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SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-83129; File No. SR-FINRA-2018-015)

April 30, 2018

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

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on April 20, 2018, Financial Industry Regulatory Authority, Inc. (“FINRA”) filed with the Securities and Exchange Commission (“SEC” or “Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by FINRA. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

FINRA is proposing to amend FINRA Rule 6433 (Minimum Quotation Size Requirements for OTC Equity Securities) to adopt as permanent the minimum quotation sizes for OTC equity securities currently operating on a pilot basis, scheduled to expire on June 7, 2018.

The text of the proposed rule change is available on FINRA’s website at <http://www.finra.org>, at the principal office of FINRA and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, FINRA included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

rule change. The text of these statements may be examined at the places specified in Item IV below. FINRA has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

FINRA proposes to amend Rule 6433 (Minimum Quotation Size Requirements for OTC Equity Securities) (the "Rule") to adopt as permanent the minimum quotation sizes applicable to quotations in OTC equity securities<sup>3</sup> that were proposed pursuant to File No. SR-FINRA-2011-058 and implemented on a pilot basis on November 12, 2012 ("Tier Size Pilot" or "Pilot").<sup>4</sup> The Pilot was initially approved for a one-year term, has been extended ten times, and currently is scheduled to expire on June 7, 2018.<sup>5</sup>

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<sup>3</sup> An OTC equity security is an equity security that is not an "NMS Stock" as defined in Rule 600(b)(47) of SEC Regulation NMS; provided, however, that the term "OTC equity security" shall not include any Restricted Equity Security. See FINRA Rule 6420(f).

<sup>4</sup> 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").

<sup>5</sup> 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 File No. SR-FINRA-2011-058, as amended); see also 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

The Pilot tiers were designed to: (1) simplify the structure of the minimum quotation sizes; (2) facilitate the display of customer limit orders under Rule 6460 (Display of Customer Limit Orders) (“limit order display rule”); and (3) expand the scope of the Rule to provide for uniform treatment of the types and sources of quotations that would be subject to the Rule.<sup>6</sup> FINRA believes 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. 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 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

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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); 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).

<sup>6</sup> See Order Approving File No. SR-FINRA-2011-058, 77 FR at 37458.

updates on a real-time basis. The Rule 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,<sup>7</sup> 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.

**TABLE 1**

<b>Price (Bid or Offer)</b>	<b>Minimum Quote Size (# of shares)</b>
\$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, 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).<sup>8</sup> The Pilot tiers ultimately adopted are shown below in Table 2.

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<sup>7</sup> Regulatory Notice 12-51 (November 2012); see also Regulatory Notice 12-37 (August 2012).

<sup>8</sup> FINRA initially proposed six tiers, some of which were different from those ultimately adopted. However, in response to comments received, FINRA amended the 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.

**TABLE 2**

<b>Price (Bid or Offer)</b>	<b>Minimum Quote Size (# of shares)</b>
\$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

The Pilot tiers simplified the tier structure by reducing the number of tiers from nine to six. 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 Rule 6434 (Minimum Pricing Increment for OTC Equity Securities).<sup>9</sup>

Importantly, 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). Pursuant to the 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 the Rule. Therefore, although a customer limit order may otherwise 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 order is less than the minimum quotation size prescribed by Rule 6433,

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<sup>9</sup> 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.

the member is not required to display the order. Thus, FINRA believed that the revisions implemented by the Pilot would improve 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 execution of customer limit orders, and narrower spreads. In addition, in a memorandum on potential effects of the Pilot, SEC staff economists noted that enhanced visibility of customer limit orders could reduce customers' execution costs.<sup>10</sup>

An additional objective of the Pilot was to expand the Rule's scope to apply to all member quotations on an inter-dealer quotation system. Prior to the Pilot, the Rule 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 During the Proposal Process and Data Commitment

The Commission received several comments in response to FINRA's Tier Size Pilot proposal. Commenters generally were supportive of the goal of increased customer limit order display;<sup>11</sup> however, commenters also raised concerns regarding the impact of revised tiers. Specifically, certain commenters questioned whether the Pilot might harm market quality by

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<sup>10</sup> 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>.

<sup>11</sup> See Order Approving File No. SR-FINRA-2011-058.

permitting market makers to post quotes representing minimum dollar value commitments that are not financially meaningful, or otherwise eroding market maker liquidity in OTC equity securities.<sup>12</sup> In addition, some commenters believed that there was not sufficient data analysis to support the proposed changes to the tier sizes.<sup>13</sup>

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 instead of as a permanent amendment. FINRA also submitted Amendment No. 2 to the Original Proposal to, among other things, specify the items of data that FINRA would collect and provide to the Commission during the duration of the Pilot; specifically:

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 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.
9. Liquidity/BBO metrics

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<sup>12</sup> See id.

