



8011-01

SECURITIES AND EXCHANGE COMMISSION

(Release No. 34-83753; File No. SR-FINRA-2018-015)

July 31, 2018

Self-Regulatory Organizations; Financial Industry Regulatory Authority, Inc.; Order Granting Approval of a Proposed Rule Change to Amend FINRA Rule 6433 to Adopt the OTC Quotation Tier Pilot as Permanent

I. Introduction

On April 20, 2018, Financial Industry Regulatory Authority, Inc. (“FINRA”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)¹ and Rule 19b-4 thereunder,² a proposed rule change to amend FINRA Rule 6433 to adopt as permanent the minimum quotation sizes that are applicable to quotations in over-the-counter (“OTC”) equity securities and that were implemented on a pilot basis. The proposed rule change was published for comment in the Federal Register on May 7, 2018.³ The Commission received one comment letter on the proposed rule change.⁴ On June 13, 2018, pursuant to Section 19(b)(2) of the Act,⁵ the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See Securities Exchange Act Release No. 83129 (April 30, 2018), 83 FR 20131 (“Notice”).

⁴ See Letter from Eugene P. Torpey, Chief Compliance Officer, Vandham Securities Corp., dated May 10, 2018. Comments on the proposed rule change are available at <https://www.sec.gov/comments/sr-finra-2018-015/finra2018015.htm>.

⁵ 15 U.S.C. 78s(b)(2).

institute proceedings to determine whether to disapprove the proposed rule change.⁶ In a letter dated July 5, 2018, FINRA responded to the comment letter.⁷

This order approves the proposal.

II. FINRA’s Description of the Proposed Rule Change

FINRA proposes to amend FINRA Rule 6433 (Minimum Quotation Size Requirements for OTC Equity Securities) to adopt as permanent the minimum quotation sizes applicable to quotations in OTC equity securities⁸ that were proposed pursuant to File No. SR-FINRA-2011-058⁹ and implemented on a pilot basis on November 12, 2012 (“Tier Size Pilot” or “Pilot”). The

⁶ See Securities Exchange Act Release No. 83422, 83 FR 28483 (June 19, 2018).

⁷ See Letter from Racquel L. Russell, Associate General Counsel, FINRA, to Brent J. Fields, Secretary, Commission (“FINRA Letter”). The FINRA Letter is available at <https://www.sec.gov/comments/sr-finra-2018-015/finra2018015-4002848-167246.pdf>.

⁸ An OTC equity security is an equity security that is not an “NMS Stock” as defined in Rule 600(b)(47) of Regulation NMS; provided, however, that the term “OTC equity security” shall not include any Restricted Equity Security. See FINRA Rule 6420(f).

⁹ See Securities Exchange Act Release No. 65568 (October 14, 2011), 76 FR 65307 (October 20, 2011) (Notice of Filing of File No. SR-FINRA-2011-058) (“Original Proposal”). Comments on the Original Proposal are available at <https://www.sec.gov/comments/sr-finra-2011-058/finra2011058.shtml>.

Pilot initially was approved for a one-year term,¹⁰ has been extended a number of times,¹¹ and currently is scheduled to expire on December 7, 2018.¹²

¹⁰ See Securities Exchange Act Release No. 67208 (June 15, 2012), 77 FR 37458 (June 21, 2012) (Notice of Filing of Amendment No. 2 and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment Nos. 1 and 2, To Amend FINRA Rule 6433 (Minimum Quotation Size Requirements for OTC Equity Securities)) (“Order Approving Tier Size Pilot”).

¹¹ See Securities Exchange Act Release No. 70839 (November 8, 2013), 78 FR 68893 (November 15, 2013) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to November 14, 2014; File No. SR-FINRA-2013-049); Securities Exchange Act Release No. 73299 (October 3, 2014), 79 FR 61120 (October 9, 2014) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to February 13, 2015; File No. SR-FINRA-2014-041); Securities Exchange Act Release No. 74251 (February 11, 2015), 80 FR 8741 (February 18, 2015) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to May 15, 2015; File No. SR-FINRA-2015-002); Securities Exchange Act Release No. 74927 (May 12, 2015), 80 FR 28327 (May 18, 2015) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to August 14, 2015; File No. SR-FINRA-2015-010); Securities Exchange Act Release No. 75639 (August 7, 2015), 80 FR 48615 (August 13, 2015) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to December 11, 2015; File No. SR-FINRA-2015-028); Securities Exchange Act Release No. 76519 (November 24, 2015), 80 FR 75155 (December 1, 2015) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to June 10, 2016; File No. SR-FINRA-2015-051); Securities Exchange Act Release No. 77923 (May 26, 2016), 81 FR 35432 (June 2, 2016) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to December 9, 2016; File No. SR-FINRA-2016-016); Securities Exchange Act Release No. 79401 (November 25, 2016), 81 FR 86762 (December 1, 2016) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to June 9, 2017; File No. SR-FINRA-2016-044); Securities Exchange Act Release No. 80727 (May 18, 2017), 82 FR 23953 (May 24, 2017) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to December 8, 2017; File No. SR-FINRA-2017-014); and Securities Exchange Act Release No. 82153 (November 22, 2017), 82 FR 56300 (November 28, 2017) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to June 7, 2018; File No. SR-FINRA-2017-035)

¹² See Securities Exchange Act Release No. 83392 (June 7, 2018), 83 FR 27638 (June 13, 2018) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Extend the Tier Size Pilot to December 7, 2018; File No. SR-FINRA-2018-022).

