# SECURITIES AND EXCHANGE COMMISSION (Release No. 34-100530; File No. 4-698)

July 15, 2024

Joint Industry Plan; Order Instituting Proceedings to Determine Whether to Approve or Disapprove an Amendment to the National Market System Plan Governing the Consolidated Audit Trail Regarding Cost Savings Measures

#### I. Introduction

In July 2012, the Securities and Exchange Commission (the "Commission" or "SEC") adopted Rule 613 of Regulation NMS, which required national securities exchanges and national securities associations (the "Participants")<sup>1</sup> to jointly develop and submit to the Commission a national market system ("NMS") plan to create, implement, and maintain a consolidated audit trail (the "CAT").<sup>2</sup> On November 15, 2016, the Commission approved the NMS plan required by Rule 613 (the "CAT NMS Plan").<sup>3</sup> On March 27, 2024, and pursuant to Section 11A(a)(3) of the Securities Exchange Act of 1934 (the "Exchange Act")<sup>4</sup> and Rule 608 of Regulation NMS

The Participants include BOX Exchange LLC, Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe C2 Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe Exchange, Inc., The Financial Industry Regulatory Authority, Inc., Investors' Exchange LLC, Long-Term Stock Exchange, Inc., MEMX LLC, Miami International Securities Exchange LLC, MIAX Emerald, LLC, MIAX PEARL, LLC, Nasdaq BX, Inc., Nasdaq GEMX, LLC, Nasdaq ISE, LLC, Nasdaq MRX, LLC, Nasdaq PHLX LLC, The Nasdaq Stock Market LLC, New York Stock Exchange LLC, NYSE American LLC, NYSE Arca, Inc., NYSE Chicago, Inc., and NYSE National, Inc.

See Securities Exchange Act Release No. 67457 (July 18, 2012), 77 FR 45722 (Aug. 1, 2012 ("Rule 613 Adopting Release"); 17 CFR 242.613.

See Securities Exchange Act Release No. 78318 (Nov. 15, 2016), 81 FR 84696 (Nov. 23, 2016) ("CAT NMS Plan Approval Order"). The CAT NMS Plan is Exhibit A to the CAT NMS Plan Approval Order. See CAT NMS Plan Approval Order, at 84943–85034. The CAT NMS Plan, which is available at <a href="https://catnmsplan.com/about-cat/cat-nms-plan">https://catnmsplan.com/about-cat/cat-nms-plan</a>, functions as the limited liability company agreement of the jointly owned limited liability company formed under Delaware state law through which the Participants conduct the activities of the CAT (the "Company"). Each Participant is a member of the Company and jointly owns the Company on an equal basis. The Participants submitted to the Commission a proposed amendment to the CAT NMS Plan on August 29, 2019, which they designated as effective on filing. On August 29, 2019, the Participants replaced the CAT NMS Plan in its entirety with the limited liability company agreement of a new limited liability company, CAT LLC, which became the Company. See Securities Exchange Act Release No. 87149 (Sept. 27, 2019), 84 FR 52905 (Oct. 3, 2019).

<sup>&</sup>lt;sup>4</sup> 15 U.S.C. 78k-1(a)(3).

thereunder,<sup>5</sup> the Participants filed with the Commission proposed amendments to the CAT NMS Plan designed to implement certain costs saving measures (the "Proposed Cost Savings Amendments").<sup>6</sup> The Proposed Cost Savings Amendments were published for comment in the Federal Register on April 16, 2024.<sup>7</sup>

This order institutes proceedings, under Rule 608(b)(2)(i) of Regulation NMS,<sup>8</sup> to determine whether to disapprove the Proposed Cost Savings Amendments or to approve the Proposed Cost Savings Amendments with any changes or subject to any conditions the Commission deems necessary or appropriate.

## II. Summary of Proposed Cost Savings Amendments<sup>9</sup>

The Participants proposed to implement the following measures: (A) amendments that would change processing, query, and storage requirements for Options Market Maker quotes in Listed Options ("Option Market Maker Quotes")<sup>10</sup>; (B) amendments that would permit the Plan

<sup>&</sup>lt;sup>5</sup> 17 CFR 242.608.

