



INVESTORS EXCHANGE MARKET MAKER SPECIFICATION

Version 1.04

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MARKET MAKER REGISTRATION

Investors Exchange (“IEX” or the “Exchange”) offers [Registered Market Makers](#) the ability to register symbols in which they wish to make a market. Registration must be completed by 9 a.m. ET on the business day of the trading date they will be actively quoted on IEX. Registration must be submitted to IEX Market Operations via email at marketops@iextrading.com with a file attachment following the file format detailed below.

Market Makers may request that IEX Market Operations provide the current list of symbols they have registered for the current and next trading session.

Once a symbol has been “ADDED,” the Member will remain registered as a Market Maker in that symbol until the Member submits a request to Market Operations via email at marketops@iextrading.com noting the symbol is to be “REMOVED” in the attached file. All requests submitted after 9:00 a.m. ET will be processed and changes will be effective the next business day.

IEX does not automatically adjust any registration due to corporate actions.

File Format

Each line of the registered securities file represents a rule containing a comma separated list of fields. The fields are defined as follows:

- Symbol: The security represented in [Nasdaq Integrated symbology](#).
- Action: The action is one of the following two values:
 - ADDED: Add symbol to list of symbols for which you will be a Market Maker.
 - REMOVED: Remove symbol from list of symbols for which you will be a Market Maker.

Sample Security Registration Data

MSFT,ADDED

ICE,REMOVED

Excused Withdrawal of Quotations

In general, a market maker that wishes to withdraw quotations in a security in which they are registered shall contact IEX Regulation via email at regulation@iextrading.com to obtain excused withdrawal status prior to withdrawing its quotations. Excused withdrawal status based on illness, vacations or physical circumstances beyond the Market Maker's control may be granted for up to five (5) business days, unless extended by IEX Regulation. Excused withdrawal status based on investment activity or advice of legal counsel, accompanied by a representation that the condition necessitating the withdrawal of quotations is not permanent in nature, may, upon written request, be granted for not more than sixty (60) days. The withdrawal of quotations because of pending news, a sudden influx of orders or price changes, or to effect transactions with competitors shall not normally constitute acceptable reasons for granting excused withdrawal status.

An IEX Market Maker that wishes to obtain excused withdrawal status based on a market maker's systemic equipment problems, such as defects in an IEX Market Maker's software or hardware systems, or connectivity problems associated with the circuits connecting Exchange systems with the IEX Market Maker's systems, shall contact IEX Market Operations either before or after withdrawing its quotations. IEX Market Operations may grant excused withdrawal



status based on systemic equipment problems for up to five (5) business days, unless extended by IEX Market Operations.

Voluntary Termination of Registration

An IEX Market Maker may voluntarily terminate its registration in a security by withdrawing its two-sided quotation from the Exchange. An IEX Market Maker that voluntarily terminates its registration in a security may not re-register as a market maker in that security for twenty (20) business days in the case of IEX-listed securities or for one (1) business day in the case of other securities. Withdrawal from participation as an IEX Market Maker in the Exchange shall constitute termination of registration as a market maker in that security.

Notwithstanding the foregoing, an IEX Market Maker that accidentally withdraws as an IEX Market Maker in one or more symbols may be reinstated if:

- The IEX Market Maker notified Regulation of the accidental withdrawal as soon as practicable under the circumstances, but within at least one hour of such withdrawal, and immediately thereafter provided written notification of the withdrawal and reinstatement request;
- It is clear that the withdrawal was inadvertent and the IEX Market Maker was not attempting to avoid its market making obligations; and
- The IEX Market Maker's firm would not exceed the following reinstatement limitations:
 - For firms that simultaneously made markets in less than 250 stocks during the previous calendar year, the firm can receive no more than two (2) reinstatements per year;
 - For firms that simultaneously made markets in 250 or more but less than 500 stocks during the previous calendar year, the firm can receive no more than three (3) reinstatements per year; and
 - For firms that simultaneously made markets in 500 or more stocks during the previous calendar year, the firm can receive no more than six (6) reinstatements per year.

