

October 11, 2017

Mr. Brent J. Fields  
Secretary  
U.S. Securities and Exchange Commission  
100 F Street, N.E.  
Washington, DC 20549-1090

**Re: File No. SR-FINRA-2017-013 – Response to Comments**

Dear Mr. Fields,

On May 15, 2017, as required by the National Market System Plan Governing the Consolidated Audit Trail (the “CAT NMS Plan” or “Plan”), FINRA filed the above-referenced rule filing to eliminate the Order Audit Trail System (“OATS”) rules in the FINRA Rule 7400 Series and Rule 4554 and to amend FINRA’s electronic blue sheet (“EBS”) rules, Rules 8211 and 8213 (“EBS Rules”), to reflect changes to these rules once members are effectively reporting to the consolidated audit trail (“CAT”) and the CAT’s accuracy and reliability meet certain standards.<sup>1</sup> On August 30, 2017, the Securities and Exchange Commission (“Commission” or “SEC”) instituted proceedings to determine whether to approve or disapprove the Proposal.<sup>2</sup> This letter responds to comments received by the Commission on the Proposal and the OIP and addresses questions asked by the Commission in the OIP.

**Background**

Bats BYX Exchange, Inc.; Bats BZX Exchange, Inc.; Bats EDGA Exchange, Inc.; Bats EDGX Exchange, Inc.; BOX Options Exchange LLC; C2 Options Exchange, Incorporated; Chicago Board Options Exchange, Incorporated; Chicago Stock Exchange, Inc.; FINRA; International Securities Exchange, LLC; Investors’ Exchange LLC; ISE Gemini, LLC; ISE Mercury, LLC; Miami International Securities Exchange LLC; MIAX

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<sup>1</sup> See Securities Exchange Act Release No. 80783 (May 26, 2017), 82 FR 25423 (June 1, 2017) (SR-FINRA-2017-013) (“Proposal”). FINRA filed an amendment to the Proposal on August 25, 2017. See Securities Exchange Act Release No. 81499 (August 30, 2017), 82 FR 42168 (September 6, 2017) (“OIP”). The amendment to the Proposal added introductory language to Rule 7400 to clarify the status of the OATS Rules and amended the proposed Supplementary Material to the EBS Rules.

<sup>2</sup> See OIP, *supra* note 1.

PEARL, LLC; NASDAQ BX, Inc.; NASDAQ PHLX LLC; The NASDAQ Stock Market LLC; National Stock Exchange, Inc.; New York Stock Exchange LLC; NYSE MKT LLC; and NYSE Arca, Inc. (collectively, the “Participants”) filed the CAT NMS Plan<sup>3</sup> with the SEC pursuant to Section 11A of the Securities Exchange Act of 1934 (“Exchange Act”)<sup>4</sup> and Rule 608 of Regulation NMS thereunder.<sup>5</sup> The Participants filed the Plan to comply with Rule 613 of Regulation NMS under the Exchange Act.<sup>6</sup> The Plan was approved by the Commission, as modified, on November 15, 2016.<sup>7</sup> On March 15, 2017, the Commission approved the new FINRA Rule 6800 Series to implement provisions of the CAT NMS Plan that are applicable to FINRA members.<sup>8</sup>

Among other things, Section C.9. of Appendix C to the Plan, as modified by the Commission, requires each Participant to “file with the SEC the relevant rule change filing to eliminate or modify its duplicative rules within six (6) months of the SEC’s approval of the CAT NMS Plan” and requires the rule filing to discuss:

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<sup>3</sup> See Letter from the Participants to Brent J. Fields, Secretary, Commission, dated September 30, 2014; and Letter from Participants to Brent J. Fields, Secretary, Commission, dated February 27, 2015. On December 24, 2015, the Participants submitted an amendment to the CAT NMS Plan. See Letter from Participants to Brent J. Fields, Secretary, Commission, dated December 23, 2015. Unless otherwise specified, capitalized terms used in this letter are defined as set forth herein, or in the CAT Compliance Rule Series or in the CAT NMS Plan. Since the Plan was filed, National Stock Exchange, Inc. has been renamed NYSE National, Inc. See Securities Exchange Act Rel. No. 79902 (Jan. 30, 2017), 82 Fed. Reg. 9258 (Feb. 3, 2017). ISE Gemini, LLC; ISE Mercury, LLC; and International Securities Exchange, LLC have been renamed Nasdaq GEMX, LLC; Nasdaq MRX, LLC; and Nasdaq ISE, LLC, respectively. See Securities Exchange Act Rel. No. 80248 (Mar. 15, 2017), 82 Fed. Reg. 14547 (Mar. 21, 2017); Securities Exchange Act Rel. No. 80326 (Mar. 29, 2017), 82 Fed. Reg. 16460 (Apr. 4, 2017); Securities Exchange Act Rel. No. 80325 (Mar. 29, 2017), 82 Fed. Reg. 16445 (Apr. 4, 2017). NYSE MKT LLC has been renamed NYSE American LLC. See Securities Exchange Act Rel. No. 80283 (Mar. 21, 2017), 82 Fed. Reg. 15244 (Mar. 27, 2017).

<sup>4</sup> 15 U.S.C. 78k-1.

<sup>5</sup> 17 CFR 242.608.

<sup>6</sup> 17 CFR 242.613.

<sup>7</sup> Securities Exchange Act Rel. No. 79318 (Nov. 15, 2016), 81 FR 84696 (Nov. 23, 2016) (“Approval Order”).

<sup>8</sup> Securities Exchange Act Rel. No. 80255 (Mar. 15, 2017), 82 FR 14563 (Mar. 21, 2017).

