I. Introduction

On March 15, 2011, The NASDAQ Stock Market LLC (“NASDAQ” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”), and Rule 19b-4 thereunder, a proposed rule change to modify the procedures for the opening of trading at the start of the trading day and at the resumption of trading following a trading halt on the NASDAQ Options Market (“NOM”). The proposed rule change was published for comment in the Federal Register on April 4, 2011. The Commission received no comment letters regarding the proposal. This order approves the proposed rule change.

II. Description of the Proposal

The Exchange proposes to modify Chapter V, Section 4 and Chapter VI, Section 8 of the Exchange’s rules (“NOM Rules”) governing the opening of trading at the start of the trading day and at the resumption of trading following a trading halt on NOM. Specifically, the Exchange proposes to: 1) eliminate one tie-breaker and modify a second tie-breaker used to establish the Current Reference Price and cross price; 2) modify the circumstances whereby the Exchange disseminates an indicative indicator of “market;” 3) change the start time for imbalance and

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indicative data dissemination; 4) clarify when an Order Imbalance Indicator is disseminated; and
5) establish a halt cross.

A. Elimination of the Order Imbalance Tie-Breaker and Modification of the Mid-Point Tie-Breaker

NOM currently employs a series of tie-breakers that resolve instances where multiple
prices satisfy the conditions for executing the opening cross. These tie-breakers govern the
calculation of the Current Reference Price, which is disseminated to market participants prior to
the execution of the opening cross, and the calculation of the actual cross price.\footnote{See NOM Rules Chapter VI, Section 8(a)(2)(A), (b)(2).}

The tie-breakers are criteria that operate in a hierarchy. If one and only one price satisfies the first
criterion, the system has no need to consider the second tie-breaker, and, instead, the system will
execute the cross. Conversely, if multiple prices satisfy the first criterion, the algorithm turns to
the second criterion, and, if multiple prices satisfy the second criterion, the algorithm then turns
to the third criterion. Currently, the first tie-breaker is the single price at which the maximum
number of contracts of Eligible Interest\footnote{“Eligible Interest” is any quotation or any order that may be entered into the system and
designated with a time-in-force of IOC, DAY, GTC, EXPR. See NOM Rules Chapter VI, Section 8(a)(4).}
can be paired at or within the National Best Bid and Offer (“NBBO”).\footnote{See NOM Rules Chapter VI, Section 8(a)(2)(A)(i), (b)(2)(A).}

The Exchange proposes to eliminate what currently serves as the second tie-breaker (the
“Order Imbalance Tie-Breaker”).\footnote{See NOM Rules Chapter VI, Section 8(a)(2)(A)(ii), (b)(2)(B).}

Specifically, under this second tie-breaker, when more than
one price satisfies the first condition for the opening cross, the system will choose the price
which minimizes the order imbalance remaining if the cross were to be executed.
The Exchange represents that it has determined to eliminate the Order Imbalance Tie-Breaker because it has not proven useful in augmenting price discovery prior to the cross or in operating an effective opening cross.\(^8\) The Exchange noted that it initially adopted the Order Imbalance Tie-Breaker based upon its successful use in the equities opening cross.\(^9\) However, the Exchange believes that, in its experience, the Order Imbalance Tie-Breaker has not performed well for the options cross because imbalances occur less often in the options market and such imbalances generally are much smaller in size than in the equities market.\(^10\) As a result, the Exchange believes that the size of an imbalance in an options cross rarely provides a meaningful basis for distinguishing between multiple prices at which a cross could occur and that elimination of the Order Imbalance Tie-Breaker would not hinder price discovery and would allow the Exchange to focus the cross on the most relevant criteria.\(^11\)

In addition, the Exchange is proposing to modify the current third tie-breaker (the “Mid-Point Tie-Breaker”).\(^12\) Rather than choosing the mid-point of the NBBO, as happens today under this tie-breaker, the Exchange would choose a price that it believes more accurately represents the supply and demand in the market at the time of reference price dissemination and/or auction execution.\(^13\) To achieve that end, the Exchange would set a minimum threshold price, based on the higher of the last-crossed NOM offer or the National Best Bid, and a maximum threshold price, based on the lower of the last-crossed NOM bid or the National Best Offer. The mid-point (in $0.01 increments) of those threshold prices would be the Current