According to FINRA, the Pilot tiers are designed to: (1) simplify the structure of the minimum quotation sizes for OTC equity securities; (2) facilitate the display of customer limit orders under FINRA Rule 6460 (Display of Customer Limit Orders) (“limit order display rule”); and (3) expand the scope of FINRA Rule 6433 to provide for uniform treatment of the types and sources of quotations that would be subject to FINRA Rule 6433.¹³ FINRA believes that the Pilot has resulted in its intended objectives, and particularly notes that the Pilot has yielded a significant positive result with regard to increased display of customer limit orders. FINRA states that, at the same time, market quality measures have been neutral (i.e., unchanged) or slightly positive (i.e., slightly improved) overall during the Pilot, as compared to the pre-Pilot period, as discussed more fully below. Accordingly, FINRA believes that it is appropriate and consistent with the Act to adopt the Pilot tier sizes on a permanent basis.

Objectives of the Pilot

FINRA Rule 6433 sets forth the minimum quotation sizes applicable to the display of quotations in OTC equity securities on any inter-dealer quotation system that permits quotation updates on a real-time basis. FINRA Rule 6433 provides different minimum quotation sizes that apply depending upon the price level of the bid or offer in the security.

Prior to the Pilot, which has been in effect since November 12, 2012,¹⁴ FINRA Rule 6433 provided for nine tier sizes that applied only to market makers’ proprietary quotes. The pre-Pilot tiers ranged in price points from \$0.00 through \$2,500.01, and are shown below in Table 1.

¹³ See Order Approving Tier Size Pilot, supra note 10, 77 FR at 37458.

¹⁴ See FINRA Regulatory Notice 12-51 (November 2012), available at: <http://www.finra.org/industry/notices/12-51>; see also FINRA Regulatory Notice 12-37 (August 2012), available at: <http://www.finra.org/industry/notices/12-37>.

TABLE 1

Price (Bid or Offer)	Minimum Quote Size (# of shares)
\$0 to \$0.50	5,000
\$0.51 to \$1.00	2,500
\$1.01 to \$10.00	500
\$10.01 to \$100.00	200
\$100.01 to \$200.00	100
\$200.01 to \$500.00	25
\$500.01 to \$1,000.00	10
\$1,000.01 to \$2,500.00	5
\$2,500.01 +	1

Under the Pilot, the number of tiers was reduced from nine to six tiers, and the tiers apply to all quotations displayed by market makers, whether representing proprietary or customer interest, as well as quotations displayed by non-market makers (*i.e.*, alternative trading systems or any other member firm).¹⁵

In addition, for price points between \$1.00 and \$174.99, the Pilot established a minimum quotation size of 100 shares, which is comparable to the minimums generally applicable to quotations in securities on equity exchanges. The Pilot also revised the smallest price point from \$0.00 to \$0.0001 to conform to the minimum quotation increments under FINRA Rule 6434 (Minimum Pricing Increment for OTC Equity Securities).¹⁶ The Pilot tiers that ultimately were adopted are shown below in Table 2.

¹⁵ FINRA initially proposed six tiers, some of which differed from those tiers that ultimately were adopted. However, in response to comments received, FINRA amended its original filing to increase the minimum quotation size for most price points between \$0.02 and \$1.00. FINRA stated that the amended tiers were intended to facilitate the display of additional liquidity by market makers. *See* Securities Exchange Act Release No. 66819 (April 17, 2012), 77 FR 23770 (April 20, 2012) (Amendment No. 1 to File No. SR-FINRA-2011-058); *see also* Original Proposal, *supra* note 9.

¹⁶ FINRA Rule 6434, among other things, prohibits members from displaying a bid or offer in an OTC equity security in an increment smaller than \$0.01 if the bid or offer is priced \$1.00 or greater per share, or in an increment smaller than \$0.0001 if the bid or offer is priced below \$1.00.

TABLE 2

Price (Bid or Offer)	Minimum Quote Size (# of shares)
\$0.0001 to \$0.0999	10,000
\$0.10 to \$0.1999	5,000
\$0.20 to \$0.5099	2,500
\$0.51 to \$0.9999	1,000
\$1.00 to \$174.99	100
\$175.00 +	1

FINRA states that the Pilot was designed to facilitate the display of customer limit orders under FINRA’s limit order display rule, which generally requires that OTC market makers fully display better-priced customer limit orders (or same-priced customer limit orders that are at the best bid or offer and that increase the OTC market maker’s size by more than a de minimis amount).¹⁷ Pursuant to FINRA’s limit order display rule, OTC market makers are not required to display a customer limit order on an inter-dealer quotation system unless doing so would comply with the minimum quotation size applicable to the price of the quotation under FINRA Rule 6433. Therefore, although a customer limit order otherwise would have been required to be displayed under the limit order display rule—for example, because it improved price or the size (more than a de minimis amount)—if the size of the order were less than the minimum quotation size prescribed by FINRA Rule 6433, the member would not be required to display the order. Thus, FINRA believed that the revisions implemented by the Pilot would improve the overall display of customer limit orders.

