



SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-77565; File No. SR-FINRA-2016-005]

April 8, 2016

Self-Regulatory Organizations; Financial Industry Regulatory Authority, Inc.; Order Approving a Proposed Rule Change to Reduce the Synchronization Tolerance for Computer Clocks that are Used to Record Events in NMS Securities and OTC Equity Securities

I. Introduction

On February 9, 2016, the 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 reduce the synchronization tolerance for computer clocks that are used to record events in NMS Securities, including standardized options and OTC Equity Securities. The proposed rule change was published for comment in the Federal Register on February 25, 2016.³ Four comments were received in response to the proposal.⁴ This order approves the proposed rule change.

II. Description of the Proposed Rule Change

FINRA rules require that firms synchronize their business clocks in conformity with procedures prescribed by FINRA. Specifically, FINRA Rule 7430 requires that firms

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See Securities Exchange Act Release No. 77196 (Feb. 19, 2016), 81 FR 9550 (“Notice”).

⁴ See Letter from Kermit Kubitz, dated March 18, 2016 (“Kubitz Letter”); Letter from Dave Lauer, Chairman, Healthy Markets Association, to Brent J. Fields, Secretary, Commission, dated March 17, 2016 (“Healthy Markets Letter”); Letter from Manisha Kimmel, Chief Regulatory Officer, Wealth Management, Thompson Reuters, to Brent J. Fields, Secretary, Commission, dated March 17, 2015 (“Reuters Letter”); Letter from Mary Lou Von Kaenel, Managing Director, Financial Information Forum, to Brent J. Fields, Secretary, Commission, dated March 22, 2016 (“FIF Letter”).

synchronize their business clocks that are used for purposes of recording the date and time of any event that must be recorded pursuant to the FINRA By-Laws or other FINRA rules (i.e., the time a trade was executed or the time an order was received or routed), with reference to a time source as designated by FINRA. Current OATS technical specifications provide that all computer system clocks and mechanical time stamping devices must be synchronized to within one second of the NIST atomic clock.⁵ As stated in the Notice, FINRA proposed to reduce the synchronization tolerance for members' computer clocks that are used to record events in NMS securities,⁶ including standardized options, and OTC Equity Securities.⁷

Given the increasing speed of trading in today's automated markets, FINRA believes the current one second tolerance is no longer appropriate for computer system clocks recording events in NMS securities and OTC Equity Securities, thus FINRA proposed to tighten the synchronization requirement for computer system clocks that record events in NMS securities and OTC Equity Securities by reducing the drift tolerance from one second to 50 milliseconds.⁸

Under a combination of Rule 7430 and the OATS technical specifications, the current one second synchronization standard applies to the recording of the date and time of any event

⁵ Any time provider may be used for synchronization; however, all clocks and time stamping devices must remain accurate to within a one-second tolerance of the NIST clock. This tolerance includes (1) the difference between the NIST standard and a time provider's clock, (2) the transmission delay from the source and (3) the amount of drift of the member firm's clock. The OATS technical specifications further specify that computer system and mechanical clocks must be synchronized every business day before market open to ensure the accuracy of recorded order event timestamps.

⁶ See Rule 600(b)(46) of Regulation NMS; 17 CFR 242.600(b)(46).

⁷ See FINRA Rule 6420(f).

⁸ The proposal does not change the current clock synchronization requirement for members' mechanical time stamping devices or computer clocks that are used to record events for securities other than NMS securities or OTC Equity Securities.

that must be recorded under FINRA By-Laws or rules. In this proposal, FINRA proposed to consolidate and codify the clock synchronization requirements in new Rule 4590 for clarity and ease of reference. This consolidation includes the current provision in the OATS technical specifications that conveys guidance on recordkeeping to demonstrate compliance with the synchronization standard, which would be codified without material change as Supplementary Material .01 to Rule 4590.

FINRA proposed a phased implementation for the 50 millisecond standard.⁹ FINRA would require firms with systems that capture time in milliseconds to comply with the new 50 millisecond standard within six months of the effective date; firms that do not have systems that capture time in milliseconds must comply with the new standard within 18 months of the effective date.