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\(^8\) See Notice, supra note 3, 76 FR at 18589-90.  
\(^9\) See id. at 18590.  
\(^10\) See id.  
\(^11\) See id.  
\(^12\) See NOM Rules Chapter VI, Section 8(a)(2)(A)(iv), (b)(2)(C).  
\(^13\) See Notice, supra note 3, 76 FR at 18590.
The Exchange believes that this formulation would improve price discovery and execution quality. The Exchange provides three examples, illustrating the operation of this new Mid-Point Tie-Breaker in the Notice. See id.

B. Modification of Indicative Indicator Dissemination of “Market”

The indicative price is the price at which the NOM opening cross would occur if the opening cross were to occur at that time. The Exchange disseminates an indicative indicator for “market buy” or “market sell” if marketable buy (sell) contracts would remain unexecuted above (below) the Near or Far Clearing Prices, respectively. The Exchange proposes to modify when an indicative indicator is disseminated with a price of “market buy” or “market sell.” First, such message would be disseminated when there is trading interest with a market price that is not offset, not when there is marketable interest, as is currently the practice. Second, whether NOM disseminates an indicative price of “market” would no longer depend upon the available interest being priced lower or higher than the Near or Far Clearing Prices, respectively. The Exchange believes this formulation of “market” will reduce any potential for confusion about its dissemination practices.

See NOM Rules Chapter VI, Section 8(a)(E).

See NOM Rules Chapter VI, Section 8(a)(E)(iii). The Near and Far Clearing Prices are defined in NASDAQ Rule 4752. For the purpose of NOM Rules Chapter VI, Section 8, both are equal to the Current Reference Price. See NOM Rules Chapter VI, Section 8(a)(2)(E)(i)-(ii).

NOM Rules Chapter VI, Section 8(a)(2)(E)(iii) governs when this dissemination occurs.

See Notice, supra note 3, 76 FR at 18590.
C. Change of the Start Time for Data Dissemination

The Exchange also proposes to change the time at which imbalance and indicative price data will begin to be disseminated.\(^\text{20}\) Currently, the Exchange begins indicative data dissemination at 9:25 a.m. EST. However, the Exchange represents that it has received feedback from market participants that certain option classes might benefit from a different dissemination window due to the trading characteristics of such option classes.\(^\text{21}\) Accordingly, the Exchange proposes to commence dissemination of the imbalance and indicative price data anywhere between 9:20 a.m. and 9:28 a.m. EST. The initial default time to begin dissemination will remain at 9:25 a.m. EST, but the Exchange would have discretion to pick a different time for an option class. When the Exchange does change the start time for data dissemination, the new start time of imbalance and data dissemination for such class would be published in advance and with equal access on the NASDAQ Trader website.\(^\text{22}\) The Exchange represents that deviations from the default start time of 9:25 a.m. EST would be rare.\(^\text{23}\)

D. Clarification of Dissemination of the Order Imbalance Indicator

The Exchange proposes to clarify when an Order Imbalance Indicator will be disseminated just prior to the opening cross.\(^\text{24}\) Currently, any time an imbalance remains just prior to the opening cross, the Exchange disseminates a final Order Imbalance Indicator. As proposed, NASDAQ would disseminate this final Order Imbalance Indicator only when the imbalance contains routable trading interest that is marketable against the NBBO. The Exchange

\(^{20}\) NOM Rules Chapter VI, Section 8(b)(1) governs when this dissemination occurs.

\(^{21}\) See Notice, supra note 3, 76 FR at 18590.

\(^{22}\) See id.

\(^{23}\) See id.

