## **EXHIBIT 5**

Deleted text is [bracketed]. New text is <u>underlined</u>.

The Nasdaq Stock Market LLC Rules

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**EQUITY RULES** 

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**Equity 4 Equity Trading Rules** 

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## 4702. Order Types

- (a) No change.
- (b) (1) (7) No change.
  - (8) (A) A "Market On Open Order" or "MOO Order" is an Order Type entered without a price that may be executed only during the Nasdaq Opening Cross. Subject to the qualifications provided below, MOO Orders may be entered[, cancelled, and/or modified] between 4 a.m. ET and immediately prior to 9:28 a.m. ET. An MOO Order may[ not] be cancelled or modified [at or after ]until immediately prior to 9:2[8]5 a.m. ET. An MOO Order shall execute only at the price determined by the Nasdaq Opening Cross.
  - (B) The following Order Attributes may be assigned to a Market On Open Order:
    - Price. An MOO Order is entered without a price and shall execute only at the price determined by the Nasdaq Opening Cross.
    - Size.
    - Time-in-Force. An MOO Order may execute only in the Nasdaq Opening Cross. However, a Participant may designate the Time-in-Force for an MOO Order either by designating a Time-in-Force of "On Open" or by entering another Order Type with a Market Pegging Attribute and flagging the Order to participate in the Nasdaq Opening Cross. An MOO Order entered through RASH or FIX with a Time-in-Force of IOC and flagged to participate in the Nasdaq Opening Cross that is entered after the time of the Nasdaq Opening Cross will be accepted but will be converted into a Non-Displayed Order with a Time-in-Force of IOC and a price established using the Market Pegging Order Attribute with no offset. An Order with a Market Pegging Attribute and a Time-in-Force other than IOC that is

flagged to participate in the Nasdaq Opening Cross and entered at or after 9:28 a.m. will be held and entered into the System after the completion of the Nasdaq Opening Cross. All other MOO Orders entered at or after 9:28 a.m. will be rejected.

- Participation in the Nasdaq Opening Cross is required for this Order Type.
- (9) (A) A "Limit On Open Order" or "LOO Order" is an Order Type entered with a price that may be executed only in the Nasdaq Opening Cross, and only if the price determined by the Nasdaq Opening Cross is equal to or better than the price at which the LOO Order was entered. Subject to the qualifications provided below, LOO Orders may be entered[, cancelled, and/or modified] between 4 a.m. ET and immediately prior to 9:28 a.m. ET but may not be cancelled or modified at or after 9:25 a.m. ET. Between 9:28 a.m. ET and 9:29:30 a.m. ET, an LOO Order may be entered, provided that there is a First Opening Reference Price or a Second Opening Reference Price. An LOO Order entered after 9:29:30 a.m. ET that is designated as an IOC will be rejected. An LOO Order entered between 9:28 a.m. ET and 9:29:30 a.m. ET will be accepted at its limit price, unless its limit price is higher (lower) than the higher (lower) of the First Opening Reference Price and the Second Opening Reference Price for an LOO Order to buy (sell), in which case the LOO Order will be handled consistent with the Participant's instruction that the LOO Order is to be: (1) rejected; or (2) re-priced to the higher (lower) of the First Opening Reference Price and the Second Opening Reference Price, provided that if either the First Opening Reference Price or the Second Opening Reference Price is not at a permissible minimum increment, the First Opening Reference Price or the Second Opening Reference Price, as applicable, will be rounded (i) to the nearest permitted minimum increment (with midpoint prices being rounded up) if there is no imbalance, (ii) up if there is a buy imbalance, or (iii) down if there is a sell imbalance. The default configuration for Participants that do not specify otherwise will be to have such LOO Orders re-priced rather than rejected.
- (B) The following Order Attributes may be assigned to a Limit On Open Order:
  - Price.
  - Size.
  - Time-in-Force. In general, an LOO Order may execute only in the Nasdaq Opening Cross. However, a Participant may designate the Time-in-Force for an LOO Order either by designating a Time-in-Force of "On Open," in which case the Order will execute solely in the Nasdaq Opening Cross, or by entering another Order Type and Time-in-Force and flagging the Order to participate in the Nasdaq Opening Cross. In the latter case, if the Participant designates a Time-in-Force of IOC, the Order will participate solely in the Nasdaq Opening Cross. If the Participant enters a Time-in-Force that continues after the time of the Nasdaq Opening Cross, the Order will participate in the Nasdaq Opening Cross like an

LOO Order, while operating thereafter in accordance with its designated Order Type and Order Attributes (if not executed in full in the Nasdaq Opening Cross). Such an Order may be referred to as an "Opening Cross/Market Hours Order." If such an Order has a Time-in-Force that continues until at least the time of the Nasdaq Closing Cross, the Order may be referred to as a "Cross to Cross Order."

