SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-91461; File No. SR-NASDAQ-2021-004)

April 2, 2021

Self-Regulatory Organizations; The Nasdaq Stock Market LLC; Order Approving Proposed Rule Change, as Modified by Amendment No. 2, to Disseminate Abbreviated Order Imbalance Information for the Nasdaq Opening Cross, Amend Certain Cutoff Times for On-Open Orders Entered for Participation in the Nasdaq Opening Cross, and Extend the Time Period for Accepting Certain Limit-On-Open Orders

I. Introduction

On February 3, 2021, 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 disseminate abbreviated order imbalance information for the Nasdaq opening cross, amend certain cutoff times for on-open orders entered for participation in the Nasdaq opening cross, and extend the time period for accepting certain limit-on-open orders. The proposed rule change was published for comment in the Federal Register on February 17, 2021. On April 1, 2021, the Exchange filed Amendment No. 2 to the proposed rule change. The Commission

4 On April 1, 2021, the Exchange also filed and withdrew Amendment No. 1 to the proposed rule change. In Amendment No. 2, the Exchange specified April 26, 2021 as the implementation date for the proposed rule change and amended a footnote to reflect that the proposal would not affect the handling of market-on-open orders or market hours orders with market pegging that are entered after 9:28 a.m. Because Amendment No. 2 does not materially alter the substance of the proposed rule change and makes conforming and technical changes, it is not subject to notice and comment. Amendment No. 2 is available on the Commission’s website at: https://www.sec.gov/rules/sro/nasdaq.htm.
received no comment letters on the proposed rule change. This order approves the proposed rule change, as modified by Amendment No. 2.

II. Description of the Proposal

The Nasdaq opening cross is the process for determining the price at which orders would be executed at the open and for executing those orders, and it establishes the Nasdaq official opening price for a security.5 Under the current process, market-on-open ("MOO") orders6 and limit-on-open ("LOO") orders7 may be entered, cancelled, or modified between 4:00 a.m.8 and immediately prior to 9:28 a.m.9 Opening imbalance only ("OIO") orders may be entered between 4:00 a.m. until the time of execution of the Nasdaq opening cross, and may be cancelled or modified between 4:00 a.m. and immediately prior to 9:28 a.m.10 At 9:28 a.m., the Exchange begins to disseminate an order imbalance indicator (also known as the net order imbalance indicator or "NOII") every second until market open.11 The NOII is a message disseminated by

See Nasdaq Equity 4, Rule ("Rule") 4752(a)(5) and Notice, supra note 3, at 9972-73.

A MOO order is an order type entered without a price that may be executed only during the Nasdaq opening cross. See Rule 4702(b)(8)(A); see also Notice, supra note 3, at 9973 n.8.

A 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. See Rule 4702(b)(9)(A); see also Notice, supra note 3, at 9973 n.9.

All times referenced are in Eastern Time.

See Rule 4702(b)(8)(A) and (b)(9)(A); see also Notice, supra note 3, at 9973 n.8-9.

An OIO order is an order type entered with a price that may be executed only in the Nasdaq opening cross and only against MOO, LOO, or early market hours orders. 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. See Rule 4702(b)(10)(A); see also Notice, supra note 3, at 9973 n.10.

See Rule 4752(d)(1); see also Notice, supra note 3, at 9973.
electronic means containing information about MOO, LOO, OIO, and early market hours orders, and information about the price at which those orders would execute at the time of dissemination.

**Early Opening Order Imbalance Indicator and Cutoff Times for On-Open Orders**

The Exchange proposes to amend Rule 4752 to establish an early opening order imbalance indicator ("EOII") that would be disseminated by electronic means every 10 seconds beginning at 9:25 a.m. until the NOI begins to disseminate at 9:28 a.m. As proposed, the EOII would contain the same information as the NOI, except it would exclude information about indicative prices. Specifically, the EOII would contain: (1) the current reference price; (2) the number of shares represented by MOO, LOO, OIO, and early market hours orders that are paired at the current reference price; (3) the size of any imbalance; and (4) the buy/sell direction of any imbalance. The Exchange believes that an early release of a subset of the NOI information

12 Market hours orders means any order that may be entered into the system and designated with a time-in-force of MIOC, MDAY, and MGTC; market hours orders are designated as "early market hours orders" if they are entered into the system prior to 9:28 a.m. See Rule 4752(a)(7).