\(^{24}\) NOM Rules Chapter VI, Section 8(b)(5) governs when this dissemination occurs.
believes non-routable interest is best served by being posted on NOM after execution of the opening cross.\textsuperscript{25} Once the cross is executed and the order is posted, that trading interest would be disseminated as part of the Exchange’s best bid or offer via the consolidated data feed. The Exchange believes this broad dissemination would better advertise the trading interest and thereby increase the likelihood of an execution.\textsuperscript{26} Additionally, the Exchange proposes to clarify that, after the opening cross is executed, all orders in the imbalance would be cancelled, routed, or posted in accordance with the entering party’s instructions.

E. Establishment of a Halt Cross

Finally, in order to provide a more orderly opening of the market after a trading halt, the Exchange proposes to establish an opening cross after the termination of a trading halt.\textsuperscript{27} The opening cross following a trading halt would operate in the same manner as the opening cross at the start of the trading day, including dissemination of the Order Imbalance Indicator, matching algorithm, and posting or routing of interest that remains unexecuted following execution of the opening cross.

\textsuperscript{25} See Notice, supra note 3, 76 FR at 18590. The Exchange states that the goal of NOM’s open is to attract as much liquidity as possible to interact with any orders that are marketable at the time of the open. See id. The Exchange believes that the change to post non-routable orders (at the NBBO) rather than disseminating additional imbalance messages provides more advertisement for the order because it is broadcast over the consolidated quote feed rather than just NASDAQ’s proprietary market data feeds. See id. Additionally, for routable orders, the Exchange would continue the current process of advertising the order(s) via an imbalance message on its proprietary market data feeds rather than opening immediately and routing the order away. By doing this, the Exchange represents that its goal is to get the order a price that is equal to or better than the away quoted price. See id.

\textsuperscript{26} See id.

\textsuperscript{27} When the Exchange first proposed rules for NOM, it planned to resume trading after a halt by conducting a “Halt Cross.” In response to comments received on that proposal that the market relies on price discovery from the underlying security rather than on the availability of interest in a cross, the Exchange determined to remove the Halt Cross. See Securities Exchange Act Release Nos. 57478 (March 12, 2008), 73 FR 14521 (March 18, 2008) (SR-NASDAQ-2007-004) and (SR-NASDAQ-2007-080) (approval order regarding NOM Rules including Chapters III and XIV).
cross. The opening cross for halted options would differ from the opening cross only in the time at which it occurs.  

III. Discussion

After careful review of the proposal, the Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange. In particular, the Commission finds that the proposal is consistent with Section 6(b)(5) of the Act, which requires, among other things, that the rules of an exchange be designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

The Commission believes that the proposed elimination of the Order Imbalance Tie-Breaker and modification of the Mid-Point Tie-Breaker are consistent with the Act. Although the Exchange is eliminating the Order Imbalance Tie Breaker and modifying the Mid-Point Tie Breaker, the Exchange will continue to employ a series of tie-breakers to determine the Current Reference Price and the opening cross price where multiple prices satisfy the conditions for executing the opening cross. The Exchange represents that, since NOM was launched on March 31, 2008, it has monitored the operation of the market to identify instances where market

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28 See NOM Rules Chapter V, Section 4 (providing that trading in an option that has been the subject of a halt shall be resumed upon the determination by Nasdaq Regulation that the conditions which led to the halt are no longer present or that the interests of a fair and orderly market are best served by a resumption of trading).

29 In approving this proposed rule change, the Commission has considered the proposed rule’s impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

efficiency can be enhanced. 31 According to the Exchange, the Order Imbalance Tie-Breaker has not proven useful in augmenting price discovery prior to the opening cross or in operating an effective opening cross. 32 The Exchange also believes that the proposed modification to the Mid-Point Tie-Breaker will more accurately represent the supply and demand in the market at the time of reference price dissemination and/or auction execution. 33 The Commission believes that the elimination of the Order Imbalance Tie Breaker is reasonable, given that the Exchange has not found it to be useful in augmenting price discovery. The Exchange is not proposing to change the primary criteria whereby the Current Reference Price is calculated to be the single price at which the maximum number of contracts of Eligible Interest can be paired at or within the NBBO. If more than one price satisfies this condition, the Exchange will continue to employ a series of iterative tie-breakers that are designed to facilitate an orderly opening. Further, the proposed change to the Mid-Point Tie-Breaker is intended to aid in facilitating orderly openings at prices reflective of the market. Accordingly, as revised, the Exchange’s opening process will continue to be designed to facilitate orderly openings and encourage price discovery and liquidity.