III. Comment Letters

The Commission received four comment letters on the proposal.¹⁰ Healthy Markets supports the proposal noting: “[s]ub-second clock synchronization standards are an important element of market data and audit trail reliability, and most market technology is already synchronized at tolerances far more precise than the fifty milliseconds proposed.” Further, it states that “[c]lock synchronization is a critical component of today’s market structure and is long overdue for reform,” and notes that “[t]ighter synchronization standards would enhance regulators’ abilities to surveil for manipulative trading practices.” The commenter suggests that FINRA recognize the differences between “extremely time-sensitive trading firms and other market participants” by imposing a higher standard on the firms it labels “extremely time-

⁹ FINRA will announce the effective date of the proposed rule change in a Regulatory Notice to be published no later than 90 days following Commission approval. See Notice, 81 FR at 9553.

¹⁰ See supra, note 4.

sensitive.”¹¹ A second commenter urges “higher time synchronization requirements than proposed.”¹² FIF indicates that its members “generally agree the 50 millisecond clock synchronization requirement is appropriate for order and execution events”¹³ and acknowledges the “compelling regulatory need for fine precision time stamps on order and execution events,”¹⁴ however, FIF expresses concern about FINRA proposing this rule given the pending implementation of the CAT NMS Plan.¹⁵ The fourth commenter requests that “FINRA provide a list of impacted events to ensure that firms are appropriately implementing reduced clock synchronization across all relevant systems,”¹⁶ and states that nine months is a more reasonable timeframe within which to implement the requirement.¹⁷

With respect to the scope of events covered under the proposal, FINRA stated in the filing that through a combination of FINRA Rule 7430 and the OATS technical specifications, the current clock synchronization standard already applies to the recording of the date and time of any event that must be recorded under FINRA By-Laws or rules.¹⁸ For instance, FINRA

¹¹ See Healthy Markets letter at 1 – 2.

¹² See Kubitz letter.

¹³ See FIF letter at 1.

¹⁴ See FIF letter at 2.

¹⁵ See FIF letter at 1. FIF also raises concerns about applying the synchronization requirement to post-trade activities. See pages 1 – 3. The National Market System Plan governing the Consolidated Audit Trail (“CAT NMS Plan”) was required by Rule 613 under the Act, which directed FINRA and the national securities exchanges to submit a national market systems plan to govern the creation, implementation, and maintenance of a consolidated audit trail and central repository. See Securities Exchange Act Release No. 67457 (July 17, 2012), 77 FR 45722 (August 1, 2012) (“Rule 613 Adopting Release”). The CAT NMS Plan submitted by the national securities exchanges and FINRA on February 27, 2015 is available at <http://www.catnmsplan.com/>.

¹⁶ See Thomson Reuters letter at 1.

¹⁷ See id. at 2.

¹⁸ See Notice, 81 FR at 9551.

stated that Rule 7430 requires that firms synchronize business clocks used for purposes of recording the date and time of any event that must be recorded pursuant to the FINRA By-Laws or other FINRA Rules (e.g., the time a trade was executed or the time an order was received or routed), with reference to a time source as designated by FINRA.¹⁹ Under existing OATS technical specifications, all computer system clocks and mechanical stamping devices must be synchronized to within one second of the NITS atomic clock.²⁰ FINRA stated that this proposal consolidates and codifies its clock synchronization requirements, including the new 50 millisecond standard, in a new Rule 4590 for clarity and ease of reference, so as to make clear that the requirements apply to the recording of the date and time of any event that must be recorded under FINRA By-Laws or rules.²¹

With respect to implementation, in the proposal FINRA stated that it has accommodated such concerns in two ways. First, FINRA tailored the proposal so that the 50 millisecond standard would apply only to NMS Securities and OTC Equity Securities and not to fixed income securities.²² Second, FINRA proposed a phased implementation schedule for the 50 millisecond standard that allows firms that capture time in milliseconds to comply with the 50 millisecond standard within six months of the effective date of the rule and firms that do not capture time in milliseconds to comply with the standard within 18 months of the effective date of the rule.²³

¹⁹ See Notice, 81 FR at 9550.

²⁰ See id.

²¹ See Notice, 81 FR at 9551.

²² See Notice, 81 FR at 9553.

²³ See id.