- (i) specific accuracy and reliability standards that will determine when duplicative systems will be retired, including, but not limited to, whether the attainment of a certain Error Rate should determine when a system duplicative of the CAT can be retired;
- (ii) whether the availability of certain data from Small Industry Members two years after the Effective Date would facilitate a more expeditious retirement of duplicative systems; and
- (iii) whether individual Industry Members can be exempted from reporting to duplicative systems once their CAT reporting meets specified accuracy and reliability standards, including, but not limited to, ways in which establishing cross-system regulatory functionality or integrating data from existing systems and the CAT would facilitate such Individual Industry Member exemptions.<sup>9</sup>

In response to these requirements, FINRA filed the Proposal to delete the Rule 7400 Series (the “OATS Rules”) and Rule 4554 from the FINRA rulebook and add new Supplementary Material to FINRA’s EBS Rules once (i) the CAT achieves the specific accuracy and reliability standards described below and (ii) FINRA has determined that its usage of the CAT has not revealed material issues that have not been corrected, confirmed that the CAT includes all data necessary to allow FINRA to continue to meet its surveillance obligations, and confirmed that the Plan Processor is sufficiently meeting all of its obligations under the CAT NMS Plan.

The SEC received four comment letters on the Proposal.<sup>10</sup> The commenters expressed support for portions of the Proposal but disagreed with, or asked for clarification on, other aspects. Three of the four commenters on the Proposal also filed additional comment letters in response to the OIP, many of which reiterated points raised

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<sup>9</sup> See CAT NMS Plan, Appendix C, Section C.9.

<sup>10</sup> See Letters to Robert W. Errett, Deputy Secretary, SEC, from Marc R. Bryant, Senior Vice President and Deputy General Counsel, Fidelity Investments, dated June 22, 2017 (“Fidelity”); William H. Hebert, Managing Director, Financial Information Forum, dated June 22, 2017 (“FIF”); Letters to Brent J. Fields, Secretary, SEC, from Manisha Kimmel, Chief Regulatory Officer, Wealth Management, Thomson Reuters, dated June 22, 2017 (“Thomson Reuters”); Ellen Greene, Managing Director & Theodore R. Lazo, Managing Director and Associate General Counsel, Securities Industry and Financial Markets Association, dated June 23, 2017 (“SIFMA”).

in the initial comment letters.<sup>11</sup> FINRA’s responses to the issues raised in the letters are below.

### Discussion

The majority of issues raised in the initial comment letters submitted on the Proposal and in response to the OIP addressed FINRA’s plan to retire OATS. In general, to ensure the CAT’s accuracy and reliability before retiring OATS, FINRA proposed that the CAT would generally need to achieve a sustained error rate for Industry Member reporting in each of the following categories for a period of at least 180 days of 5% or lower, measured on a pre-correction or as-submitted basis, and 2% or lower on a post-correction basis (measured at T+5):<sup>12</sup>

- Rejection Rates and Data Validations
- Intra-Firm Linkages
- Inter-Firm Linkages
- Order Linkage Rates
- Exchange and TRF/ORF Match Rates.

In addition to these error rates and matching thresholds that generally must be met before OATS can be retired, the Proposal notes that, during the minimum 180-day period during which the thresholds are calculated, FINRA’s use of the data in the CAT must confirm that (i) usage over that time period has not revealed material issues that have not been corrected, (ii) the CAT includes all data necessary to allow FINRA to continue to meet its

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<sup>11</sup> Letters to Brent J. Fields, Secretary, SEC, from Manisha Kimmel, Chief Regulatory Officer, Wealth Management, Thomson Reuters, dated September 27, 2017 (“Thomson Reuters OIP”); Ellen Greene, Managing Director & Theodore R. Lazo, Managing Director and Associate General Counsel, Securities Industry and Financial Markets Association, dated September 29, 2017 (“SIFMA OIP”); Letter to Heather Seidel, Acting Director, Division of Trading and Markets, SEC, from William H. Herbert, Managing Director, FIF, dated September 29, 2017 (“FIF OIP”).

<sup>12</sup> The Plan requires that the Plan Processor must ensure that regulators have access to corrected and linked order and Customer data by 8:00 a.m. Eastern Time on T+5. *See* CAT NMS Plan, Appendix C, Section A.2(a). FINRA proposed to measure the 5% pre-correction and 2% post-correction thresholds by averaging the error rate across the period, not require a 5% pre-correction and 2% post-correction maximum each day for 180 consecutive days.

surveillance obligations, and (iii) the Plan Processor is sufficiently meeting all of its obligations under the CAT NMS Plan.

FINRA also noted in the Proposal that it believed that there is no effective way to retire OATS until all current OATS reporters are reporting to the CAT and that, although Technical Specifications for Industry Members were not yet available, FINRA believed it would be inefficient, less reliable, and more costly to attempt to marry the OATS and CAT databases for a temporary period to allow some FINRA members to report to the CAT while others continue to report to OATS. FINRA also concluded that having data from those Small Industry Members currently reporting to OATS available two years after the Effective Date would substantially facilitate a more expeditious retirement of OATS. For this reason, the Proposal states that FINRA supports an amendment to the Plan that would require current OATS Reporters that are Small Industry Members to report two years after the Effective Date (instead of three) and intends to work with the other Participants to submit a proposed amendment to the Plan to require Small Industry Members that report to OATS to report to CAT two years after the Effective Date.

#### *Transitioning from OATS to CAT*

All four commenters objected to FINRA's proposal to exempt firms from OATS reporting at one time rather than allow firms to migrate from OATS to CAT on an individual firm basis,<sup>13</sup> and three of the commenters repeated these objections when responding to the OIP.<sup>14</sup> For example, FIF suggested that firms "that quickly and consistently meet/exceed quality standards are severely penalized with this plan," and repeated the SEC's finding that those firms that do their own regulatory reporting spend, on average, \$725,615 per month for current regulatory obligations, which includes OATS, EBS, Large Trader, and others.<sup>15</sup> Fidelity suggested that, if FINRA "does not agree that a firm-by-firm transition is appropriate, in the alternative, FINRA should consider migrating firms in tranches, or phases, based on priority of those firms that first met the proposed error rates."<sup>16</sup> Thomson Reuters recommended that the SROs undertake "a cost-benefit analysis that discusses the costs to the Processor of providing a CAT-to-

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<sup>13</sup> Fidelity at 4; FIF at 3; SIFMA at 3-4; Thomson Reuters at 3.

<sup>14</sup> FIF OIP at 3-4; SIFMA OIP at 2-3; Thomson Reuters OIP at 3. In its response to the OIP, FIF noted that it could support a single cutover approach if the approach was modified in certain respects, including a fixed cutover date and reporting criteria being "defined as CAT launch criteria, not duplicative system retirement criteria." FIF OIP at 3-4. Thomson Reuters also supported specific milestones for OATS retirement but noted that final Technical Specifications "would be necessary to set meaningful dates." Thomson Reuters OIP at 5.