The Commission finds that the proposed modification to the dissemination of an indicative indicator of “market buy” or “market sell” is consistent with the Act. The Exchange proposes to disseminate the indicative message of “market buy” or “market sell” when there is interest with a market price that is not offset, irrespective of the Near or Far Clearing Prices.

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32 See Notice, supra note 3, 76 FR at 18589-90.

33 See id.
Currently, such message is disseminated only when there is marketable interest depending on whether the available interest is lower or higher than the Near or Far Clearing Prices, respectively. This change is intended to reduce any potential for confusion regarding the meaning of an indicator that specifies “market.” The Commission believes that NASDAQ’s revised dissemination of a “market” indicator in connection with its opening process will benefit investors and improve transparency by providing market participants with useful information during the opening cross.

The Commission finds that the proposed change to allow NOM to select a different start time for imbalance and indicative data dissemination for a class within the window of 9:20 a.m. and 9:28 a.m. EST is consistent with the Act. Currently, the Exchange begins indicative data dissemination at 9:25 a.m. EST as previously approved by the Commission. The Exchange represents that it will continue to use 9:25 a.m. EST as the default start time and that changes to this default start time will be rare. The Commission notes that, if the Exchange decides to change the start time, then it will publish the new time of imbalance and indicative price data dissemination commencement in advance on the publicly accessible NASDAQ Trader website. This change will give the Exchange more flexibility to determine the most appropriate time for data dissemination in an option class that NASDAQ believes will be most conducive to price discovery based on the trading characteristics of such option class. Further, the Commission believes that the advance notice on the NASDAQ Trader website of any change in the commencement of dissemination of imbalance and indicative price data will continue to ensure certainty with respect to the time of dissemination.

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34 See Notice, supra note 3, 76 FR at 18590.
35 See id.
The Commission finds that the proposed modification to the dissemination of the final Order Imbalance Indicator is consistent with the Act. Currently, any time an imbalance remains just prior to the opening cross, the Exchange disseminates one last Order Imbalance Indicator. The Exchange proposes to disseminate that final Order Imbalance Indicator only when the imbalance contains routable trading interest that is marketable against the NBBO. After the opening cross is executed, any non-routable interest that is not cancelled will be posted. As such, dissemination of this interest will be broadcast via the consolidated quote. The effect of this change is that the Exchange will not disseminate the very last Order Imbalance Indicator that it would otherwise have disseminated right before the opening cross when the imbalance only contains non-routable interest. While this change could have the effect of reducing the last message on imbalances that the Exchange currently sends immediately before the opening cross, it also mitigates message traffic for orders that the Exchange expects would post immediately thereafter. The Commission believes this change will not adversely affect transparency with respect to imbalance information immediately prior to the opening cross.

The Commission finds that the proposed establishment of an opening cross following a trading halt is consistent with the Act. The Exchange believes that conducting an opening cross will provide a more orderly opening of the market after a halt, particularly to the extent that NOM attracts higher levels of liquidity than it did previously. The Commission notes that the halt cross will operate in the same manner as the opening cross. It is also consistent with the use of an opening cross following a trading halt on NASDAQ’s equities platform. The Commission notes that similar auctions are used by other options markets following a trading halt.

36 See id. at 18591.
37 See NASDAQ Rule 4753.
halt. The Commission believes that the adoption of a halt cross is designed to provide for a fair and orderly re-opening of the market and contribute to the quality of executions following a trading halt.

IV. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act,\(^{39}\) that the proposed rule change (SR-NASDAQ-2011-037) be, and hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.\(^{40}\)

Cathy H. Ahn
Deputy Secretary


\(^{40}\) 17 CFR 200.30-3(a)(12).