13 Specifically, the NOI contains: (1) the current reference price; (2) the number of shares represented by MOO, LOO, OIO, and early market hours orders that are paired at the current reference price; (3) the size of any imbalance; (4) the buy/sell direction of any imbalance; and (5) the indicative prices at which the Nasdaq opening cross would occur if it 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. See Rule 4752(a) (also providing the definitions for current reference price, imbalance, and indicative prices); see also Notice, supra note 3 at 9973.

14 See proposed Rule 4752(a)(1) and (d)(1); see also Notice, supra note 3, at 9973. The Exchange also proposes to renumber certain provisions of Rule 4752 to incorporate newly proposed defined terms into the rule, and to make a non-substantive change in current Rule 4752(a)(2)(E)(i) to delete the word “both.”

15 See proposed Rule 4752(a)(1).

16 See id.; see also Notice, supra note 3, at 9973.
would offer participants additional time and flexibility to react to imbalance information in advance of 9:28 a.m. and aid them in making informed decisions about whether and how to participate in the opening cross.\textsuperscript{17} The Exchange also believes that the EOII would enhance price discovery and liquidity by attracting more participants to its opening cross.\textsuperscript{18} In addition, the Exchange believes that disseminating the EOII every 10 seconds would provide participants more time to digest the information and enter MOO, LOO, and OIO orders in between dissemination periods.\textsuperscript{19}

As stated above, the EOII would differ from the NOII in that the EOII would not include information about indicative prices.\textsuperscript{20} The Exchange believes that the exclusion of the near and far clearing prices (which are part of the indicative price information) from the EOII would enhance stability in the opening cross process because it would reduce the possibility of large indicative price movements during the early moments of the price formation process.\textsuperscript{21} By contrast, the Exchange proposes to include in the EOII the current reference price because it reflects the Nasdaq best bid and best offer at the time of dissemination and it is used to calculate any imbalance direction and imbalance size.\textsuperscript{22} According to the Exchange, providing the current

\begin{flushleft}
\textsuperscript{17} See Notice, supra note 3, at 9973.
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\textsuperscript{18} Id.
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\textsuperscript{19} See id. at 9974.
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\textsuperscript{20} See supra note 15 and accompanying text.
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\textsuperscript{21} The Exchange also states that, because participants may freely enter new orders that contribute to price discovery before 9:28 a.m., indicative prices may change more substantially before 9:28 a.m. than after. See Notice, supra note 3, at 9973-74.
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\textsuperscript{22} See id. at 9974 n.19.
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reference price in the EOII would increase transparency and allow participants to provide additional orders to improve the price discovery process in the opening cross.\textsuperscript{23}

In connection with the establishment of the EOII that would begin disseminating at 9:25 a.m., the Exchange proposes to amend Rule 4702(b) to prohibit participants from cancelling or modifying MOO, LOO, and OIO orders beginning at 9:25 a.m.\textsuperscript{24} The Exchange does not propose to similarly change the cutoff times for entering MOO, LOO, and OIO orders for participation in the opening cross. Thus, under the proposal, MOO orders may continue to be entered until immediately prior to 9:28 a.m.;\textsuperscript{25} LOO orders may be entered until immediately prior to 9:28 a.m. or, in certain circumstances as described below, until 9:29:30 a.m.;\textsuperscript{26} and OIO orders may continue to be entered until the time of execution of the opening cross.\textsuperscript{27} But any such orders, once entered, may not be cancelled or modified at or after 9:25 a.m.\textsuperscript{28}

**LOO Order Type Changes**

The Exchange proposes to amend Rule 4702(b)(9)(A) to permit the entry of LOO orders between 9:28 a.m. and 9:29:30 a.m. ("late LOO orders"), provided that the security has a first

\begin{itemize}
  \item\textsuperscript{23} See id.
  \item\textsuperscript{24} See proposed Rule 4702(b)(8), (b)(9), and (b)(10); see also Notice, supra note 3, at 9974. Relatedly, the Exchange proposes to amend current Rule 4752(a)(7) to provide that requests to cancel or modify market hours orders would be suspended beginning at 9:25 a.m. (rather than 9:28 a.m. as the rule currently provides) until after completion of the Nasdaq opening cross, at which time such requests will be processed to the extent that such orders remain available within the system. The Exchange also proposes to amend current Rule 4752(a)(7) to utilize certain defined terms and abbreviated terms.
  \item\textsuperscript{25} See proposed Rule 4702(b)(8)(A).
  \item\textsuperscript{26} See proposed Rule 4702(b)(9)(A).
  \item\textsuperscript{27} See proposed Rule 4702(b)(10)(A).
  \item\textsuperscript{28} See proposed Rule 4702(b)(8), (b)(9), and (b)(10); see also Notice, supra note 3, at 9974.
\end{itemize}
opening reference price or a second opening reference price. The Exchange believes that allowing the entry of eligible LOO orders after 9:28 a.m. would enhance the price discovery process for and liquidity of a given security in the opening cross. As proposed, any LOO order entered after 9:29:30 a.m. that is designated as immediate-or-cancel (“IOC”) would be rejected.