Factors that IEX will consider in granting a reinstatement following an accidental termination in one or more symbols include, but are not limited to (i) the number of accidental withdrawals by the IEX Market Maker in the past, as compared with IEX Market Makers making markets in a comparable number of stocks, (ii) the similarity between the symbol of the stock that the IEX Market Maker intended to withdraw from and the symbol of the stock that the IEX Market Maker actually withdrew from, (iii) market conditions at the time of the withdrawal, (iv) whether, given the market conditions at the time of the withdrawal, the withdrawal served to reduce the exposure of the Member's position in the security at the time of the withdrawal to market risk, and (v) the timeliness with which the IEX Market Maker notified Regulation of the error.

For a full description of the rights and obligations regarding a Market Maker's Withdrawal of Quotations and Voluntary Termination of Registration, as well as the Suspension and Termination of Quotations by IEX, please see [IEX Rules](#) 11.152, 11.153, and 11.154.

MARKET MAKER PEG ORDERS

To support Market Makers with their quoting obligations for registered securities, IEX has created a Market Maker Peg order type. This order type essentially functions as a displayed Peg order that will allow for quoting at an offset to a defined Reference Price identified by the Exchange. As described below, a Market Maker Peg order is repriced by the System when the Reference Price has moved a defined percentage away or towards the order. A Market Maker Peg



order will continue to be repriced by the System until it reaches the Member-defined limit, if any, or an impermissible price (e.g., priced at \$0.00), at which time such order will be canceled back to the Member. If a Market Maker Peg order is decremented to less than one round lot, the order will also be canceled back to the Member.

Reference Price

The Reference Price for a Market Maker Peg order will be the NBB for bids or NBO for offers; if there is no NBB or NBO, the latest last sale eligible trade (“Last Sale”) is used as the Reference Price. Note that in the absence of a Last Sale for the current trading day, the Market Maker Peg will wait to enter a quotation on that side until either a NBB/NBO or Last Sale is established. Note that IEX flips the NBBO during a crossed market; therefore, the Reference Price for Market Maker Peg Bids is the NBO and the Reference Price for Market Maker Peg Offers is the NBB.

The quote will be entered at a specified distance (the “Designated Percentage”) away from the Reference Price as follows:

| LIMIT UP-LIMIT DOWN TIER | TIME PERIOD | DESIGNATED PERCENTAGE |
|--------------------------|--|-----------------------|
| Tier 1 | 9:45 a.m. – 3:35 p.m. ET | 8% |
| Tier 1 | 9:30 a.m. – 9:45 a.m., 3:35 p.m. – 4:00 p.m. ET | 20% |
| Tier 2 | 9:30 a.m. – 4:00 p.m. ET | 28% |

Automated Quote Updates

Once the Market Maker Peg order has published a quote for a given security, the quote will not be refreshed until it falls outside of a band around its entered price, unless otherwise specified. The band is presently defined to be 1% on the inside and 1.5% on the outside (these percentages are relative to the Reference Price)¹:

- A Market Maker Peg Bid in a Tier 1 NMS Stock under the Limit Up-Limit Down Plan will be automatically updated during the 9:45 a.m. – 3:35 p.m. ET trading period if it falls outside of the range (NBB x .905) to (NBB x .93).
- A Market Maker Peg Bid in a Tier 1 NMS Stock under the Limit Up-Limit Down Plan will be automatically updated during all other trading periods if it falls outside of the range (NBB x .785) to (NBB x .81).
- A Market Maker Peg Bid in a Tier 2 NMS Stock under the Limit Up-Limit Down Plan will be automatically updated during the 9:30 a.m. – 4:00 p.m. ET trading period if it falls outside of the range (NBB x .705) to (NBB x .73).
- A Market Maker Peg Offer in a Tier 1 NMS Stock under the Limit Up-Limit Down Plan will be automatically updated during the 9:45 a.m. – 3:35 p.m. ET trading period if it falls outside of the range (NBO x 1.07) to (NBO x 1.095).
- A Market Maker Peg Offer in a Tier 1 NMS Stock under the Limit Up-Limit Down Plan will be automatically updated during all other trading periods if it falls outside of the range (NBO x 1.19) to (NBO x 1.215).
- A Market Maker Peg Offer in a Tier 2 NMS Stock under the Limit Up-Limit Down Plan will be automatically updated during the 9:30 a.m. – 4:00 p.m. ET trading period if it falls outside of the range (NBO x 1.27) to (NBO x 1.295).

¹ This constitutes the percentage points referenced in IEX Rule 11.190(b)(13).