<sup>13</sup> See id. at 37461-62.

- 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 addressed the impact of the Pilot, the concerns raised by commenters during the rule filing process, and whether the Pilot resulted in the desired effects.<sup>14</sup>

#### Pilot Assessment

FINRA submitted its 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.<sup>15</sup> The 2013 Assessment, discussed in greater detail below, included a recommendation, based on the extensive analysis conducted, that the Pilot tiers be adopted as permanent. Nonetheless, FINRA extended the Pilot duration to allow the effects of the Pilot to be more thoroughly reviewed.<sup>16</sup> During this extension, the Staff of the Division of Economic and Risk Analysis (“DERA”) of the SEC conducted a study, which assessed the impact of the Pilot on liquidity. The study was published as a memorandum to file (“DERA Memo to File”).<sup>17</sup> And while the two studies covered different time periods and employed different methods, the DERA

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<sup>14</sup> See Amendment No. 2 to File No. SR-FINRA-2011-058, available at <http://www.finra.org/file/amendment-no-2-propose-rule-change>.

<sup>15</sup> FINRA engaged a third-party, Cornerstone Research, to conduct an analysis of the impact of the Pilot on OTC market quality. The 2013 assessment is part of the SEC’s comment file for SR-FINRA-2011-058 and also is available on FINRA’s website at: <http://www.finra.org/industry/rule-filings/sr-finra-2011-058> (“2013 Assessment”).

<sup>16</sup> See *supra* note 5.

<sup>17</sup> See Memorandum to File No. SR-FINRA-2011-058 re: FINRA’s Pilot Program Amending Minimum Quotation Size Requirements for OTC Equity Securities from DERA, dated July 28, 2017, available at: [https://www.sec.gov/files/otc\\_tiersizepilot\\_memo.pdf](https://www.sec.gov/files/otc_tiersizepilot_memo.pdf).

Memo to File reported findings consistent with those of the FINRA 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 to permanently adopt the tier sizes that have been in operation since November 12, 2012, and is proposing to do so at this time.

FINRA believes the 2013 Assessment demonstrated that the Pilot 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 SEC since the 2013 Assessment. In addition, FINRA has 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, providing continued support for permanent adoption of the Pilot tiers.<sup>18</sup> Moreover, the DERA Memo to File provided further evidence, in a regression framework, that supports the conclusion that the Pilot had a neutral to positive impact on market quality.

Specifically, FINRA believes that the 2013 Assessment demonstrated that the Pilot has resulted in a meaningful increase in the display of customer limit orders. Moreover, FINRA believes 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.

(A) Enhanced Customer Limit Order Display

When the Commission approved the Pilot, it recognized the potential benefits of enhancing customer limit order display. Notably, the Commission found that “[i]n the

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<sup>18</sup> 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.

Commission's view, FINRA's proposed revisions are designed to protect investors by revising the Rule's tier thresholds 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."<sup>19</sup> FINRA believes the Pilot clearly has achieved the objective of increased customer limit order display.

As noted in FINRA's September 2013 Assessment, 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. 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. This trend continued through July 31, 2014. Specifically, between July 1, 2013 and July 31, 2014, FINRA 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, eligible for display – also with the most significant increase observed for securities priced between \$0.20 and \$100.00.

Tables 3 and 4 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.

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<sup>19</sup> See Order Approving File No. SR-FINRA-2011-058, 77 FR at 37466. See also Memorandum to file from Division of Risk, Strategy, and Financial Innovation, dated June 1, 2012, supra note 10.

**TABLE 3**  
November 1, 2012 through June 30, 2013

<b>Price Range</b>	<b>Pilot Tier Size</b>	<b>Customer Limit Orders <math>\geq</math> Tier Size</b>	<b>Pre-Pilot Tier Size</b>	<b>Customer Limit Orders <math>\geq</math> Tier Size</b>
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%

**TABLE 4**  
July 1, 2013 through July 31, 2014

<b>Price Range</b>	<b>Pilot Tier Size</b>	<b>Customer Limit Orders <math>\geq</math> Tier Size</b>	<b>Pre-Pilot Tier Size</b>	<b>Customer Limit Orders <math>\geq</math> Tier Size</b>
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%

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. Of particular note, 58.7 million customer limit orders, or almost 20% of all customer limit orders, were priced

between \$1.00 and \$10.00. 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. This price range experienced an increase of over 10% in the number of customer limit orders that met the tier sizes and were eligible for display under the Pilot tier sizes. Consequently, 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.

