigger Threshold has been reached. The System will send a Purge Notification Message to the Market Maker for all affected options when the above thresholds have been reached.

(i) The Percentage-Based Threshold or Volume-Based Threshold and Multi-Trigger Threshold, are considered independently of each other.

(ii) Quotes and SQF interest will be automatically executed up to the Market Maker's size regardless of whether the execution exceeds the Percentage-Based Threshold or Volume-Based Threshold.

(E) If a Market Maker requests the System to remove quotes and SQF interest in all options series in an underlying issue, the System will automatically reset the Percentage-Based Specified Time Period(s) or Volume-Based Specified Time Period(s). The Multi-Trigger Specified Time Period(s) will not automatically reset for the Multi-Trigger Threshold.

(F) When the System removes quotes and SQF interest as a result of the Percentage-Based Threshold or Volume-Based Threshold, the Market Maker must send a re-entry indicator to re-enter the System. When the System removes quotes and SQF interest as a result of the Multi-Trigger Threshold, the System will not accept quotes and SQF interest through designated protocols until the Market Maker manually requests re-entry. After quotes and SQF interest are removed as a result of the Multi-Trigger Threshold, Exchange staff must set a re-entry indicator in this case to enable re-entry, which will cause the System to send a Reentry Notification Message to the Market Maker 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 and SQF interest are removed as a result of the Multi-Trigger Threshold, provided the Market Maker's Clearing Firm has requested to receive such notification.

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Section 23. Data Feeds and Trade Information

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

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(2) **PHLX Orders** is a real-time full Limit Order book data feed that provides pricing information for orders on the PHLX [Limit] Order book for displayed order types and All-or-None Orders, as well as market participant capacity. PHLX Orders is currently provided as part of the TOPO Plus Orders data product. PHLX Orders provides real-time information to enable users to keep track of the single and complex order book(s)[, single and Complex Orders, and Complex Order Live Auction ("COLA") for all symbols listed on Phlx]. 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 Depth of Market** is a data product that provides: (i) order and quotation information for individual quotes and orders on the [PHLX] 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.

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Options 5 Order Protection and Locked and Crossed Markets

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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 All-or-None Orders or Stop Orders which have not been triggered. [and t]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 which have not been triggered and All-or-None Orders which cannot be satisfied. 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").

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Options 8 Floor Trading

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Section 2. Definitions

(a) The following terms as used in the Rules shall, unless the context otherwise indicates, have the meanings herein specified:

(1) – (4) No change.

(5) **Permit.** The term "Permit" shall refer to the description in Rule 1(z). Additionally, notwithstanding applicable By-Laws and Rules conditioning membership, a Series A-1 permit holder on the Exchange's Trading Floor may be affiliated with up to two (2) member organizations (a primary and a secondary member organization) that are under common ownership. Both the primary and secondary member organizations shall notify the Membership Department of such an affiliation. This notification shall include: (i) an attestation of common ownership; (ii) the names of the individuals responsible for supervision of the permit holder; and (iii) the Exchange account numbers for billing purposes. For purposes of this Rule, "common ownership" shall be defined as at least 75% common ownership between the member organizations. A permit may not be transferred by lease, sale, gift, involuntary transfer, or any other means or as collateral to secure any obligation, except that a permit may be transferred within the Permit Holder's Member Organization or to an "Inactive Nominee" who is registered as such with the Exchange, subject to the provisions of the By-Laws and Rules relating to an "Inactive Nominee".

(6) No change.

(7) **Floor Lead Market Maker.** The term "*Floor Lead Market Maker*" is a member who is registered as an options Lead Market Maker pursuant to Options 2, Section 12(a) and has a physical presence on the Exchange's trading floor.

([7]8) **Floor Market Maker.** The term "*Floor Market Maker*" is a Market Maker who is neither an SQT or an RSQT. A Floor Market Maker may provide a quote in open outcry

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

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

(g) *FLEX Option*. A FLEX Option is as described in Options 8, Section 34. FLEX Options are not eligible for entry by a member for execution through FBMS.

([g]h) *Routing order types*. In the System, the following order types will be available and governed by Options 5, Section 4: DNR (do not route), FIND and SRCH.

([h]i) For options on foreign currencies, a multi-spread transaction consisting of spread, straddle or combination orders may be executed. A multi-spread transaction combines any two spread type orders for the same account as defined in Options 8, Section 32(e), a permissible multi-spread transaction combines any of the following: a two-way transaction with another two-way transaction of the same spread type; a three-way transaction with another three-way transaction of the same spread type; or a two-way transaction with a three-way transaction of the same spread type. In addition, a multi-spread transaction includes the combination of a spread type order with a ratio spread type order. The ratio between the spread type order and the ratio spread type order comprising the multi-spread transaction may range from one-to-one to three-to-one, which will be determined by the Exchange.

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