<sup>15</sup> FIF at 3; *see also* SIFMA at 3-4.

<sup>16</sup> Fidelity at 4.

OATS converter that would allow firms that meet the error rates to cease sending data to OATS directly.” SIFMA and Thomson Reuters also suggested that dual reporting could impose a burden on competition by increasing infrastructure costs for new firms.<sup>17</sup>

In the OIP, the SEC requested comment on several aspects of the proposed transition from OATS to the CAT, including:

- the monetary costs of constructing a CAT-to-OATS converter or other mechanism;
- the technological challenges of a converter or mechanism;
- the timing and practicalities of a converter or mechanism; and
- the potential impact on the SROs’ ability to conduct surveillance and oversight.

As noted above, three commenters submitted letters in response to the OIP.

As discussed in the Proposal, FINRA cannot commit to retiring OATS until the CAT has proven itself to be a reliable substitute. Since the submission of the Proposal and the publication of the OIP, the Plan Processor has published an initial (albeit incomplete) draft of the CAT Technical Specifications for Industry Members (“Draft Specs”).<sup>18</sup> Consequently, although FINRA is now able to more specifically address some of the challenges that may be presented in linking CAT and OATS data, there remain numerous unresolved issues that could change the current analysis, perhaps in material ways. For the reasons discussed below, FINRA continues to believe that permitting some firms to report only to CAT while others continue to report to OATS would introduce substantially more complexity into linking orders and creating a reliable audit trail, and would generate the potential for an additional layer of errors and gaps. As described more fully below, these concerns exist independent of many of the specific reporting requirements in the Draft Specs but are exacerbated by many of the provisions included in the Draft Specs. Ultimately, surveillance conducted using a hybrid of CAT and OATS

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<sup>17</sup> See SIFMA OIP at 2; Thomson Reuters OIP at 6.

<sup>18</sup> The plan processor published the Draft Specs on September 7, 2017. At the beginning of the Draft Specs, it is noted that “this first discussion draft is incomplete and there are important sections that have not yet been drafted that will be material to how Industry Members will be required to report data to the Central Repository.” Industry Members were encouraged to submit comments on the Draft Specs by October 16, 2017. It is FINRA’s understanding that a significant number of substantive comments have already been raised by Industry Members in response to the Draft Specs.

data would introduce significant risks to FINRA's current regulatory programs that rely on the accuracy and completeness of OATS data.

As an initial matter, the concept of relying on CAT data for some reporters and OATS data for other reporters poses logistical difficulties. CAT data ingested, processed, and stored in the Central Repository will not be in the same cloud environment used by FINRA to ingest, process, and store OATS data. Consequently, for any approach that relies on the use of both CAT and OATS data, FINRA would need to extract a copy of Industry Member CAT data each day, move it to the FINRA cloud processing environment, and then attempt to identify OATS records that need to be linked to CAT records and vice versa. Moving the entire Industry Member CAT data set from one environment to another, which would generally be done only after the T+5 error correction timeframe has elapsed to ensure more accurate CAT data, would delay the existing OATS linkage processing timeframe of T+2 by several days.

This process is further complicated by numerous provisions in the Draft Specs that are potentially inconsistent with OATS and may be difficult to reconcile systematically. By way of example, there are potential inconsistencies in what constitutes the reporting day. The OATS business day ends at 4:00 p.m. Eastern Time<sup>19</sup> whereas the trading day in the Draft Specs ends at 12:00 a.m.<sup>20</sup> As a result, data required to be reported to the CAT on one day may not be required to be reported to OATS until the following day. Additional yet related complications include late and rejected firm data submissions and the lack of a reconciliation process between the two systems. For example, a firm may report to OATS on time, but the CAT reporting firm to which it is routing may not report to CAT until two days later. In this instance, data FINRA could already have pulled over and run linkage processes on would result in a broken linkage since the route receipt would not yet have been reported to the CAT. Today in OATS, these records would be reconciled and linked for a period of up to 30 days.

In a firm-by-firm transition approach, once Industry Member CAT data is extracted and moved into FINRA's cloud environment, FINRA would need to rely on OATS data for surveillance programs as it relates to non-transitioned firms and on CAT data for transitioned firms. This would require FINRA to combine OATS and CAT data to obtain a complete set of data to satisfy its surveillance obligations.<sup>21</sup> While in theory

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<sup>19</sup> See FINRA Rule 7450(b)(3).

<sup>20</sup> This example was also identified in one of the comment letters to the OIP. See Thomson Reuters OIP at 4.

<sup>21</sup> For example, in a scenario where Firm A and Firm C are OATS reporters (i.e., firms that have not achieved the required compliance rates in CAT) and Firm B has transitioned to CAT and no longer reports to OATS, the following would be required in a sample routing scenario. Firm A receives a customer order and routes it to Firm B. Firm B receives the order from Firm A and routes it to Firm C

this may sound achievable, given the many complex routing scenarios that involve numerous broker-dealers touching the same order, and the fact that CAT contains additional scope that is not included in OATS (e.g., market maker orders, street side riskless principal orders), identifying what is required to be linked and to which data source introduces significant risk of broken linkages within FINRA's regulatory data. In addition, because the linkages in CAT are critical to obtaining the customer and account data that is currently obtained through EBS, any difficulty in linking to customer and account information due to an OATS-to-CAT linkage process could further delay any EBS rule modifications. Further, the time and effort required for FINRA to obtain the CAT data from the Central Repository, determine how to link that data to OATS data, and build the necessary feedback tools to inform firms if their CAT report failed to link to an OATS report or vice versa would be significant. FINRA believes this process could impose additional supervisory burdens on firms by requiring them to incorporate these new feedback tools into their supervisory and error correction procedures to identify when linkages are broken due to CAT reporting errors or OATS reporting errors.