For example, because the Pilot would reduce the minimum quotation size from 2,500 to 100 shares for securities priced at or above \$1.00, FINRA believed that competitively priced customer limit orders, which tend to be smaller-sized orders, would more likely be displayed and potentially yield a variety of benefits, including improved price transparency, enhanced

¹⁷ See FINRA Rule 6460 (Display of Customer Limit Orders).

execution of customer limit orders, and narrower spreads. In addition, in a memorandum on the potential effects of the Pilot, Commission staff of the Division of Risk, Strategy and Financial Innovation (n/k/a the Division of Economic Research and Analysis (“DERA”)) noted that enhanced visibility of customer limit orders could reduce customers’ execution costs.¹⁸

An additional objective of the Pilot was to expand the scope of FINRA Rule 6433 to apply to all member quotations on an inter-dealer quotation system. Prior to the Pilot, FINRA Rule 6433 applied only to market makers’ proprietary quotes in OTC equity securities on an inter-dealer quotation system. Under the Pilot, the minimum tier sizes apply to any member quotations entered on an inter-dealer quotation system (including quotes representing customer interest and quotations entered by non-market makers).

Concerns Raised Regarding FINRA’s Original Proposal

The Commission received several comments in response to FINRA’s Original Proposal.¹⁹ Commenters generally were supportive of the goal of increased customer limit order display.²⁰ However, commenters also raised concerns regarding the impact of the proposed revisions to the tiers in FINRA Rule 6433. Specifically, some commenters questioned whether the proposed Pilot might harm market quality by permitting market makers to post quotes representing minimum dollar value commitments that would not be financially meaningful, or otherwise

¹⁸ See Memorandum to File No. SR-FINRA-2011-058 re: FINRA Proposal to Reduce Minimum Quotation Size in OTC Market Tiers from Division of Risk, Strategy, and Financial Innovation, dated June 1, 2012, available at: <http://www.sec.gov/comments/sr-finra-2011-058/finra2011058-13.pdf> (“Memorandum from Division of Risk, Strategy, and Financial Innovation”).

¹⁹ See supra note 9.

²⁰ See Order Approving Tier Size Pilot, supra note 10.

would erode market maker liquidity in OTC equity securities.²¹ In addition, some commenters believed that there was not sufficient data analysis to support the proposed changes to the then existing tier sizes.²²

In response to commenters' concerns, FINRA filed Amendment No. 1 to the Original Proposal to increase the minimum quotation sizes for most price points between \$0.02 and \$1.00, and proposed that the revised tiers operate as a one-year pilot program instead of on a permanent basis. FINRA also submitted Amendment No. 2 to the Original Proposal, which, among other things, specified the items of data that FINRA would collect and provide to the Commission during the duration of the Pilot. These data items were:

1. The price of the first trade of each trading day executed at or after 9:30:00 a.m., based on execution time.
2. The price of the last trade of each trading day executed at or before 4:00:00 p.m., based on execution time.
3. Daily share volume.
4. Daily dollar volume.
5. Number of limit orders from customers and in total.
6. Percentage of the day that the size of the Best Bid or Offer ("BBO") equals the minimum quote size.
7. Number of market makers actively quoting.
8. Number of executions from a limit order and number of limit orders at the BBO or better by tier size from a customer and in total.

²¹ See id.

²² See id. at 37461-62.

9. Liquidity/BBO metrics

- a. Time-weighted quoted spread.
- b. Effective spread.
- c. Time-weighted quoted depth (number of shares) at the inside.
- d. Time-weighted quoted depth (dollar value of shares) at the inside.

FINRA also committed to submitting an assessment, at least 60 days before the end of the Pilot, that would address the impact of the proposed Pilot, the concerns raised by commenters during the rule filing process, and whether the proposed Pilot resulted in its desired effects.²³

Pilot Assessment

FINRA submitted an assessment on the operation of the Tier Size Pilot on September 13, 2013, which utilized pilot data covering the period from November 12, 2012 through June 30, 2013.²⁴ The 2013 Assessment, discussed in greater detail below, included a recommendation, based on the analysis conducted, that the Pilot tiers be adopted as permanent. Nonetheless, FINRA submitted proposed rule changes to extend the Pilot's duration to allow the effects of the Pilot to be more thoroughly reviewed.²⁵ During this extension period, DERA conducted a study, dated July 28, 2017, that assessed the impact of the Pilot on the liquidity of OTC equity securities.²⁶ Although the two studies covered different time periods and employed different

²³ See Order Approving Tier Size Pilot, supra note 10.

²⁴ FINRA engaged a third-party, Cornerstone Research, to conduct an analysis of the impact of the Pilot on OTC market quality. The "OTC Tier Size Analysis" prepared by Cornerstone Research and the accompanying FINRA Executive Summary were submitted as Exhibit 3a of the instant proposed rule change and are available at <https://www.sec.gov/rules/sro/finra/2018/34-83129-ex3a.pdf> ("2013 Assessment").