The Exchange proposes to define the first opening reference price as the previous day’s Nasdaq official closing price of the security for Nasdaq-listed securities or the consolidated

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The Exchange also proposes to make conforming changes in Rule 4702(b)(9)(B). Specifically, Rule 4702(b)(9)(B) currently specifies the handling of opening cross/market hours orders (i.e., orders with a time-in-force that continues after the time of the Nasdaq opening cross and are flagged to participate in the opening cross) entered between 9:28 a.m. and the time of the Nasdaq opening cross. The Exchange proposes to amend this time interval such that it refers to opening cross/market hours orders entered between 9:29:30 a.m. and the time of the Nasdaq opening cross. Relatedly, the Exchange proposes to specify in Rule 4702(b)(9)(B) that certain LOO orders entered at or after 9:28 a.m. would not be rejected. Moreover, the Exchange states that market hours orders entered between 9:28 a.m. and 9:29:30 a.m. would be treated as late LOO orders, as applicable. See Notice, supra note 3, at 9974 n.21 and Amendment No. 2, supra note 4. In addition, the Exchange proposes to make a conforming change in current Rule 4752(a)(7) to provide that orders entered at or after 9:29:30 a.m. (rather than 9:28 a.m. as the rule currently provides) with a time-in-force other than IOC would be designated as “late market hours orders.”

See Notice, supra note 3, at 9974.

The Exchange also proposes to remove language from Rule 4702(b)(9)(B) regarding how it handles routable orders with a time-in-force other than IOC that are flagged to participate in the Nasdaq opening cross and entered at or after 9:28 a.m. because the Exchange believes that language is duplicative of other language in the same rule. See id. at 9975. Moreover, the Exchange proposes to make a conforming change in current Rule 4752(a)(7) to provide that orders entered at or after 9:29:30 a.m. (as proposed) would be designated as “late market hours orders” if they have a time-in-force other than IOC.
closing price for non-Nasdaq-listed securities.\textsuperscript{32} For new exchange-traded products that do not have a Nasdaq official closing price or a consolidated closing price, the first opening reference price would be the offering price.\textsuperscript{33} The Exchange states that it proposes to use the Nasdaq official closing price as the first opening reference price because the Nasdaq official closing price is a well-defined benchmark for the security’s market price that serves as the most relevant price of a security at or before regular trading hours.\textsuperscript{34} The Exchange proposes to define the second opening reference price as the current reference price in the NOII disseminated at 9:28 a.m.\textsuperscript{35} The Exchange states that it proposes to use the current reference price in the NOII disseminated at 9:28 a.m. as the second opening reference price because it is consistent with the Exchange’s functionality with respect to the closing cross and late limit-on-close ("LOC") orders, and is intended to promote price stability of the opening cross.\textsuperscript{36}

In addition, the Exchange proposes to accept a LOO order entered between 9:28 a.m. and 9:29:30 a.m. 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 a LOO order to buy (sell), in which case the LOO order would 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

\textsuperscript{32} See proposed Rule 4752(a)(8).
\textsuperscript{33} See id.
\textsuperscript{34} See Notice, supra note 3, at 9974.
\textsuperscript{35} See proposed Rule 4752(a)(9).
\textsuperscript{36} See Notice, supra note 3, at 9974.
applicable, would 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 would be to have such LOO order re-priced rather than rejected. The Exchange states that this repricing mechanism is designed to reduce order imbalances and volatility for securities that participate in the opening cross, and believes that allowing such LOO orders to be priced at the more aggressive of the two reference prices would provide flexibility to market participants by allowing them to consider information in both the EOII and NOII within the context of the previous day’s Nasdaq official closing price or consolidated closing price to facilitate informed decisions about whether and how to participate in the opening cross.

III. Discussion and Commission Findings

After careful review, the Commission finds that the proposed rule change, as modified by Amendment No. 2, 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 proposed rule change is consistent with Section 6(b)(5) of the Act, which requires,

37 See proposed Rule 4702(b)(9)(A). The Exchange proposes to use natural rounding when there is no imbalance. When there is an imbalance, the Exchange would round such that more offsetting interest can participate. Thus, when there is a buy imbalance, the Exchange would round the first opening reference price or second opening reference price up to allow more sell interest to participate, and when there is a sell imbalance, the Exchange would round the first opening reference price or second opening reference price down to allow more buy interest to participate. See Notice, supra note 3, at 9974 n.22.