Following the Nasdaq Opening Cross, an Opening Cross/Market Hours Order may not operate as a Post-Only Order, Midpoint Peg Post-Only Order, a Supplemental Order, a Retail Order, or an RPI Order. In the case of a Market Maker Peg Order entered prior to 9:28 a.m. ET that is also designated to participate in the Nasdaq Opening Cross, the price of the Order for purposes of operating as an LOO Order will be established on entry and will not thereafter be pegged until after the completion of the Nasdaq Opening Cross. An Opening Cross/Market Hours Order that has a Time-in-Force other than IOC and is entered between 9:2[8]9:30 a.m. ET and the time of the Nasdaq Opening Cross will be (i) held and entered into the System after the completion of the Nasdaq Opening Cross if it has been assigned a Pegging Attribute or Routing Attribute, (ii) treated as an Opening Imbalance Only Order and entered into the System after the completion of the Nasdaq Opening Cross if entered through RASH, QIX, or FIX but not assigned a Pegging Attribute or Routing Attribute, or (iii) treated as an Opening Imbalance Only Order and cancelled after the Nasdaq Opening Cross if entered through OUCH or FLITE. An Opening Cross/Market Hours Order entered through RASH or FIX after the time of the Nasdaq Opening Cross will be accepted but the Nasdaq Opening Cross flag will be ignored. [A Routable Order flagged to participate in the Nasdaq Opening Cross with a Time-in-Force other than IOC and entered at or after 9:28 a.m. will be held and entered into the System after the Nasdaq Opening Cross.] All other [LOO Orders and] Opening Cross/Market Hours Orders entered at or after 9:28 a.m. will be rejected with the exception of certain LOO Orders discussed in subparagraph (A) above.

- Participation in the Nasdaq Opening Cross is required for this Order Type.
- (10) (A) An "Opening Imbalance Only Order" or "OIO Order" is an Order Type entered with a price that may be executed only in the Nasdaq Opening Cross and only against MOO Orders, LOO Orders, or Early Market Hours Orders (as defined in Rule 4752). OIO Orders may be entered between 4:00 a.m. ET until the time of execution of the Nasdaq Opening Cross, but may not be cancelled or modified at or after 9:2[8]5 a.m. ET. If the entered price of an OIO Order to buy (sell) is higher than (lower than) the highest bid (lowest offer) on the Nasdaq Book, the price of the OIO Order will be modified repeatedly to equal the highest bid (lowest offer) on the Nasdaq Book; provided, however, that the price of the Order will not be moved beyond its stated limit price. Thus, for example, if an OIO Order to buy was entered with a price of \$11 and the current highest bid on the Nasdaq Book was \$10.99, the OIO Order would be priced at \$10.99. If the highest bid subsequently became \$10.98, the OIO Order would again be repriced. However, if the highest bid moved to \$11.01, the OIO Order would not be repriced.

- (B) The following Order Attributes may be assigned to an Opening Imbalance Only Order:
  - Price.
  - Size.
  - Time-in-Force. An OIO Order may execute only in the Nasdaq Opening Cross. An OIO Order entered after the time of the execution of the Nasdaq Opening Cross will be rejected.
  - Participation in the Nasdaq Opening Cross is required for this Order Type.

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## 4752. Opening Process

- (a) **Definitions.** For the purposes of this rule the term:
  - (1) "Early Opening Order Imbalance Indicator" shall mean a message disseminated by electronic means containing the same information as the Order Imbalance Indicator, except that it will exclude information about indicative prices, as set forth in subparagraph (a)(3)(E) herein.
  - ([1]2) "Imbalance" shall mean the number of shares of buy or sell MOO, LOO or Early Market Hours orders that may not be matched with other MOO, LOO, Early Market Hours, or OIO order shares at a particular price at any given time.
  - ([2]3) "Order Imbalance Indicator" shall mean a message disseminated by electronic means containing information about MOO, LOO, OIO, and Early Market Hours orders and the price at which those orders would execute at the time of dissemination. The Order Imbalance Indicator shall disseminate the following information:
    - (A) "Current Reference Price" shall mean:
- (i) The single price that is at or within the current Nasdaq Market Center best bid and offer at which the maximum number of shares of MOO, LOO, OIO, and Early Market Hours orders can be paired.
- (ii) If more than one price exists under subparagraph (i), the Current Reference Price shall mean the price that minimizes any Imbalance.
- (iii) If more than one price exists under subparagraph (ii). the Current Reference Price shall mean the entered price at which shares will remain unexecuted in the cross.