²⁵ See supra notes 11 and 12.

²⁶ See DERA Staff Memorandum regarding FINRA's Pilot Program Amending Minimum Quotation Size Requirements for OTC Equity Securities (SR-FINRA-2011-058), dated

methods, FINRA notes that the DERA Memo to File reported findings consistent with those of the 2013 Assessment. In light of the 2013 Assessment, FINRA's further observations, and the DERA Memo to File, FINRA continues to believe that it is appropriate for the Commission to approve permanently the tier sizes that have been in operation since November 12, 2012.

According to FINRA, the 2013 Assessment demonstrates that the Pilot has accomplished its objectives, including increased customer limit order display, and that key market quality indicators have been unchanged or have slightly improved overall. FINRA continued to collect and provide Pilot data to the Commission after the issuance of the 2013 Assessment. In addition, FINRA continued to monitor the impact of the operation of the Pilot on market quality metrics for the over-the-counter marketplace, which FINRA generally believes indicate positive trends overall, thus providing continued support for permanent adoption of the Pilot tiers.²⁷ Moreover, FINRA states that the DERA Memo to File provides further evidence, in a regression framework, to support the conclusion that the Pilot had a neutral to positive impact on market quality.

FINRA further believes that the 2013 Assessment demonstrates that the Pilot has resulted in a meaningful increase in the display of customer limit orders. Moreover, FINRA believes that the data collected during the Pilot also supports that market quality has not been harmed, as suggested by the analysis of market quality measures such as spreads and market depth.

July 28, 2017, available at: https://www.sec.gov/files/otc_tiersizepilot_memo.pdf ("DERA Memo to File").

²⁷ FINRA engaged in outreach with member firms that are active in the market for OTC equity securities regarding the operation of the Tier Size Pilot, and the majority of those firms did not oppose the permanent adoption of the Pilot.

(A) Enhanced Customer Limit Order Display

According to FINRA, when the Commission approved the Pilot, it recognized the potential benefits of enhancing customer limit order display. Notably, the Commission stated that “[i]n the Commission’s view, FINRA’s proposed revisions are designed to protect investors by revising the . . . tier thresholds [in FINRA Rule 6433] such that a larger percentage of customer limit orders are reflected in quotations for OTC equity securities, thereby potentially improving the prices at which customer limit orders will be executed, consistent with the protection of investors and the public interest.”²⁸ FINRA believes that the Pilot has achieved the objective of increased customer limit order display.

As noted in the 2013 Assessment, FINRA analyzed the number of customer limit orders that would be eligible under both the Pilot and the pre-Pilot tier sizes and observed that between November 1, 2012 and June 30, 2013, for all tier sizes combined, there was a 13% increase in the number of customer limit orders that met the minimum quotation sizes to be eligible for display under the Pilot tiers.²⁹ For that same period, FINRA also observed a significant increase in the number of customer limit orders in securities priced between \$0.20 and \$100.00 that became eligible for display. According to FINRA, this trend continued through July 31, 2014. Specifically, for the period between July 1, 2013 and July 31, 2014, FINRA indicates that it observed, for all tier sizes combined, an 18.45% increase in the number of customer limit orders that met the minimum quotation sizes and, therefore, were eligible for display, with the most significant increase observed for securities priced between \$0.20 and \$100.00.³⁰

²⁸ See Order Approving Tier Size Pilot, supra note 10, 77 FR at 37466. See also Memorandum from Division of Risk, Strategy, and Financial Innovation, supra note 18.

²⁹ See Notice, supra note 3.

³⁰ See Notice, supra note 3

Tables 3³¹ and 4³² below show the percentage of customer limit orders that were equal to or greater than the minimum quotation size under both the Pilot and pre-Pilot tier sizes for the specified price ranges for the periods of November 1, 2012 through June 30, 2013, and from July 1, 2013 through July 31, 2014, respectively.

TABLE 3
November 1, 2012 through June 30, 2013

Price Range	Pilot Tier Size	Customer Limit Orders ≥ Tier Size	Pre-Pilot Tier Size	Customer Limit Orders ≥ Tier Size
0.0001-0.0999	10,000	78.29%	5,000	86.30%
0.10-0.1999	5,000	56.89%	5,000	56.89%
0.20-0.5099	2,500	57.35%	5,000	43.30%
0.51-0.9999	1,000	72.81%	2,500	46.05%
1.00-10.00	100	97.86%	500	74.73%
10.01-100.00	100	98.24%	200	87.93%
100.01-174.99	100	90.49%	100	90.49%
175.00-200.00	1	100%	100	96.71%
200.01-500.00	1	100%	25	90.74%
500.01-1,000.00	1	100%	10	64.62%
1,000.00-2,500.00	1	100%	5	61.38%
2,500.00+	1	100%	1	100.00%

³¹ Table 3 originally was included in FINRA's Executive Summary, dated September 13, 2013, which is part of the 2013 Assessment. See supra note 24. See also Notice, supra note 3.