Some commenters suggested creating a CAT-to-OATS converter that would eliminate the need to link CAT data to OATS data and vice versa.<sup>22</sup> Under this approach, CAT data would be converted to OATS records and would result in a complete OATS data set for FINRA to utilize in its surveillance programs until such time that all firms had successfully transitioned to CAT. FINRA notes that, as a threshold matter, the Draft Specs and proposed CAT reporting model are materially different from the current OATS

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who executes it and reports it to a TRF. FINRA would have to use Firm A's and Firm C's OATS data for surveillance but Firm B's CAT data for surveillance. To achieve this, FINRA would need to obtain CAT data for Firm B so that Firm A's OATS Report could be linked to Firm B's CAT Report. FINRA would then need to link Firm B's CAT Report to Firm C's OATS Report which would also need to be linked to Firm C's TRF trade report to obtain the complete order lifecycle necessary to support FINRA's existing surveillance patterns.

<sup>22</sup> See FIF at 3; SIFMA OIP at 4; Thomson Reuters at 3. As noted by some commenters, the CAT NMS Plan contemplates potentially exempting firms from OATS reporting obligations on an individual firm basis. See FIF OIP at 5; SIFMA at 3. Specifically, the CAT NMS Plan notes that “[i]f it is practicable to integrate the data in a way that ensures no interruption in FINRA's surveillance capabilities, FINRA will consider exempting firms from the OATS Rules provided they report data to the Central Repository pursuant to the CAT NMS Plan and any implementing rules.” This provision in the Plan was included without the Participants having selected a plan processor and was based on discussions with multiple bidders; however, the initial reporting framework set forth in the Draft Specs significantly complicates the process of integrating CAT and OATS data, as FIF and Thomson Reuters note in their comment letters on the OIP. See FIF OIP at 3, 5; Thomson Reuters OIP at 3-4.

reporting model. Based on its review of the Draft Specs, FINRA does not believe it would be feasible to create a CAT-to-OATS converter. As an initial matter, the Draft Specs introduce new reports and data elements that do not exist in OATS, and the Draft Specs would require Industry Members to report certain key data elements in a materially different way than they are currently reported to OATS (e.g., certain material terms and conditions of an order are captured as an Order Type in the Draft Specs but are captured as a Special Handling Code in OATS) if they are reported at all. Moreover, the Draft Specs did not include all relevant OATS elements; however, FINRA has engaged in discussions with the Plan Processor in an effort to close these informational gaps.

More significantly, because of the reporting approach taken by the Plan Processor in the Draft Specs, there is a lack of standardization throughout the Draft Specs, which essentially precludes the possibility that a universal CAT-to-OATS converter could be designed that would translate CAT reports into OATS reports for all Industry Members.<sup>23</sup> Rather, an individual converter would need to be used for each Industry Member (or, in a best case scenario, for each reporting entity) because of the lack of standardized reporting. The OATS Technical Specifications, in contrast to significant portions of the Draft Specs, impose standardization for almost all reporting fields to ensure that there is some level of consistency among disparate OATS reporters when reporting the same type of activity. This standardization permits FINRA to use automated surveillance patterns more efficiently and effectively since different OATS reporters are generally reporting the same activity in the same manner.

In contrast, the Draft Specs allow for the same information to be reported in different ways by different Industry Members, and in some instances through the use of free form text. For example, the OATS Reporting Technical Specifications has over 75 defined allowable values for “Special Handling Codes,” which are used to identify additional order handling instructions.<sup>24</sup> The Draft Specs has eight defined allowable values for “definedHandlingInstructions”. It then uses a free form text field named “orderAttributes” to capture additional handling instructions. It is FINRA’s understanding that the Plan Processor does not intend to transform data submitted in accordance with the Draft Specs to a format within the Central Repository that would contain standard values for critical data elements across all Industry Member CAT Reporters. The lack of standard values across Industry Member CAT Reporters within the

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<sup>23</sup> In its comment letter on the OIP, FIF recognizes that, to be feasible, “the CAT interface must be ‘mappable’ to the OATS reporting interface.” FIF OIP at 5. FIF notes that “the CAT report model defined by the [Draft Specs] deviates from the OATS event report schema, making the work of a CAT to OATS converter more difficult.” *Id.*; *see also* Thomson Reuters OIP at 3.

<sup>24</sup> *See* OATS Reporting Technical Specifications, at A-20 through A-27 (Jan. 20, 2017 ed.), available at <http://www.finra.org/industry/oats/oats-technical-specifications>.

Central Repository and the ability to use free form text does not allow for a consistent mapping between OATS and CAT data elements without direct interaction with each Industry Member Reporter to obtain an understanding of how each one is reporting required OATS data elements to the CAT. With approximately 1,000 existing OATS Reporting firms and approximately 350 different OATS reporting agents, FINRA estimates it could take multiple years to complete the necessary analysis for each Industry Member reporter, assuming FINRA could even acquire the number of resources necessary to complete such an exercise.<sup>25</sup> Finally, FINRA's analysis could not begin until the CAT Technical Specifications for Industry Members are finalized and the firm has defined and built their CAT reporting system, further shortening the time period available to build firm-by-firm converters.

Even if the Draft Specs were amended to adopt a more standardized format, FINRA still does not believe a converter could be built, tested, and implemented within a timeframe that would be of any benefit to Industry Members. A Technical Specification for Industry Members, even if standardized, that is materially different from OATS and requires mapping of different fields and values is a vastly more complex exercise than simply truncating a CAT record to leave just the OATS format and would require a far greater amount of time and testing to accomplish. To efficiently implement a converter requires the CAT to be designed from the ground up to be compatible with OATS. Any attempt at building a bolt-on integration such as a converter running in a different physical environment would require the same testing and dual reporting to ensure the end solution results in the data quality required by FINRA to meet its regulatory obligations. For these reasons, FINRA does not believe a converter would be practical from either a timing or cost perspective given its very limited shelf life. FINRA believes that the testing window alone to ensure that mappings are correct, that firms are accurately reporting, and that the converter is operating correctly in all cases of the very complex scenarios in a way that FINRA could rely upon for regulatory purposes would essentially be the same amount of time FINRA has proposed to analyze CAT error rates, eliminating any time benefits of a converter for firms.