The trends during the period since the 2013 Assessment are similar. Specifically, 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. Of particular note, 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. This price range experienced an increase of over 19% in the number of customer limit orders that met the 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.

Thus, with 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, FINRA believes that the impact of the Pilot on limit order display has clearly 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

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.<sup>20</sup> On balance, however, the Commission 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.”<sup>21</sup>

FINRA believes that analysis of the Pilot and pre-Pilot data generally shows that the market quality measures the Commission identified – *i.e.*, market maker activity, spreads and liquidity<sup>22</sup> – were unchanged to slightly improved, and that, therefore, there has been

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<sup>20</sup> See Order Approving File No. SR-FINRA-2011-058, 77 FR at 37467.

<sup>21</sup> See Order Approving File No. SR-FINRA-2011-058, 77 FR at 37467.

<sup>22</sup> To the extent the Commission expressed concern about volatility when it approved the Pilot, its concern was premised on the Pilot’s impact on liquidity. See, *e.g.*, Order Approving File No. SR-FINRA-2011-058, 77 FR at 37470 (“[I]f the revised tier sizes result in less activity by market makers, overall liquidity in the marketplace could decline. Such a decline could result in increased volatility and less efficient pricing for OTC equity securities.”) (internal citation omitted).

an overall neutral to positive impact on OTC market quality for the majority of tiers as compared to the pre-Pilot data.<sup>23</sup>

As noted in the 2013 Assessment, where 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 increased. The 2013 Assessment documented that effective spreads had widened, but with no significant reduction in quoted depth.<sup>24</sup>

In the post-2013 Assessment period of July 1, 2013 through July 31, 2014, FINRA has observed that the number of stocks quoted in the OTC market has remained relatively constant<sup>25</sup> and market makers continued to provide liquidity.<sup>26</sup> The number of BBO quotes also significantly increased throughout 2014, the second year of the Pilot; as it 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

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<sup>23</sup> FINRA notes that, from an analytical perspective, changes in market quality measures may not be attributable solely due to the Pilot, since they may also be impacted by other contemporaneous market factors.

<sup>24</sup> For Tier 1 securities, the DERA Memo to File finds that both quoted and effective spreads increase 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, as spreads started to widen at least six months prior to the implementation of the Pilot.

<sup>25</sup> 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 and FINRA's subsequent observations (November 1, 2012 through July 31, 2014).

<sup>26</sup> There was an average of nine market-makers for each symbol with no significant change in the number between the pre-Pilot period, and during the period covered in the 2013 Assessment and FINRA's subsequent observations (November 1, 2012 through July 31, 2014).

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.<sup>27</sup> However, trading activity appears to have leveled-off in mid-2014, albeit still at levels above the pre-Pilot trading.<sup>28</sup> Liquidity continued to 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%. While there was virtually no change in the frequency of trades above the minimum size for Tiers 2 and 3, all the other tiers experienced a positive change. Trading in sizes greater than the minimum quotation occurred infrequently in these tiers both prior to and during the pilot.

The analysis of data from the second year of the Pilot also confirms FINRA's position that the impact of the change in the minimum quotation size on the market quality metrics is generally 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. 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.<sup>29</sup> Similarly, volume-

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<sup>27</sup> 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.

<sup>28</sup> The daily average number of trades was approximately 100,000 by July 2014.

<sup>29</sup> For stocks in price tiers where the minimum quotation size requirement decreased, the DERA Memo to File also finds that both quoted and effective spreads decrease between the pre-Pilot period (from November 14, 2011 to October 31, 2012) and the Pilot period

weighted spreads were unchanged (or 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.

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.<sup>30</sup> For example, the following two tables 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).<sup>31</sup>

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(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.

<sup>30</sup> As 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.

<sup>31</sup> [Content of footnote 31 moved to the body of the text due to Federal Register requirements.]

[Content of footnote 31: The t-statistic 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  $s_{\bar{X}_1 - \bar{X}_2} = \sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}$ .

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, 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 increased. For example, the 2013 Assessment indicated that the time-weighted quoted spread was unchanged for Tier 1 securities in the Pilot period. However, 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. Therefore, the updated analysis provides reliable evidence that market quality for Tier 1 securities has also improved during the Pilot.<sup>32</sup> 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 it is appropriate and in the best interest of investors to adopt the Pilot tiers as permanent.

As noted in Item 2 of this filing, because the filing would allow Rule 6433 to continue to operate without interruption, 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.

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<sup>32</sup> As noted in note 24, supra, the DERA Memo to File finds that quoted and effective spreads for Tier 1 securities increase 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.