See Letter from Brandon Becker, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, Commission, dated March 27, 2024, available at https://catnmsplan.com/sites/default/files/2024-03/03.27.24-Proposed-CAT-NMS-Plan-Amendment-Cost-Savings-Amendment.pdf.

See Securities Exchange Act Release No. 99938 (Apr. 10, 2024), 89 FR 26983 (Apr. 16, 2024) ("Notice"). Comments received in response to the Notice can be found on the Commission's website at https://www.sec.gov/comments/4-698/4-698-d.htm.

<sup>8 17</sup> CFR 242.608(b)(2)(i).

See Notice, supra note 7, for a full discussion of the Proposed Cost Savings Amendments.

An "Options Market Maker" is "a broker-dealer registered with an exchange for the purpose of making markets in options contracts on the exchange." See CAT NMS Plan, supra note 3, at Section 1.1. A "Listed Option" is defined as having "the meaning set forth in Rule 600(b)(35) of Regulation NMS." See id. Rule 600(b)(35) has since been redesignated as Rule 600(b)(43), which defines a "Listed Option" as "any option traded on a registered national securities exchange or automated facility of a national securities association." 17 CFR 242.600(b)(43).

Processor<sup>11</sup> to move raw unprocessed data and interim operational copies of CAT Data<sup>12</sup> older than 15 days to what the Participants described as a more cost-effective storage tier; (C) amendments that would permit the Plan Processor to provide an interim CAT-Order-ID<sup>13</sup> to regulatory users on an "as requested" basis, rather than on a daily basis; and (D) amendments that would codify and expand exemptive relief recently provided by the Commission related to certain recordkeeping and data retention requirements for industry testing data.<sup>14</sup>

The Participants represented that the Proposed Cost Savings Amendments are expected to result in approximately \$23 million in new annual cost savings in the first year with limited impact on the regulatory function of the CAT. The Participants further stated that their cost and savings projections were estimates only and were based on, among other factors: the current state and costs of CAT operations, including the current number of national securities exchanges; current CAT NMS Plan requirements; reporting by Participants, Industry Members<sup>15</sup> and market data providers; observed data rates and volumes; current discounts, reservations, and cost savings plans; and associated cloud fees. According to the Participants, actual future savings could be more or less than their estimates due to changes in any of these variables.

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The "Plan Processor" is "the Initial Plan Processor or any other Person selected by the Operating Committee pursuant to SEC Rule 613 and Sections 4.3(b)(i) and 6.1, and with regard to the Initial Plan Processor, the Selection Plan, to perform the CAT processing functions required by SEC Rule 613 and set forth in this Agreement." See CAT NMS Plan, supra note 3, at Section 1.1.

<sup>&</sup>quot;CAT Data" is "data derived from Participant Data, Industry Member Data, SIP Data, and such other data as the Operating Committee may designate as 'CAT Data' from time to time." See id.

The "CAT-Order-ID" is "a unique order identifier or series of unique order identifiers that allows the central repository to efficiently and accurately link all reportable events for an order, and all orders that result from the aggregation or disaggregation of such order." See 17 CFR 242.613(j)(1); see also CAT NMS Plan, supra note 3, at Section 1.1 ("'CAT-Order-ID' has the same meaning provided in SEC Rule 613(j)(1).").

See Securities Exchange Act Release No. 99023 (Nov. 27, 2023), 88 FR 84026 (Dec. 1, 2023) ("Industry Test Data Exemptive Relief Order").

<sup>&</sup>quot;Industry Member" means "a member of a national securities exchange or a member of a national securities association." See CAT NMS Plan, supra note 3, at Section 1.1.

A. Processing, Query, and Storage Requirements for Options Market Maker Quotes

Section 6.3(d) of the CAT NMS Plan currently requires each Participant to record and electronically report to the Central Repository details for each Order and each Reportable Event, including all Options Market Maker Quotes and related Reportable Events. With respect to the reporting obligations of an Options Market Maker with regard to its quotes in Listed Options, Section 6.4(d)(iii) of the CAT NMS Plan states that Reportable Events required pursuant to Section 6.3(d)(ii) and (iv) shall be reported to the Central Repository by an Options Exchange in lieu of the reporting of such information by the Options Market Maker. Section 6.4(d)(iii) of the CAT NMS Plan also requires Options Market Makers to report to an Options Exchange the time at which a quote in a Listed Option is sent to the Options Exchange (and, if applicable, any subsequent quote modifications and/or cancellation time when such modification or cancellation is originated by the Options Market Maker), pursuant to compliance rules established by the Options Exchanges. Such time information must be reported to the Central Repository by the Options Exchange in lieu of reporting by the Options Market Maker.