- (iv) If more than one price exists under subparagraph (iii), the Current Reference Price shall mean the price that minimizes the distance from the bid-ask midpoint of the inside quotation prevailing at the time of the order imbalance indicator dissemination.
  - (B) the number of shares represented by MOO, LOO, OIO, and Early Market Hours orders that are paired at the Current Reference Price;
  - (C) the size of any Imbalance;
  - (D) the buy/sell direction of any Imbalance; and
  - (E) indicative prices at which the Nasdaq Opening Cross would occur if the Nasdaq Opening Cross were to occur at that time and the percent by which the indicative prices are outside the then current Nasdaq Market Center best bid or best offer, whichever is closer. The indicative prices shall be:
- (i) "Near Clearing Price" which shall mean the price at which [both] the MOO, LOO, OIO, and Early Market Hours orders and Open Eligible Interest in the Nasdaq Market Center would execute, and
- (ii) "Far Clearing Price" which shall mean the price at which the MOO, LOO, OIO, and Early Market Hours orders in the Nasdaq Opening Book would execute.
- (iii) If marketable buy (sell) shares would remain unexecuted above (below) the Near Clearing Price or Far Clearing Price, Nasdaq shall disseminate an indicator for "market buy" or "market sell".
  - ([3]4) "Limit On Open Order" or "LOO" shall have the meaning provided in Rule 4702.
  - ([4]5) "Market on Open Order" or "MOO" shall have the meaning provided in Rule 4702.
  - ([5]6) "Nasdaq Opening Cross" shall mean the process for determining the price at which orders shall be executed at the open and for executing those orders.
  - ([6]7) "Opening Imbalance Only Order" or "OIO" shall have the meaning provided in Rule 4702.
  - (8) "First Opening Reference Price" shall mean the previous day's Nasdaq Official Closing Price of the security for Nasdaq-listed securities or the consolidated closing price otherwise. For new Exchange Traded Products that do not have a Nasdaq Official Closing Price or a consolidated closing price, the First Opening Reference Price will be the offering price.

- (9) "Second Opening Reference Price" shall mean the Current Reference Price in the Order Imbalance Indicator disseminated at 9:28 a.m. ET.
- ([7]10) "Market Hours Orders" shall mean any order that may be entered into the [s]System and designated with a time-in-force of MIOC, MDAY, MGTC. Market Hours Orders shall be designated as "Early Market Hours Orders" if entered into the [s]System prior to 9:28 a.m. and shall be treated as MOO[market-on-open] and LOO[limit-on-open orders], as appropriate, for the purposes of the Nasdaq Opening Cross. Orders entered into the [s]System at 9:[28]29:30 a.m. ET or after with a Time-in-Force other than an IOC shall be designated as "Late Market Hours Orders" and shall be treated as imbalance-only orders for the purposes of the cross. Beginning at 9:2[8]5 a.m., requests to cancel or modify Market Hours Orders shall be suspended until after completion of the Opening Cross at which time such requests shall be processed, to the extent that such orders remain available within the System.
- ([8]11) "Open Eligible Interest" shall mean any quotation or any order that may be entered into the system and designated with a time-in-force of SDAY, SGTC, SHEX, or GTMC.
- ([9]12) "Nasdaq Order Imbalance Snapshot" shall mean a message disseminated by electronic means containing a subset of information contained in the Order Imbalance Indicator using a format optimized for newswire services.
- (b) (c) No change.
- (d) Processing of Nasdaq Opening Cross. For System securities, the Nasdaq Opening Cross shall occur at 9:30, and market hours trading shall commence when the Nasdaq Opening Cross concludes.
  - (1) Early Order Imbalance Indicator and Order Imbalance Indicator.
    - (A) Beginning at 9:25 a.m., Nasdaq shall disseminate by electronic means an early Order Imbalance Indicator every 10 seconds until the Order Imbalance Indicator begins to disseminate.
    - [(1)](B) Beginning at 9:28 a.m., Nasdaq shall disseminate by electronic means an Order Imbalance Indicator every second until market open.
  - (2) (A) The Nasdaq Opening Cross shall occur at the price that maximizes the number of shares of MOO, LOO, OIO, Early Market Hours orders, and executable quotes and orders in the Nasdaq Market Center to be executed.
    - (B) If more than one price exists under subparagraph (A), the Nasdaq Opening Cross shall occur at the price that minimizes the number of shares of buy or sell