FINRA also believes a converter would be of limited practical use since, if reporting to the CAT is successful, the need for a converter would be for only a very short time period and, if reporting to the CAT raises concerns, the reported CAT data may not be reliable enough to warrant conversion to OATS. In addition, creating converters as an intermediate step would necessitate having a trial period to test the reliability of each

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<sup>25</sup> In addition to the time necessary to build and test converters, the costs associated with any such effort would be significant. FINRA anticipates that any costs incurred to create and test converters would be recovered from OATS reporting members and could, therefore, increase costs to those industry members who would then have to incur costs to report to the CAT, report to OATS, and cover costs associated with creating and testing converters.

converter, which would require a six-month period to ensure the introduction of the converters did not result in a degradation in data quality and could, in fact, delay retirement and divert resources away from the primary objective of accurate CAT reporting and processing. FINRA would need to establish appropriate error rates for the converted data, measure those rates, and individually determine whether each Industry Member could be permitted to report solely to the CAT such that FINRA could rely on the accuracy of its CAT reporting and the accuracy of its converter. FINRA welcomes feasible approaches to accelerating OATS retirement, but does not believe the commenters' proposals would achieve this goal, particularly given the proposed CAT reporting model set forth in the Draft Specs.

For these reasons, FINRA continues to believe that there is no effective way to retire OATS until all OATS reporters are reporting to the CAT and that the suggestions provided by the commenters do not describe workable substitutes for maintaining OATS through the transition.

#### *Accuracy and Reliability Standards*

As noted above, FINRA proposed that, although no single metric is dispositive, the CAT would generally need to achieve a sustained error rate for Industry Member reporting in each of five categories (Rejection Rates and Data Validations, Intra-Firm Linkages, Inter-Firm Linkages, Order Linkage Rates, and Exchange and TRF/ORF Match Rates) for a period of at least 180 days of 5% or lower, measured on a pre-correction or as-submitted basis, and 2% or lower on a post-correction basis (measured at T+5) before OATS could be retired. Commenters asked a number of clarifying questions about the calculation of these rates, which are addressed below. FINRA notes, however, that as a general matter, the Plan Processor has not finalized the CAT Reporting Technical Specifications for Industry Members; thus, definitive statements regarding detailed calculations are not always possible at this time. Moreover, the overriding goal of the specific accuracy and reliability standards set out in the Proposal, coupled with the other general requirements that the CAT must meet before OATS can be retired, is to ensure that the CAT can serve as the single source for order and trade data enabling FINRA to conduct its surveillance in a manner that will allow FINRA to continue to perform its regulatory obligations. Until FINRA can confidently make that determination, OATS cannot be retired.

Each of the commenters suggested basing the standards for measuring the accuracy and reliability of the CAT only on those fields reported to OATS for purposes of determining when to retire OATS.<sup>26</sup> Similarly, FIF asked whether the measurements would be limited to reports for equity securities since OATS does not include options

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<sup>26</sup> Fidelity at 3; FIF at 4; FIF OIP at 3, 12-13; SIFMA at 2; SIFMA OIP at 3; Thomson Reuters at 2.

information and whether customer and account information would be excluded from the OATS retirement plan.<sup>27</sup> In its response to the OIP, SIFMA asserted that “[t]he lack of transparency into which data elements will be used to determine when systems can be retired creates uncertainty about the retirement of systems.”<sup>28</sup>

At this time, in the absence of final Technical Specifications, FINRA cannot identify the precise fields that will be used to measure the applicable standards as it is possible that the fields for CAT will differ from those in OATS, including which fields may be used by the Plan Processor to link order events together. However, on a more general level, FINRA agrees that high error rates (i.e., those over the proposed thresholds of 5% and 2%) that are isolated to particular fields that have no analog in OATS or that involve only securities that are not reportable to OATS should not delay the retirement of OATS unless these error rates raise concerns regarding the accuracy or reliability of the CAT overall. FINRA intends to base its assessment on whether CAT can be used to replace OATS for surveillance; thus, error rates in fields and for securities that have direct parallels to OATS reports are more relevant in making that determination, and although FINRA would not anticipate delaying the retirement of OATS due solely to higher error rates in fields or securities that are not currently captured in OATS, some of this information could be relevant to FINRA’s consideration of the overall accuracy and reliability of the CAT and the performance of the Plan Processor.

FIF also asked whether, in calculating the applicable thresholds, the measurements would include all CAT Reporters or only Industry Members.<sup>29</sup> FIF noted that “[t]he reporting metrics for Participant reporting should meet high quality standards by start of Industry Member reporting; otherwise, it is indicative of CAT reporting problems that should be addressed prior to start of Industry Member reporting.”<sup>30</sup>

FINRA intends to assess the 5% and 2% thresholds including only Industry Member data. As FIF notes, Participants will have been reporting data to the CAT for one year prior to Industry Member reporting and, consequently, should be at higher accuracy and reliability standards. Indeed, the Plan anticipates that by the time Industry Members begin reporting two years after the Plan’s approval, the error rate by the Participants will be down to 1%.<sup>31</sup> In addition, because Participants do not report to OATS, Participant data is not analogous to data currently captured in OATS. For both of these reasons, including Participant data to measure the thresholds would not give an

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<sup>27</sup> FIF at 4.

<sup>28</sup> SIFMA OIP at 3.

<sup>29</sup> FIF at 4.

<sup>30</sup> *Id.*

<sup>31</sup> CAT NMS Plan, Appendix C, Section A(3)(b).

accurate indication of the CAT's ability to replace OATS as FINRA's source of data for broker-dealer surveillance.<sup>32</sup>

FIF suggested in its letter that FINRA allow higher rates for individual categories provided that the overall error rates across all categories met the 5% and 2% thresholds.<sup>33</sup> FIF suggested that no single category could exceed a 7% pre-correction error rate or a 3% post-correction error rate.