³² Table 4 was included in the Notice, supra note 3.

TABLE 4
July 1, 2013 through July 31, 2014

Price Range	Pilot Tier Size	Customer Limit Orders ≥ Tier Size	Pre-Pilot Tier Size	Customer Limit Orders ≥ Tier Size
0.0001-0.0999	10,000	78.29%	5,000	88.70%
0.10-0.1999	5,000	56.89%	5,000	57.78%
0.20-0.5099	2,500	57.35%	5,000	42.31%
0.51-0.9999	1,000	72.81%	2,500	42.10%
1.00-10.00	100	97.86%	500	68.36%
10.01-100.00	100	98.24%	200	78.03%
100.01-174.99	100	90.49%	100	90.60%
175.00-200.00	1	100%	100	91.94%
200.01-500.00	1	100%	25	89.41%
500.01-1,000.00	1	100%	10	66.65%
1,000.00-2,500.00	1	100%	5	65.58%
2,500.00+	1	100%	1	100.00%

FINRA states that, as was noted in the 2013 Assessment, of the 301,628,686 customer limit orders in OTC equity securities reported to FINRA’s Order Audit Trail System (“OATS”) between November 1, 2012 and June 30, 2013, over 86.6% were priced between \$0.20 and \$100.00. FINRA further notes that 58.7 million customer limit orders, or almost 20% of all customer limit orders, were priced between \$1.00 and \$10.00. According to FINRA, this price range experienced an increase of almost 24% in the number of customer limit orders that met the minimum quotation size to be eligible for display under the Pilot. Further, 181.6 million customer limit orders, or over 60% of all customer limit orders, were priced between \$10.01 and \$100.00. FINRA observes that this price range experienced an increase of over 10% in the number of customer limit orders that met the Pilot tier sizes and were eligible for display under the Pilot tier sizes. FINRA points out that the 2013 Assessment found that an additional 32 million customer limit orders priced between \$1.00 and \$100.00 became eligible for display during the Pilot that otherwise would not have been eligible for display.

According to FINRA, the trends during the period since the 2013 Assessment are similar. FINRA states that of the 573,973,197 customer limit orders in OTC equity securities reported to OATS between July 1, 2013 and July 31, 2014, 81.4% were priced between \$0.20 and \$100.00. FINRA notes that 114.5 million customer limit orders, or almost 20% of all customer limit orders, were priced between \$1.00 and \$10.00. From July 1, 2013 through July 31, 2014, this price range experienced an increase of over 29% in the number of customer limit orders that met the minimum quotation size to be eligible for display under the Pilot than would have been eligible in the absence of the Pilot. Further, 312.1 million customer limit orders, or over 54% of all customer limit orders, were priced between \$10.01 and \$100.00. FINRA remarks that this price range experienced an increase of over 19% in the number of customer limit orders that met the Pilot tier sizes and were eligible for display under the Pilot tier sizes. Consequently, an additional 94.9 million customer limit orders priced between \$1.00 and \$100.00 became eligible for display during the Pilot between June 30, 2013 and July 31, 2014 than otherwise would have been eligible for display.

FINRA states that there was an aggregate overall increase in displayed customer limit orders in OTC equity securities over the period from November 12, 2012 through July 31, 2014 of 16.24%, representing approximately 142 million additional orders than otherwise would have been eligible for display. As a result, FINRA believes that the impact of the Pilot on limit order display has been positive, with stronger than average results concentrated in the price points ranging from \$10.01 and \$100.00 (the range in which the majority of all customer limit orders fell (approximately 57%)).

(B) Impact on Market Quality

FINRA explains that when the Commission approved the Pilot, it acknowledged that the Pilot may raise issues of “potentially competing forces”—enhanced customer limit order display on the one hand and potential harm to OTC equity market quality (liquidity, efficiency, and volatility) on the other.³³ FINRA notes that the Commission, however, expressed the view that “as well as increasing the number of customer limit orders eligible for display and the potential for better executions, arguments can be made that FINRA’s proposal will benefit the OTC market by facilitating market making activity, narrowing spreads and increasing liquidity.”³⁴

FINRA believes that analysis of the Pilot and pre-Pilot data generally shows that the market quality measures that the Commission had identified—i.e., market maker activity, spreads and liquidity—were unchanged to slightly improved, and that therefore there has been an overall neutral to positive impact on OTC market quality for the majority of Pilot tiers as compared to the pre-Pilot data.³⁵

As noted in the 2013 Assessment, where the minimum quotation size decreased under the Pilot, effective spreads generally remained the same or narrowed, quoted spreads narrowed, and price impact generally decreased. The 2013 Assessment also stated that some of the market quality metrics provided inconclusive results, specifically for Tier 1 securities, where the minimum quote size requirement had increased under the Pilot. FINRA remarks that the 2013

³³ See Order Approving Tier Size Pilot, supra note 10, 77 FR at 37467.

³⁴ Id.

³⁵ FINRA notes that, from an analytical perspective, changes in market quality measures may not be attributable solely as a result of the Pilot, since they also may be impacted by other contemporaneous market factors.