Finally, in the filing, FINRA stated that it believes that it is appropriate and necessary to proceed with the 50 millisecond standard now, rather than forego this proposal in light of the proposed CAT NMS Plan, because the standard is an important element of market data reliability, and it may be sometime before the clock-synchronization requirements of the CAT NMS Plan take effect.²⁴ FINRA stated that it relies on the accuracy of market data to fulfill its regulatory obligations as a national securities association.²⁵ Accordingly, FINRA believes it has a current need to tighten the clock synchronization standard for events that must be recorded pursuant to the FINRA By-Laws or other FINRA Rules.²⁶

Two commenters suggested that FINRA should consider differentiating between market participants when setting clock-synchronization standards.²⁷ For instance, one commenter stated that FINRA should recognize differences between extremely time-sensitive trading firms and other market participants, and suggested differentiating between co-located broker-dealers and others.²⁸ Similarly, one commenter suggested that firms that co-locate their equipment to or otherwise have access to an exchange datacenter should be held to tighter requirements.²⁹

In the filing, FINRA stated that audit trail integrity relies on the ability to accurately sequence events for a given period of time, including events generated by firms that do not

²⁴ In the Notice, FINRA also notes that the proposed clock synchronization standard is consistent with the 50 millisecond clock synchronization standard advanced by the CAT NMS Plan. See Notice, 81 FR at 9552.

²⁵ See id.

²⁶ Id.

²⁷ See Healthy Markets Letter and Kubitz Letter.

²⁸ See Healthy Markets Letter.

²⁹ See Kubitz Letter.

engage in high-frequency trading.³⁰ FINRA believes it is important to apply the same standard to all computer-related events, regardless of firm size or activity type.³¹

IV. Discussion and Commission Findings

After carefully considering the proposed rule change and the comment letters, the Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities association.³² In particular, the Commission finds that the proposed rule change is consistent with Section 15A(b)(6) of the Act, 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.³³

The Commission agrees with the commenter's observation that clock synchronization is a "critical component of today's market structure."³⁴ Tightening the clock synchronization requirement to 50 milliseconds will bolster FINRA's ability to meet its regulatory obligations as a national securities association. As the Commission has noted, time drift away from a universal, synchronized standard is an important issue to address to enhance the integrity of audit trail

³⁰ See Notice, 81 FR at 9552.

³¹ In the Notice, FINRA states that while it does not believe it is practicable to adopt different standards for market participants, as some commenters suggested, it is proposing to provide less automated firms with more time to adjust their systems to the new proposed standard. See Notice, 81 FR 9552 n.25.

³² In approving the proposed rule change, the Commission has also considered the rule change's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

³³ 21 U.S.C. 78o-3(b)(6).

³⁴ See Healthy Markets letter at 1.

data.³⁵ The Commission agrees with the commenter's observation that updating clock synchronization standards is important to improve transparency and enhance surveillance and enforcement capabilities. Further, the Commission believes that FINRA's decision to have a consistent clock synchronization standard across the industry at this time is a reasonable decision. The Commission believes it is important to pursue a 50 millisecond standard at this time so that FINRA can compile more accurate audit trail data and conduct surveillance with more precise time-sequenced data, rather than waiting for the issue to be addressed by the CAT NMS Plan.³⁶ Tighter synchronization is critical to precisely reconstructing market events, as the commenter noted,³⁷ which will facilitate FINRA's efforts to detect and 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. In addition, the Commission notes that the proposed rule change does not alter the events that are covered by the clock synchronization requirement.

For the reasons discussed above, the Commission finds that the proposed rule change is consistent with Section 15A of the Act.

³⁵ See Rule 613 Adopting Release, 77 FR at 45774. The Commission notes that the FINRA proposal is consistent with the clock-synchronization standard advanced by the CAT NMS Plan.

³⁶ See supra, note 24.

³⁷ See Healthy Markets letter at 1.

V. Conclusion

IT IS THEREFORE ORDERED pursuant to Section 19(b)(2) of the Act³⁸ that the proposed rule change (SR-FINRA-2016-005) be and hereby is approved.

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

Robert W. Errett,
Deputy Secretary.

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³⁸ 15 U.S.C. 78s(b)(2).

³⁹ 17 CFR 200.30-3(a)(12).