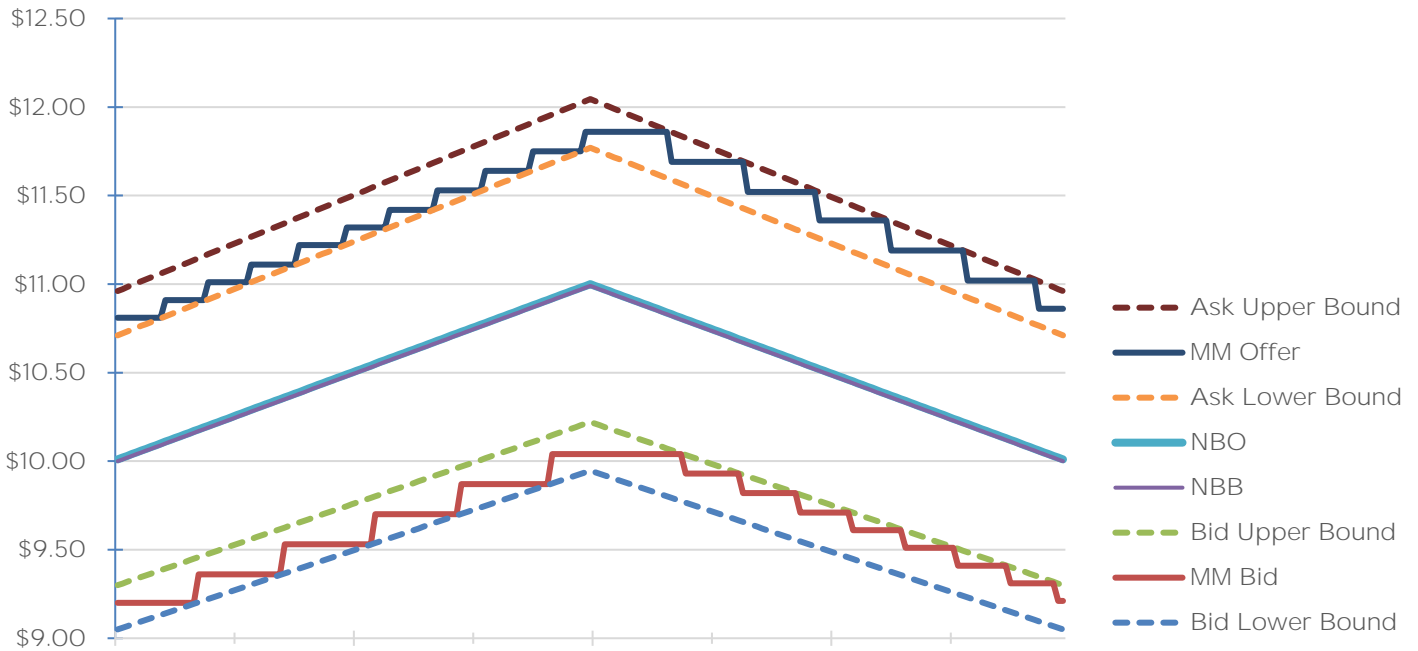


When the Market Maker Peg order falls outside the band, the System will automatically reprice the order to the Designated Percentage away from the Reference Price. However, if, after entry, the Market Maker Peg order is established as the NBB or NBO, the Market Maker Peg order will not be subsequently repriced by the System until a new NBB or NBO is established. Note that all quote calculations will be rounded to the most aggressive displayable tick size (i.e., rounded up for bids and down for offers).

The following diagram and detailed example illustrate how price bands are used to determine when a quote refresh will occur. An NBBO update that causes an existing Market Maker Bid or Ask quote to fall outside of the price band results in a quote refresh as demonstrated in the diagram that follows.

Sample Market Maker Automated Quote Updates

MM Quotes Sample for a Tier 1 Limit Up-Limit Down Security During 9:45 a.m. - 3:35 p.m. ET Trading Hours



Example of Market Maker Automated Quote Updates

Consider an NBBO at \$10.00 X \$10.01 in a Tier 1 NMS Stock under the Limit Up-Limit Down Plan (the “Security”) at a time of 9:35 a.m. ET.

An IEX Market Maker Peg is entered to buy for one round lot at \$8.00 (10.00 x .8) (the “Market Maker Bid”) and a Market Maker Peg is entered to sell for one round lot at \$12.01 (10.01 x 1.2) (the “Market Maker Offer”) in the Security. The price of the orders will be calculated using a Designated Percentage of 20%, as set forth above.