Assessment documented that effective spreads had widened, but with no significant reduction in quoted depth.³⁶

In the post-2013 Assessment period of July 1, 2013 through July 31, 2014, FINRA observes that the number of stocks quoted in the OTC market has remained relatively constant³⁷ and market makers continued to provide liquidity.³⁸ The number of BBO quotes also significantly increased throughout 2014, which was the second year of the Pilot, as the number of quotes generally hovered around 2 million per day during the Pre-Pilot period, but steadily increased, reaching a high of approximately 6 million per day in early 2014 and leveling off to an average of 5 million per day during the month of July 2014. The average number of trades per day was higher during the first two years of the Pilot compared to the pre-Pilot level, and more than tripled by March 2014.³⁹ FINRA states, however, that trading activity appears to have leveled-off in mid-2014, albeit still at levels above the pre-Pilot trading.⁴⁰ Liquidity continued to

³⁶ FINRA points out that for Tier 1 securities, the DERA Memo to File finds that both quoted and effective spreads increased between the pre-Pilot period (November 14, 2011 through October 31, 2012) and the Pilot period (November 12, 2012 through November 28, 2014) covered by the analysis. However, the DERA Memo to File does not find sufficient evidence that these increases in spreads were caused by the Pilot, because spreads had started to widen at least six months prior to the implementation of the Pilot.

³⁷ The number of stocks quoted on the OTC market remained stable at around 10,000 throughout the pre-Pilot period and during the period covered in the 2013 Assessment, as well as during FINRA's subsequent observations (November 1, 2012 through July 31, 2014).

³⁸ There was an average of nine market-makers for each symbol with no significant change in the number of market makers between the pre-Pilot period and during the period covered in the 2013 Assessment and during FINRA's subsequent observations (November 1, 2012 through July 31, 2014).

³⁹ The daily number of trades executed during the year prior to the Pilot is estimated at approximately 75,000, and reached around 250,000 trades by the end of the first quarter in 2014.

⁴⁰ The daily average number of trades was approximately 100,000 by July 2014.

be provided at levels greater than the minimum required depth, evidenced by executions at sizes greater than the required minimums, which enabled the execution of large trades in the OTC market. For example, for Tier 1 securities where the minimum quotation size increased, the number of trades executed above the minimum size increased by approximately 75%. Although there was virtually no change in the frequency of trades above the minimum size for Tiers 2 and 3, FINRA notes that all the other tiers experienced a positive change. Trading in sizes greater than the minimum quotation size occurred infrequently in these tiers both prior to and during the Pilot.

FINRA further notes that the analysis of data from the second year of the Pilot also confirms its position that the impact of the change in the minimum quotation size on the market quality metrics generally is positive. FINRA staff analyzed the change in five measures to evaluate the impact of the Pilot on market quality—time-weighted quoted spreads, volume-weighted spreads, time-weighted quoted depth at the BBO, time-weighted quoted depth around the BBO, and price impact. Based on FINRA’s analysis, time-weighted quoted spreads continued to narrow during the first two years of the Pilot and these positive changes in time-weighted quoted spreads between the pre-Pilot and the first two years of the Pilot were statistically significant for all tiers.⁴¹ Similarly, volume-weighted spreads were unchanged (or

⁴¹ For stocks in price tiers where the minimum quotation size requirement had decreased, the DERA Memo to File also finds that both quoted and effective spreads had decreased between the pre-Pilot period (from November 14, 2011 to October 31, 2012) and the Pilot period (November 12, 2012 to November 28, 2014) covered by the analysis. Furthermore, the DERA Memo to File’s analysis suggests that these decreases in spreads may reflect causal effects of the Pilot. In contrast, for stocks in price tiers where the minimum quotation size requirement increased or remained the same, the DERA Memo to File does not find sufficient evidence that the Pilot had a causal impact on spreads.

slightly narrowed) for all tiers between the pre-Pilot period and the first two years of the Pilot when accounting for the longer Pilot period.

FINRA observes that the displayed depth decreased slightly for most tiers, but a consideration of depth beyond the BBO demonstrated that any declines were mostly statistically insignificant across tiers in the first two years of the Pilot. FINRA believes that consideration of depth beyond the BBO is a useful additional measure for assessing market depth.

In addition, based on a data review using the same methodology as was employed for the 2013 Assessment, subsequent to the completion of the 2013 Assessment, FINRA observed that the price impact of hypothetical market orders continued to remain lower during the second year of the Pilot period than during the pre-Pilot period.⁴² For example, the following two tables prepared by FINRA present the price impact for hypothetical market buy and sell orders with sizes five times larger than the minimum size requirement for each tier. The price impact associated with the hypothetical orders is estimated to have declined for all tiers, which is an indication of improved market quality. The decline is significant for all levels except for Tiers 5b and 5c (for buy trades) and Tier 1 (for sell trades).

According to FINRA, the t-statistic in the charts below is designed to measure whether the price impact associated with a trade of a given (relative) size is different between the pre-Pilot and Pilot sample periods. The difference is tested for significance by calculating the two-

sample un-pooled Student's t-statistic, $t = \frac{\bar{x}_1 - \bar{x}_2}{s_{\bar{x}_1 - \bar{x}_2}}$, where $s_{\bar{x}_1 - \bar{x}_2} = \sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}$.