FINRA does not believe it would be appropriate under normal circumstances to allow higher thresholds than those set forth in the Proposal for any of the five categories it proposes to measure. Each of the five categories set forth in the Proposal represents a key component of the audit trail, and a higher error rate in any one of those categories could result in a significant deterioration in the audit trail data available to FINRA to perform surveillance. The 5% and 2% thresholds in the Proposal already represent higher rates of error than FINRA currently has in OATS, and permitting even higher error rates would result in data that may not be reliable enough for FINRA to shift its surveillance from OATS to the CAT.<sup>34</sup>

Regarding the post-correction rate of 2%, FIF asked whether "the 2% post-correction error rate [will] be an average error rate over the period calculated as the number of erroneous records, as measured on T+5 divided by the total number of records received?"<sup>35</sup> FINRA confirms that it intends to measure the rates as the number of errors in a particular category divided by the total number of records received in that category.

FIF also requested clarification on the calculation of the inter-firm error rate and asked whether the rate would be measured in the aggregate across all Industry Members.<sup>36</sup> FINRA intends to base its assessment on the rate across all Industry Members, not on a per-firm basis, particularly since, by definition, an inter-firm match involves more than one firm and a break in the linkage can occur due to either firm's erroneous report.

FIF suggested that the post-correction rate be calculated based on the current error correction timeframes for OATS (which is T+6) and EBS (which is T+10) rather than on

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<sup>32</sup> Similarly, error rates also would not include industry member reporting errors that are solely a result of Participant data errors (e.g., unlinked routes by an industry member to an exchange due to error in the exchange's data).

<sup>33</sup> FIF at 4-5.

<sup>34</sup> For example, in each of the 24 months through June 2017, the OATS compliance rate exceeded 99% in all but one month.

<sup>35</sup> FIF at 4.

<sup>36</sup> *Id.*

a T+5 calculation.<sup>37</sup> FINRA believes that the appropriate post-correction timeframe to assess whether the CAT can serve as the source of data for surveillance should be determined based on the CAT requirements. Because the Plan requires corrections to CAT data on a T+5 basis, FINRA believes it is appropriate to use that timeframe as the baseline to measure the post-correction rate for order data since that will be the requirement for firms once OATS is retired and all surveillance will thereafter rely solely on CAT data.

FIF recommended a rolling 180-day period during which the accuracy and reliability of the CAT will be assessed.<sup>38</sup> Thus, “if the industry does not meet the quality criteria by the end of the first 180 days after start of CAT reporting, then it should use a ‘rolling’ metric, resetting the 180-day period each day and recalculating the metrics each day with the previous 179 days of measurements.” FINRA confirms that this is the approach it intends to take when assessing the applicable rates rather than starting a new 180-day period if the thresholds are not met during the initial period.

Two commenters stated that OATS should continue to be the “reporting system/audit trail of record” during the time period firms are required to report to both systems.<sup>39</sup> FIF suggested that, during the “trial period, . . . there should be no CAT penalties, archiving requirements or regulatory inquiries associated with CAT reporting.” Thomson Reuters voiced its concern that “during the 180 day rolling period firms will be subject to inquiries based on data from both systems.” In its comment on the OIP, SIFMA recommended “that firms not be subject to penalties for CAT reporting during the initial CAT reporting stages.”<sup>40</sup>

Once the CAT reporting rules are implemented for Industry Members, FINRA believes Industry Members must fully and completely comply with those rules, in addition to the OATS rules to which they are already subject. Indeed, SEC Rule 613(g) requires each FINRA member to comply with the Plan, and FINRA must enforce compliance by its members with the Plan.<sup>41</sup> Thus, failure to comply with the CAT rules or the Plan once the reporting requirements are in effect must be appropriately dealt with by regulators. However, FINRA acknowledges that a firm could, for example, have a systems problem that results in erroneous reporting to both OATS and CAT during the time period the firm is required to report to both systems. Although both rule sets must be enforced, FINRA considers facts regarding rule violations on a case-by-case basis and

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<sup>37</sup> *Id.* at 5.

<sup>38</sup> *Id.* at 2.

<sup>39</sup> FIF at 2; FIF OIP at 3; Thomson Reuters at 2.

<sup>40</sup> SIFMA OIP at 4.

<sup>41</sup> 17 CFR 242.613(g).

believes that consideration can be given in appropriate instances when violations of both the CAT and OATS rules occur due to the same underlying reason.<sup>42</sup>

FIF and Thomson Reuters supported the daily publication of metrics detailing the rates associated with the retirement of OATS on both an industry-wide and individual firm level.<sup>43</sup> FINRA intends to provide as much transparency as possible into its assessment of the accuracy and reliability of the CAT and agrees with the commenters that, as part of that effort, making daily industry-wide statistics publicly available is appropriate. FINRA believes that sharing its findings—including any issues that have been identified—with Industry Member reporters as appropriate can help resolve the issues to improve the accuracy and reliability of the CAT on a timely basis. The statistics themselves will be calculated by the Plan Processor, and FINRA commits to working with the Plan Processor to make the metrics available publicly. With respect to individual firm metrics, Section A(3)(b) of Appendix C and Section 7 of Appendix D to the Plan require the Plan Processor to communicate errors to CAT Reporters and provide a mechanism for CAT Reporters to correct identified errors. Thus, each CAT Reporter will have insight into its error rate in relevant categories.

#### *180-Day Assessment Period*

In addition to the minimum error rates and matching thresholds that generally must be met before OATS can be retired, the Proposal notes that, during the 180-day period during which the thresholds are calculated, FINRA’s use of the data in the CAT must confirm that (i) usage over that time period has not revealed material issues that have not been corrected, (ii) the CAT includes all data necessary to allow FINRA to continue to meet its surveillance obligations, and (iii) the Plan Processor is sufficiently meeting all of its obligations under the CAT NMS Plan. FIF suggested that consideration be given to shorten the 180-day period if all criteria are met before the end of the initial 180-day period.<sup>44</sup> Commenters also suggested that these three thresholds should be met before the time that Industry Members are required to report<sup>45</sup> and that a test period should be established prior to production reporting and certain criteria should be met

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<sup>42</sup> FINRA notes that Fidelity suggested in its comment letter that, because FINRA is proposing a single cut-over from OATS to the CAT, “individual firms have little incentive to reduce their individual reported error rates because the retirement of OATS will be based on industry wide error rates and not error rates at individual firms and other factors outside of firm control.” Fidelity at 4. FINRA believes this concern would be significantly exacerbated if there were no enforcement of the CAT reporting rules until OATS is retired.