### (C) Alternatives Considered

In developing the proposed rule change, FINRA considered several alternatives to the proposed rule change, to ensure that it (1) simplifies the structure of the minimum quotation sizes; and (2) facilitates the display of customer limit orders under Rule 6460 (Display of Customer Limit Orders) (“limit order display rule”) without having a negative impact on market quality and the number of customer limit orders that are eligible for display. Accordingly, FINRA considered alternative price points and minimum quotation sizes in forming the tiers and evaluated the number of customer limit orders that would be eligible for display. FINRA also assessed the potential impact associated with alternative price bands across multiple sample periods, and concluded that the tier structure that was adopted under the Pilot resulted in the maximum number of customer limit orders that would be eligible for display without harming competition in the OTC equity securities market. In addition, FINRA staff revised the smallest price point to conform to the minimum quotation increments under FINRA Rule 6434 and increased the minimum quotation sizes for most price points between \$0.02 and \$1.00. FINRA believes that the pilot tiers continue to be appropriate and should be adopted on a permanent basis.

### 2. Statutory Basis

FINRA believes that the proposed rule change is consistent with the provisions of Section 15A(b)(6) of the Act,<sup>33</sup> which requires, among other things, that FINRA rules must 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. FINRA also believes that the proposed rule change is consistent with the provisions of Section 15A(b)(11) of

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<sup>33</sup> 15 U.S.C. 78o-3(b)(6).

the Act.<sup>34</sup> Section 15A(b)(11) 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.

FINRA believes that adopting the Pilot tiers as permanent would promote just and equitable principles of trade and protect investors and the public interest. The 2013 Assessment and subsequent observations clearly demonstrate that the Pilot has resulted in increased display of customer limit orders. The 2013 Assessment found a 13% increase in the number of customer limit orders that met the minimum quotation sizes to be eligible for display across all Pilot tiers, and the updated data through July 2014 shows an even greater increase of 18.45% than otherwise would have been eligible for display. Notably, 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.

FINRA further believes that any concerns about market quality raised by public commenters prior to the Commission's approval of Pilot have not materialized. In fact, FINRA believes that the Pilot has had a positive impact on OTC market quality for the majority of OTC equity securities and tiers. As more fully detailed above, FINRA believes 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.

As noted previously, when the Commission approved the Pilot, it emphasized the potential benefits of increasing customer limit order display. For instance, the Commission noted that increased limit order display could potentially improve the prices at which customer

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<sup>34</sup> 15 U.S.C. 78o-3(b)(11).

limit orders will be executed, consistent with the protection of investors and the public interest.<sup>35</sup> The Commission also has 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.<sup>36</sup> The Commission had maintained a longstanding view that there are benefits to promoting customer limit order display.<sup>37</sup>

Accordingly, FINRA believes that the Pilot accomplished its intended objectives and realized benefits anticipated in its adoption, including greater customer limit order display. At the same time, market quality indicators during the Pilot suggest that the revised tiers and greater customer limit order display did not result in a harmful reduction in liquidity for OTC equity securities. As a result, FINRA believes it is consistent with the Act to adopt the Pilot tiers as permanent.

B. Self-Regulatory Organization's Statement on Burden on Competition

FINRA does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. Despite some initial concerns from commenters that the Pilot may have negative effects on market makers who quote OTC equity securities, as the Pilot has progressed, FINRA observed an overall increase in the number of market makers quoting OTC equity securities across the duration of the Pilot. Accordingly, given the increase in the number of market makers quoting OTC equity securities, as demonstrated by the analysis using the first two years of data from the Pilot, and the increased display of customer limit orders, FINRA believes the Pilot has generated

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<sup>35</sup> See Order Approving File No. SR-FINRA-2011-058, 77 FR at 37466.

<sup>36</sup> See id. at 37469.

<sup>37</sup> See id. at 37469 n.168 (citing, among other things, the Commission's 1996 Order Handling Rules Release).

evidence that support the Commission’s preliminary view “that the [Pilot] could enhance competition.”<sup>38</sup>

C. Self-Regulatory Organization’s Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) by order approve or disapprove such proposed rule change, or

(B) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission’s Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-FINRA-2018-015 on the subject line.

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<sup>38</sup> See Order Approving File No. SR-FINRA-2011-058, 77 FR at 37469.

Paper comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-FINRA-2018-015. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing will also be available for inspection and copying at the principal office of FINRA. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make

available publicly. All submissions should refer to File Number SR-FINRA-2018-015 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>39</sup>

Eduardo A. Aleman  
Assistant Secretary

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<sup>39</sup> 17 CFR 200.30-3(a)(12).

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