⁴² As FINRA discussed in the 2013 Assessment, the price impact of hypothetical market orders is the effective half spread for a hypothetical market “sweep” order of a particular size. In other words, it is an estimate of what the volume-weighted average effective half spread would have been had a market order been broken up and routed to the market makers based on price priority.

The null hypothesis (i.e., that price impact is unchanged between the two sample periods) is rejected at the 90% and 95% confidence levels, if the t-statistics are greater than 1.65 and 1.96, respectively.

TABLE 5
Price Impact for Hypothetical Large Market Buy Orders

Tier	Minimum Quotation Size Change	Number of Stocks	Pre-Pilot (10/2011 - 10/2012)	Pilot (11/2012 - 7/2014)	Difference	t-statistic
1	Increased	3,586	0.0055	0.0050	-0.0005	(2.60)
2	Maintained	1,254	0.0235	0.0197	-0.0038	(5.03)
3	Decreased	1,752	0.0506	0.0420	-0.0086	(6.41)
4	Decreased	1,537	0.0969	0.0810	-0.0159	(5.00)
5a	Decreased	3,038	0.3295	0.2530	-0.0765	(7.79)
5b	Decreased	2,026	1.1630	1.0661	-0.0969	(1.55)
5c	Maintained	177	4.8322	4.7906	-0.0416	(0.06)

TABLE 6
Price Impact for Hypothetical Large Market Sell Orders

Tier	Minimum Quotation Size Change	Number of Stocks	Pre-Pilot (10/2011 - 10/2012)	Pilot (11/2012 - 7/2014)	Difference	t-statistic
1	Increased	3,931	0.0062	0.0059	-0.0003	(1.60)
2	Maintained	1,483	0.0233	0.0169	-0.0064	(3.41)
3	Decreased	1,787	0.0540	0.0311	-0.0229	(4.87)
4	Decreased	1,676	0.1214	0.0656	-0.0558	(4.95)
5a	Decreased	3,059	0.4170	0.1500	-0.2670	(6.01)
5b	Decreased	2,145	2.3563	0.4214	-1.9349	(6.79)
5c	Maintained	288	14.8135	4.2683	-10.5452	(3.13)

As noted above, FINRA states that the 2013 Assessment was not conclusive as to the impact of the Pilot on market quality for Tier 1 securities, the only tier where the minimum quotation size had increased. For example, the 2013 Assessment indicated that the time-weighted quoted spread was unchanged for Tier 1 securities in the Pilot period. However, FINRA explains that from June 30, 2013 to July 2014, there was a statistically significant narrowing of time-weighted quoted spreads in this tier. Evidence from the second year of the

Pilot suggests that volume-weighted effective spreads and depth beyond the BBO were unchanged from pre-Pilot levels, but there was a statistically significant increase in depth at the BBO. FINRA therefore concludes that the updated analysis provides reliable evidence that market quality for Tier 1 securities also has improved during the Pilot.⁴³ The data for other tiers, however, continue to provide reliable evidence that market quality has been unchanged or slightly improved under the Pilot. Thus, because the Pilot had a demonstrable positive impact on customer limit order display, and appears to have had an overall neutral to positive impact on market quality, FINRA believes that it is appropriate and in the best interest of investors to adopt the Pilot tiers as permanent.

FINRA notes that, if the Commission approves the proposed rule change, the implementation date of the proposed rule change shall be the date of approval by the Commission.

III. Comment Summary and FINRA's Response

As noted above, the Commission received one comment letter on the proposed rule change and a response letter from FINRA.⁴⁴ The commenter generally supports making the proposed tier sizes permanent.⁴⁵ However, the commenter believes that there should be no tier sizes for unsolicited customer orders.⁴⁶ The commenter is concerned that when a broker-dealer is quoting on an unsolicited basis in certain securities, the tier sizes work to restrict customers

⁴³ As noted in note 36, supra, FINRA points out that the DERA Memo to File finds that quoted and effective spreads for Tier 1 securities increased between the pre-Pilot period of November 14, 2011 to October 31, 2012 and the Pilot period of November 12, 2012 to November 28, 2014 covered by the analysis, but it does not find sufficient evidence that these increases in spreads were caused by the Pilot.

⁴⁴ See supra note 4.

⁴⁵ Id.

⁴⁶ Id.

from being able to trade their positions because the unsolicited customer order does not meet the revised tier size requirements.⁴⁷

In its response letter, FINRA states that one of its goals in revising FINRA Rule 6433 was to achieve a reasonable balance between customer limit order display and facilitating a meaningful minimum dollar-value commitment to the market for all displayed quotations.⁴⁸ FINRA believes that the Pilot tiers achieve an appropriate balance of these objectives.⁴⁹ FINRA further explains that the Pilot tiers have resulted in a positive impact on the level of customer limit orders eligible for display under FINRA Rule 6460 and does not believe that an exception for any subset of customer orders should be adopted at this time.⁵⁰

IV. Discussion of Commission Findings

After careful review of the proposed rule change, the comment letter, and FINRA's response to the comment letter, the Commission finds that the proposal is consistent with the requirements of the Act and the rules and regulations thereunder that are applicable to a national securities association.⁵¹ Specifically, the Commission finds that the rule change is consistent with Section 15A(b)(6) of the Exchange Act,⁵² which requires, among other things, that FINRA rules be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest. The Commission also finds that the proposed rule change is consistent with the provisions of Section

⁴⁷ Id.