<sup>43</sup> FIF at 2; Thomson Reuters at 2; Thomson Reuters OIP at 3.

<sup>44</sup> FIF at 2.

<sup>45</sup> FIF at 5; FIF OIP at 3; Thomson Reuters at 4.

before go-live.<sup>46</sup> Fidelity objected to these additional qualitative requirements as “vague standards” and stated that these standards did not “provide enough clarity regarding when FINRA will retire OATS.”<sup>47</sup>

FINRA continues to believe that a sufficient evaluation period after Industry Members begin reporting to the CAT is essential to confirm that the CAT is functioning as intended and in a manner reliable enough to ensure the continued sufficiency of FINRA’s surveillance capabilities once OATS is retired. FINRA believes that the qualitative standards discussed in the Proposal are essential to ensure that FINRA is able to identify any errors in the data itself or in the processing of the data that is not apparent based solely on threshold data validation. As FINRA noted in the Proposal, these qualitative assessments are necessary so that “any errors that may manifest themselves only after surveillance patterns and other queries have been run” can be identified and corrected before OATS is retired. Based on its prior usage of audit trail data, FINRA believes that a minimum of 180 days is necessary to reliably establish that usage of the CAT over that time period has not revealed material issues that have not been corrected and that the Plan Processor is sufficiently meeting all of its obligations under the Plan. This time period is necessary to allow contextual analysis of the data to take place to uncover errors in reporting or processing that may not be apparent from more standardized data validation processes.

FINRA and the other Participants continue to work with the Plan Processor to ensure that the CAT will include all data necessary to allow FINRA to continue to meet its surveillance obligations in advance of the implementation of reporting requirements. FINRA also intends to continue to work with the Participants, the Plan Processor, and Industry Members themselves in advance of Industry Member reporting to enable these criteria to be met as promptly as possible. While FINRA commits to working with the Participants and the Plan Processor during the initial year of reporting to the CAT to resolve issues as quickly as possible after they are identified, the implementation dates for Industry Member reporting are dictated by Rule 613 and the CAT NMS Plan. Although the Participants and the Plan Processor can work toward resolving as many issues as possible that may be identified during any test period before implementation, FINRA believes that the accuracy and reliability of the CAT can be accurately assessed only after mandatory reporting for Industry Members has commenced.

#### *Implementation Timeline for Industry Members*

As discussed in the Proposal, FINRA concluded that having data from Small Industry Members currently reporting to OATS available in the CAT two years after the Effective Date, rather than three years after the Effective Date, would substantially

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<sup>46</sup> SIFMA at 2; Thomson Reuters at 4.

<sup>47</sup> Fidelity at 2-3.

facilitate a more expeditious retirement of OATS. For this reason, FINRA supports an amendment to the Plan that would require Small Industry Members currently reporting to OATS to report to the CAT two years after the Effective Date.

All four commenters expressed support for amending the Plan to accelerate the reporting requirement for Small Industry Members that report to OATS.<sup>48</sup> SIFMA and Fidelity also requested that large firms that are not reporting to OATS be shifted so that the reporting requirement for those firms would not be implemented until three years after the Effective Date.<sup>49</sup>

FINRA continues to support an amendment to the Plan that would accelerate the reporting requirement for those Small Industry Members that already report to OATS to facilitate its retirement. As FINRA noted in the Proposal, in the absence of such an amendment, the retirement of OATS will be delayed by an additional year since some OATS reporters are Small Industry Members and would not be required to report to the CAT until three years after the Effective Date. FINRA would not, however, support an amendment that delays the reporting for Industry Members that are not Small Industry Members and do not report to OATS to three years after the Effective Date. When the Commission adopted Rule 613, it permitted the Participants to give “small broker-dealers,” as defined in Exchange Act Rule 0-10, an additional year to comply with the CAT reporting requirements.<sup>50</sup> In doing so, the Commission concluded that this definition was appropriate “because it is an existing regulatory standard that is an indication of small entities for which regulators should be sensitive when imposing regulatory burdens,”<sup>51</sup> and in the Plan submitted by the Participants and approved by the Commission, Small Industry Members were provided with this additional year.<sup>52</sup> Although FINRA supports a Plan amendment that would accelerate reporting for certain Small Industry Members to enable FINRA to more expeditiously retire OATS, it would not support an amendment that further delays reporting by those broker-dealers that are not “small broker-dealers” but do not report to OATS. A two-year implementation timeline for broker-dealers that are not “small broker-dealers” is consistent with the implementation timeline established in Rule 613, and delaying that timeline for certain

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<sup>48</sup> Fidelity at 3; FIF at 2; SIFMA at 2; Thomson Reuters at 2.

<sup>49</sup> Fidelity at 3; SIFMA at 2.

<sup>50</sup> See Adopting Release at 45804.

<sup>51</sup> *Id.*

<sup>52</sup> See CAT NMS Plan, Section 6.7(a)(vi); see also FINRA Rule 6895(c).

broker-dealers would not produce regulatory benefits, such as facilitating the migration of regulatory reporting to the CAT and the retirement of existing reporting systems.<sup>53</sup>

*EBS Rule Modifications*

Because, after broker-dealer reporting to the CAT has begun, the CAT will contain much of the data FINRA would otherwise request via the EBS system for purposes of NMS Securities and OTC Equity Securities, the Proposal adds new Supplementary Material to the EBS Rules to clarify how FINRA will request data under these rules after members are reporting to the CAT.<sup>54</sup> On August 25, 2017, FINRA filed an amendment to the Proposal that revised the proposed Supplementary Material to clarify that FINRA will not request trade data or information, and members will not be required to provide trade data or information, for trades reported to the CAT after FINRA announces that it has determined that the accuracy and reliability of the CAT are sufficient to replace requests pursuant to the EBS Rules. These proposed changes to the Supplementary Material make clear that, after the CAT achieves the accuracy and reliability standards set forth in the Proposal, FINRA will only use the CAT to obtain trading information and will make requests under the EBS Rules only for transactions that occurred before the CAT achieved sufficient levels of accuracy and reliability or transactions that involve securities that are not reportable to the CAT (e.g., fixed income securities, OTC options).