38 See proposed Rule 4702(b)(9)(A).

39 See Notice, supra note 3, at 9974.

40 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).

among other things, that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, 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.

As described above, the Exchange proposes to disseminate the EOII beginning at 9:25 a.m., which would provide market participants with certain information relating to the Nasdaq opening cross earlier than the current NOII.\footnote{As described above, the EOII would contain the same information as the NOII, except it would exclude information about indicative prices in order to reduce the possibility of large indicative price movements during the early moments of the price formation process.} The Commission believes that the EOII would provide earlier transparency regarding the current reference price, the number of paired shares at that price, the size of any imbalance, and the direction of any imbalance for the Nasdaq opening cross, which would provide market participants with additional time before the opening cross to consider this information and flexibility in determining whether and how to participate in the opening cross.\footnote{As described above, participants may enter MOO, LOO, and OIO orders after the Exchange begins disseminating the EOII at 9:25 a.m. Specifically, MOO orders may continue to be entered until immediately prior to 9:28 a.m., LOO orders may be entered until immediately prior to 9:28 a.m. (or, in certain circumstances, until 9:29:30 a.m.), and OIO orders may continue to be entered until the time of execution of the opening cross.} The Commission also believes that the proposed 10-second interval between EOII disseminations would provide market participants with time to consider any EOII updates, while avoiding excessive message traffic. Accordingly, the Commission believes that the
dissemination of the EOII could lead to increased participation and liquidity and promote price discovery in the Nasdaq opening cross.\textsuperscript{44}

As described above, in connection with the proposal to begin disseminating the EOII at 9:25 a.m., the Exchange also proposes to prohibit participants from cancelling or modifying MOO, LOO, and OIO orders beginning at 9:25 a.m. The Commission believes that this proposed change would allow the Exchange to begin disseminating the EOII at a time when on-open interest is relatively settled, and could reduce the possibility of large price movements in the opening cross process that may otherwise result from cancellations or modifications of MOO, LOO, and OIO orders in response to the EOII. Moreover, because the Exchange is not proposing a similar 9:25 a.m. cutoff time for the entry of MOO, LOO, and OIO orders, market participants may consider the information in the EOII and NOII, as applicable, in entering these orders.\textsuperscript{45}

In addition, as described above, the Exchange proposes to permit the entry of LOO orders between 9:28 a.m. and 9:29:30 a.m. if there is either a first opening reference price or a second opening reference price, with such orders priced no more aggressively than the first opening reference price and the second opening reference price. The Commission believes that these proposed changes would allow participants to retain control over the entry of LOO orders until a later time, and would allow participants to consider the information contained in the EOII and the NOII, as well as the previous day’s closing price, in deciding whether to enter late LOO orders.

\textsuperscript{44} The Exchange also provides a similar early order imbalance indicator for the Nasdaq closing cross, which is also disseminated with a 10-second interval. See Rule 4754(a)(10) and (b)(1).

\textsuperscript{45} The Exchange also has a cutoff time for cancellations or modifications of on-close interest that aligns with the time that the Exchange begins disseminating the early order imbalance indicator for the Nasdaq closing cross. See Rules 4702(b)(11)-(13) and 4754(b)(1).
orders. The Commission also believes that the proposed re-pricing of late LOO orders such that they are priced no more aggressively than the first opening reference price and the second opening reference price could promote price stability in the opening cross process. Accordingly, the Commission believes that the proposed changes relating to late LOO orders could encourage additional participation and reduce imbalances in the Nasdaq opening cross, while promoting price stability in the opening process.46

Finally, the Commission believes that the Exchange’s proposed technical and conforming changes to Rules 4702 and 4752 would allow those rules to consistently reflect the proposed 9:29:30 a.m. cutoff time for entering late LOO orders and the proposed 9:25 a.m. cutoff time for cancellations and modifications of MOO, LOO, and OIO orders, and would add clarity with respect to how the Exchange conducts its opening process and handles orders in connection with that process.

46 The Exchange also has a similar late LOC order type for the Nasdaq closing cross. See Rule 4702(b)(12).
IV. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act,\textsuperscript{47} that the proposed rule change (SR-NASDAQ-2021-004), as modified by Amendment No. 2, be, and hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.\textsuperscript{48}

J. Matthew DeLesDernier
Assistant Secretary


\textsuperscript{48} 17 CFR 200.30-3(a)(12).