Assume that the NBBO for the Security moves to \$10.09 X \$10.10. The current Market Maker Bid of \$8.00 will not be re-priced because it will remain between the price bounds of the NBB (Lower Bound: $10.09 \times .785 = \$7.921$; Upper Bound: $10.09 \times .81 = \$8.173$). The current Market Maker Offer of \$12.01 will fall outside of the range of the price bounds of the NBO (Lower Bound: $10.10 \times 1.19 = \$12.019$; Upper Bound: $10.10 \times 1.215 = \$12.272$), so the Market Maker Offer will be repriced to \$12.12 (10.10 x 1.2).



Assume that the NBBO moves back to \$10.00 X \$10.01. The Market Maker Bid (\$8.00) will remain within the price bounds of the new NBB (Lower Bound: $10.00 \times .785 = \$7.85$; Upper Bound: $10.00 \times .81 = \$8.10$) and, thus, the Market Maker Bid will not change. Similarly, the current Market Maker Offer of \$12.12 will still fall within the price bounds of the NBO (Lower Bound: $10.01 \times 1.19 = \$11.912$; Upper Bound: $10.01 \times 1.215 = \$12.162$) and, thus, the Market Maker Offer will not change.

At 9:45 a.m. ET, the Designated Percentage moves to 8% and the IEX Market Maker Peg order will automatically re-price the Market Maker Bid to \$9.20 ($10.00 \times .92$) and the Market Maker Offer to \$10.81 (10.01×1.08).

Assume that the NBBO for the Security moves to \$9.89 X \$9.90. The existing Market Maker Bid of \$9.20 will now fall outside the price bounds of the NBB (Lower Bound: $9.89 \times .905 = \$8.95$; Upper Bound: $9.89 \times .93 = \$9.198$), so the Market Maker Bid will be re-priced to \$9.10 ($9.89 \times .92$). As the current Market Maker Offer of \$10.81 will remain within the bounds of the NBO (Lower Bound: $9.90 \times 1.07 = \$10.593$; Upper Bound: $9.90 \times 1.095 = \$10.841$), the Market Maker Offer will not change.

Assume that the NBBO now drops to \$9.86 X \$9.87. The Market Maker Bid of \$9.10 will remain within the price bounds of the new NBB (Lower Bound: $9.86 \times .905 = \$8.923$; Upper Bound: $9.86 \times .93 = \$9.17$) and, thus, the Market Maker Bid will not change. The Market Maker Offer of \$10.81, however, will now fall outside the price bounds associated with the new NBO (Lower Bound: $9.87 \times 1.07 = \$10.561$; Upper Bound: $9.87 \times 1.095 = \$10.808$) and the Market Maker Offer will be repriced to \$10.66 (9.87×1.08).

As the NBBO moves, the Designated Percentage of 8% will continue to be used to determine the lower and upper bounds for Market Maker Peg order re-pricing.

Assume the NBBO is \$10.00 X \$10.01 at 3:35 p.m. ET at which time the Designated Percentage of 20% goes back into effect. At this point, the IEX Market Maker Peg order will automatically reprice the Market Maker Bid to \$8.00 ($10.00 \times .8$) and the Market Maker Offer to \$12.01 (10.01×1.2).

Market Maker Peg Order Specifications

For complete details regarding order entry settings required for Market Maker Peg orders, please refer to the order entry specification:

- [IEX FIX Specification](#)

SUPPORT

If you have any questions or would like to register as a Market Maker on IEX, please contact your account manager or IEX Market Operations.

Business Development (Sales) 646.343.2110 or sales@iextrading.com

Market Operations 646.343.2310 or marketops@iextrading.com

Regulation 646.343.2034 or regulation@iextrading.com



REVISION HISTORY

| Version | Date | Change |
|---------|------------------|--|
| 1.00 | July 21, 2017 | Initial document |
| 1.01 | August 17, 2017 | Updated Reference Price determination when no NBB/NBO or Last Sale exists to align with IEX Rules. Specified repricing behavior when a Market Maker Peg order is established as the NBB or NBO. |
| 1.02 | October 12, 2017 | Fixed typo. |
| 1.03 | June 8, 2018 | Fixed typo. |
| 1.04 | June 12, 2018 | Updated Sales and Market Operations phone numbers. |