The CAT NMS Plan requires all CAT Data reported to the Central Repository to be processed and assembled to create the complete lifecycle of each Reportable Event.<sup>20</sup> Appendix

See Notice, supra note 7, at 26985. An Order includes "(i) [a]ny order received by a member of a national securities exchange or national securities association from any person; (ii) [a]ny order originated by a member of a national securities exchange or national securities association; or (iii) [a]ny bid or offer." See 17 CFR 242.613(j)(8); see also CAT NMS Plan, supra note 3, at Section 1.1 ("Order" or 'order' has, with respect to Eligible Securities, the meaning set forth in SEC Rule 613(j)(8)."). A "Reportable Event" includes, but is not limited to, "the original receipt or origination, modification, cancellation, routing, execution (in whole or in part) and allocation of an order, and receipt of a routed order." See CAT NMS Plan, supra note 3, at Section 1.1.

See Notice, supra note 7, at 26985.

<sup>&</sup>lt;sup>18</sup> Id.

<sup>19 &</sup>lt;u>Id.; see also CAT NMS Plan, supra</u> note 3, at Section 6.4(d)(iii).

See Notice, supra note 7, at 26985.

D, Section 3 of the CAT NMS Plan states that the Plan Processor must use a "daisy chain approach," in which "a series of unique order identifiers, assigned to all order events handled by CAT Reporters[,] are linked together by the Central Repository and assigned a single CATgenerated CAT-Order-ID that is associated with each individual order event and used to create the complete lifecycle of an order."<sup>21</sup> Timelines for data processing and data availability are described in Section 6.1 and Section 6.2 of Appendix D of the CAT NMS Plan.<sup>22</sup> The CAT NMS Plan further provides that regulators will have access to processed CAT Data through an online targeted query tool and through user-defined direct queries and bulk extract tools described in Section 8.1 and Section 8.2 of Appendix D of the CAT NMS Plan.<sup>23</sup>

The Participants proposed to amend certain processing, query, and storage requirements that would otherwise apply to Options Market Maker Quotes. Specifically, proposed Section 3.4 of Appendix D would state that Options Market Maker Quotes in Listed Options would undergo ingestion only and such unlinked data would be made available to regulators by T+1 at 12:00 p.m. Eastern Time.<sup>24</sup> Under proposed Section 3.4 of Appendix D, Options Market Maker Quotes would not be subject to any requirement to link and create an order lifecycle and would not undergo any validation, feedback, linkage, or enrichment processing. <sup>25</sup> Options Market Maker Quotes in Listed Options would be accessible through BDSQL and Direct Read interfaces only under proposed Section 3.4 of Appendix D and would not be accessible through the online

<sup>21</sup> 

See also id.

<sup>22</sup> Id.

<sup>23</sup> Id.

<sup>&</sup>lt;u>Id.</u>

<sup>25</sup> Id.

targeted query tool.<sup>26</sup> In addition, the Participants proposed to make conforming changes to certain provisions of Appendix D to include cross-references to proposed Section 3.4.<sup>27</sup>

Under these proposed provisions, the Participants explained that Options Exchanges would continue to report Options Market Maker Quotes in the same manner they do today, but that the Plan Processor would only ingest and store such data.<sup>28</sup> The Participants stated that the Plan Processor would no longer be required to create any lifecycle linkages for Options Market Maker Quotes<sup>29</sup> and that Options Market Maker Quotes would no longer be subject to Plan Processor enrichments (e.g., next event timestamp, lifecycle sequence number, CAT-Lifecycle-ID).<sup>30</sup> However, the Participants represented that, upon request, the Plan Processor would provide regulators with the code required to derive such enrichments from the unprocessed data.<sup>31</sup> While unlinked data would remain accessible to regulators by T+1 at 12:00 p.m. Eastern Time, the Participants stated that elimination of linkage and feedback processes would remove Options Market Maker Quotes from Options Market Replay, OLA Viewer, and All-Related Lifecycle Event queries.<sup>32</sup> The Participants also stated that Options Market Maker Quotes would no longer be accessible via DIVER, a CAT query tool, but would remain accessible through BDSQL and Direct Read interfaces.<sup>33</sup> According to the Participants, executions that result from