⁴⁸ See FINRA Letter, supra note 7.

⁴⁹ Id. at 2.

⁵⁰ Id.

⁵¹ In approving this rule change, the Commission has considered the rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

⁵² 15 U.S.C. 78o-3(b)(6).

15A(b)(11) of the Act,⁵³ which requires that FINRA rules include provisions governing the form and content of quotations relating to securities sold otherwise than on a national securities exchange which may be distributed or published by any member or person associated with a member, and the persons to whom such quotations may be supplied.

As stated in the Notice, FINRA believes that making the Pilot tiers permanent would promote just and equitable principles of trade and protect investors and the public interest. FINRA believes that the 2013 Assessment and subsequent observations demonstrate that the Pilot has resulted in an increased display of customer limit orders. FINRA notes that the 2013 Assessment found a 13% increase in the number of customer limit orders that met the minimum quotation sizes eligible for display across all Pilot tiers, and FINRA's updated data through July 2014 shows an even greater increase of 18.45% than otherwise would have been eligible for display. The increase in customer limit orders eligible for display was significant in tiers that make up substantial percentages of the overall volume transacted in OTC equity securities.

In the Notice, FINRA further states its belief that any concerns about market quality raised by public commenters prior to the Commission's approval of the Pilot have not materialized. In fact, FINRA states that it believes that the Pilot has had a positive impact on OTC market quality for the majority of OTC equity securities and the tiers set forth in the Pilot. FINRA believes that the Pilot data shows overall a slight reduction in spreads for most OTC equity securities with no negative (and perhaps a positive) impact on liquidity.

When the Commission approved the Pilot, it emphasized the potential benefit of increasing customer limit order display. For instance, the Commission noted that increased limit order display potentially could improve the prices at which customer limit orders would be

⁵³ 15 U.S.C. 78o-3(b)(11).

executed, consistent with the protection of investors and the public interest.⁵⁴ The Commission also stated its belief that greater customer limit order display could increase quote competition, narrow spreads, and increase the likelihood of price improvement for OTC equity securities.⁵⁵ The Commission has maintained a longstanding view that there are benefits to promoting customer limit order display.⁵⁶

As noted above, the sole commenter on the proposed rule change is concerned that when a firm is quoting on an unsolicited basis in certain securities, the Pilot tier sizes work to restrict customers from being able to trade their positions if the unsolicited customer order does not meet FINRA's minimum tier size requirements.⁵⁷ The Commission notes that FINRA's 2013 Assessment and its subsequent assessment for the period covering July 1, 2013 through July 31, 2014 indicate that there was a meaningful increase in the number of customer limit orders eligible for display. The Commission agrees with FINRA that the minimum tier size requirements of FINRA Rule 6433, which have been in place on a Pilot basis, achieve a reasonable balance between fostering customer limit order display and facilitating a meaningful minimum dollar-value commitment to the market for all displayed quotations.

The Commission believes that the Pilot has accomplished its intended objectives and has realized its anticipated benefits, including greater customer limit order display. At the same time, market quality indicators during the Pilot suggest that the revised tiers and evidence of greater customer limit order display did not result in a harmful reduction in liquidity for OTC

⁵⁴ See Order Approving Tier Size Pilot, supra note 10, 77 FR at 37466.

⁵⁵ See id. at 37469.

⁵⁶ See id. at 37469 n.168 (citing, among other things, the Commission's 1996 Order Handling Rules Release).

⁵⁷ See supra note 4.

equity securities. The Commission believes that these results are consistent with FINRA's assessment that the Pilot has had a neutral to positive impact on liquidity for the majority of OTC equity securities and price tiers.⁵⁸ At the same time, the Commission notes that there is inconclusive evidence regarding the effects of the Pilot on liquidity for the price tier for which the minimum quotation size requirement was increased.⁵⁹ In light of the foregoing, the Commission believes that it is consistent with the Act to adopt the Pilot tiers, which have been in effect for nearly six years, on a permanent basis.

IV. Conclusion

IT IS THEREFORE ORDERED pursuant to Section 19(b)(2)⁶⁰ of the Exchange Act that the proposal (SR-FINRA-2018-015) be and hereby is approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁶¹

Robert W. Errett
Deputy Secretary

⁵⁸ See id. at 2.

⁵⁹ Id. The minimum quotation size requirement increased for those securities prices between \$0.0001 and \$0.0999. These securities are included in the lowest tier which requires a minimum quotation size of 10,000 shares.

⁶⁰ 15 U.S.C. 78s(b)(2).

⁶¹ 17 CFR 200.30-3(a)(12).