- MOO, LOO or Early Market Hours orders that may not be matched with other MOO, LOO, Early Market Hours, Open Eligible Interest, or OIO order shares.
- (C) If more than one price exists under subparagraph (B), the Nasdaq Opening Cross shall occur at the entered price at which shares will remain unexecuted in the cross.
- (D) If more than one price exists under subparagraph (C), the Nasdaq Opening Cross shall occur at the price that minimizes the distance from the bid-ask midpoint of the inside quotation prevailing at 9:30 a.m.
- (E) If the Nasdaq Opening Cross price established by subparagraphs (A) through (D) is outside the benchmarks established by Nasdaq by a threshold amount, the Nasdaq Opening Cross shall occur at a price within the threshold amounts that best satisfies the conditions of subparagraphs (A) through (D). Nasdaq management shall set and modify such benchmarks and thresholds from time to time upon prior notice to market participants.
- (F) Opening Cross Eligibility: In addition to the Nasdaq Opening Cross price process of subparagraphs (A) through (E), each security in the Nasdaq Opening Cross must also pass one of the Opening Cross Price Tests in subparagraphs (i) through (iii) below or all MOO, LOO, OIO, and Early Market Hours orders in the Nasdaq Opening Cross in the security will be cancelled back to Participants, no Nasdaq Opening Cross in that security will occur, and the security will open for regular market hours trading consistent with paragraph (c) above. Each Opening Cross Price Test applies a price range within which the Opening Cross Price, as calculated by subparagraphs (A) through (E) above, must fall to pass the individual Opening Cross Price Test. For each Opening Cross Price Test, Nasdaq will calculate the price range by using a threshold applied to the unique measures under each test. Nasdaq will establish and publish the thresholds used in the Opening Cross Price Test thresholds from time to time upon prior notice to market participants.
  - (i) Opening Cross Price Test A. For Nasdaq listed securities, the Opening Cross price range for Test A is established by adding and subtracting the Opening Cross Price Test A threshold from the Nasdaq Official Closing Price of the security for the previous trading day. For non-Nasdaq listed securities, the Opening Cross price range for Test A is established by adding and subtracting the Opening Cross Price Test A threshold from the consolidated closing price of the security for the previous trading day. For new Exchange Traded Products that do not have a Nasdaq Official Closing Price, the Opening Cross price range is established by adding and subtracting the Opening Cross Price Test A threshold from the offering price. For securities subject to a corporate action where the Exchange can calculate a derived price based on the terms of the corporate action, the Opening Cross price range for Test A is established by

adding and subtracting the Opening Cross Price Test A threshold from such derived price. If the Nasdaq Opening Cross price is higher or lower than the Opening Cross price range established by this subparagraph or the security does not have a Nasdaq Official Closing Price or consolidated closing price for the previous trading day, offering price, or derived price, as applicable, Opening Cross Price Test B will be performed.

- (ii) Opening Cross Price Test B. The Opening Cross price range for Test B is established by adding and subtracting the Opening Cross Price Test B threshold from the Nasdaq last sale (either round or odd lot) after 9:15 a.m. ET but prior to the Opening Cross. If the Nasdaq Opening Cross price is higher or lower than the Opening Cross price range established by this subparagraph or if there is no Nasdaq last sale, Opening Cross Price Test C will be performed.
- (iii) Opening Cross Price Test C. The Opening Cross price range for Test C is established by adding to and subtracting the Opening Cross Price Test C threshold from the Nasdaq best bid (for Opening Cross prices that would be higher than the price used under subparagraph (i) above) or Nasdaq best offer (for Opening Cross prices that would be lower than the price used under subparagraph (i) above). For purposes of this test, if a security does not have a Nasdaq Official Closing Price or consolidated closing price for the previous trading day, offering price, or derived price, as applicable, Nasdaq will use a price of \$0. If the Nasdaq Opening Cross price is higher or lower than the Opening Cross price range established by this subparagraph all Orders in the Opening Cross will be cancelled back to Participants, no Opening Cross will occur, and the security will open for regular market hours trading consistent with paragraph (c) above.

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