As noted in the Proposal, FINRA believes that the CAT must meet certain minimum accuracy and reliability standards before FINRA could rely on the CAT to replace existing regulatory tools, including EBS. Consequently, the proposed Supplementary Material would be implemented only after the CAT achieves the thresholds set forth above with respect to OATS and an accuracy rate for customer and account information of 95% for pre-corrected data and 98% for post-correction data. In addition, as discussed above, FINRA can rely on the CAT to replace EBS requests only after FINRA has determined that its usage of the CAT over a 180-day period has not revealed material issues that have not been corrected, confirmed that the CAT includes all data necessary to allow FINRA to continue to meet its surveillance obligations, and confirmed that the Plan Processor is fulfilling its obligations under the Plan. Unlike the OATS rules, FINRA's EBS Rules will not be deleted from the FINRA Rulebook; rather,

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<sup>53</sup> See Securities Exchange Act Release No. 79318 (Nov. 15, 2016), 81 FR 84696, 84772 (Nov. 23, 2016) (Order Approving the National Market System Plan Governing the Consolidated Audit Trail) (“The Commission remains open to other approaches to phasing in CAT reporting obligations that will promote the earlier retirement of reporting systems that will be rendered duplicative by the CAT.”).

<sup>54</sup> FINRA notes that other Participants and the Commission have rules concerning EBS requests. This letter addresses only FINRA's views regarding its EBS Rules.

the rules will be amended to accommodate the fact that EBS requests will still be necessary for transactions occurring before reporting to the CAT meets the threshold accuracy and reliability standards and for transactions involving securities that are not reportable to the CAT.

Three commenters requested that the SROs amend the Plan to close the data gap between EBS requirements and the Plan regarding prime brokerage relationships.<sup>55</sup> As FINRA and the other Participants have noted, while working with the Plan Processor to develop the Technical Specifications, the Plan Participants fully intend to “ensure that by the time Industry Members are required to report to the CAT, the CAT will include all data elements necessary to facilitate the rapid retirement of duplicative systems.”<sup>56</sup> FINRA, the other Participants, and the Plan Processor are proceeding in this process and are committed to addressing any data gaps that are identified that must be addressed before existing systems can be retired or modified. Regarding prime brokerage relationships specifically, FINRA notes that Section 6.4(d)(ii)(A)(2) of the Plan requires that the identity of a prime broker be included on execution reports, if applicable; however, more generally, FINRA does not view particular elements as germane to the Proposal as FINRA reiterates that it is committed to ensuring any data gaps are identified as the Plan Processor is developing the Technical Specifications and addressed prior to Industry Member reporting to the CAT.

Thomson Reuters requested that FINRA clarify the metrics to be used to determine when FINRA will cease making EBS requests under Rules 8211 and 8213 with respect to Eligible Securities transactions that occur after CAT reporting for Industry Members has been implemented and consider whether to adopt an individual member exemption for EBS requests similar to that requested for OATS.<sup>57</sup>

As stated in the Proposal, the metrics to implement the modifications to FINRA’s EBS Rules are subject to the same requirements as the retirement of OATS. Specifically, the proposed Supplementary Material will be implemented only after the CAT achieves the thresholds set forth above with respect to OATS and an accuracy rate for customer and account information of 95% for pre-corrected data and 98% for post-correction data. In this regard, FINRA will look at the pre- and post-correction errors rates for material inconsistencies in customer information identified by the Plan Processor. In addition to these error rates, FINRA will also evaluate other factors that indicate the accuracy and completeness of customer and account information obtained through CAT. Specifically, FINRA will monitor the accuracy of the Plan Processor’s

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<sup>55</sup> FIF at 5; SIFMA at 4; Thomson Reuters at 4.

<sup>56</sup> Letter from Participants to Brent J. Fields, Secretary, Commission, dated September 23, 2016, at 21.

<sup>57</sup> Thomson Reuters at 3-4.

results for associating Firm Designated IDs with related customer information. Additionally, FINRA will monitor linkage rates from the perspective of whether lifecycle linkages produced by the CAT Processor result in a complete lifecycle including required customer and account information from the broker-dealer that received the customer order. For example, while overall linkages may be above 95%, if the unlinked 5% involves the “top” order that contained the customer and account information, FINRA would not be able to rely on CAT and would still need to continue to obtain customer and account information from EBS.

In addition, as discussed above, FINRA can rely on the CAT to replace EBS requests only after FINRA has determined that its usage of the CAT over a 180-day period has not revealed material issues that have not been corrected, confirmed that the CAT includes all data necessary to allow FINRA to continue to meet its surveillance obligations, and confirmed that the Plan Processor is fulfilling its obligations under the CAT NMS Plan. The CAT can replace EBS requests only after it is confirmed that the CAT is able to accurately link all order and execution events so that the ultimate customer can be ascertained. Although Thomson Reuters is correct that “EBS is a request-based system without linkages,” the CAT is not; thus for CAT data to replace EBS requests, FINRA must ensure that it is able to rely on the CAT to extract the same data currently provided by firms pursuant to EBS requests.

For this same reason, FINRA does not believe it is appropriate to provide individual firm exemptions from EBS requests on a rolling basis because it is the accuracy and reliability of the CAT overall that must be confirmed before FINRA can begin to rely on CAT data to replace EBS requests. Moreover, unlike OATS, firms will generally not be able to “retire” their EBS systems even after the CAT has met the accuracy and reliability standards since not all securities subject to EBS requests are Eligible Securities under the Plan and FINRA will continue to need to make EBS requests for transactions that occurred before the CAT has achieved the required accuracy and reliability thresholds. However, as a practical matter, FINRA notes that once reliable customer information is in the Central Repository, it is likely that regulators will use the CAT first before generating EBS requests, even if the authority to request information via the EBS system remains in the rules. Thus, firms accurately reporting to the CAT will likely see a decrease in EBS requests over time as the information can be reliably obtained through the CAT.

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FINRA believes that the foregoing responds to the material issues raised by the commenters to the Proposal, the questions raised in the OIP, and the issues raised in the commenters' responses to the OIP. If you have any questions, please contact the undersigned at 202-728-6927 or [brant.brown@finra.org](mailto:brant.brown@finra.org).

Sincerely,



Brant K. Brown  
Associate General Counsel