<sup>6 &</sup>lt;u>Id.</u>

<sup>27 &</sup>lt;u>Id.</u>

<sup>28 &</sup>lt;u>Id.</u> at 26984.

<sup>29 &</sup>lt;u>Id.</u> at 26984 n.15.

<sup>&</sup>lt;sup>30</sup> Id. at 26984.

<sup>31 &</sup>lt;u>Id.</u>

<sup>32 &</sup>lt;u>Id.</u>

<sup>&</sup>lt;sup>33</sup> <u>Id.</u>

Options Market Maker Quotes would identify the "quoteId" of the quote that resulted in an execution, but would appear as orphaned lifecycle events.<sup>34</sup>

The Participants estimated that the costs related to creating lifecycles for Options Market Maker Quotes were \$30 million in 2023.<sup>35</sup> The Participants represented that Options Market Maker Quotes are the single largest data source for the CAT, comprising approximately 98% of all options exchange events and approximately 75% of all transaction volume stored in the CAT.<sup>36</sup> However, the Participants explained that creating lifecycles for this data is less compute intensive than other processing tasks; because the vast majority of Options Market Maker Quote lifecycles consist of just two events – the quote and its subsequent cancellation – the number of quotes that result in an execution is extremely low.<sup>37</sup>

The Participants also stated that they had already begun to implement certain measures to reduce the costs associated with lifecycle linkages for Options Market Maker Quotes, pursuant to exemptive relief issued by the Commission in November 2023.<sup>38</sup> The Participants stated that this exemptive relief allows the Plan Processor to create lifecycle linkages for Options Market Maker Quotes only once by T+2 at 8 a.m. Eastern Time (as opposed to requiring both an interim lifecycle by T+1 at 9 p.m. Eastern Time and a final lifecycle by T+5 at 8 a.m. Eastern Time).<sup>39</sup> The Participants expected the above-described "single pass" approach to generating lifecycles

<sup>4 &</sup>lt;u>Id.</u>

<sup>35 &</sup>lt;u>Id.</u>

<sup>&</sup>lt;sup>36</sup> <u>Id.</u>

<sup>&</sup>lt;sup>37</sup> <u>Id.</u>

See Securities Exchange Act Release No. 98848 (Nov. 2, 2023), 88 FR 77128 (Nov. 8, 2023) ("November 2023 Exemptive Relief Order").

See Notice, supra note 7, at 26984 n.15 (citing November 2023 Exemptive Relief Order). To the extent the Proposed Cost Savings Amendments are approved, the Participants stated that Plan Processor would no longer be required to create any lifecycle linkages for Options Market Maker Quotes. See id. at 26984.

for options quotes to result in annual savings of approximately \$5.4 million upon implementation in April 2024.<sup>40</sup>

The Participants estimated that the Proposed Cost Savings Amendment would result in approximately \$20 million in additional annual cost savings in the first year, such that the cost impact of Options Market Maker Quotes on the CAT would be reduced from approximately \$24.4 million (inclusive of anticipated savings resulting from the implementation of the options quotes "single pass" proposal referenced above) to approximately \$4.0 million annually. They stated there would be limited regulatory impact. The Participants stated that the vast majority of Options Market Maker Quote lifecycles do not involve any execution or allocation and usage data demonstrates that such data is very rarely accessed by regulators. The Participants also stated that regulators would still have access to unlinked Options Market Maker Quotes data by T+1 at 12:00 p.m. Eastern Time under the Proposed Cost Savings Amendments and stated that regulatory users would be able to derive the currently available data enrichments if needed.

# B. <u>Storage for Raw Unprocessed Data and Interim Operational Copies of CAT Data Older Than 15 Days</u>

The CAT NMS Plan requires CAT Data to be "directly available and searchable electronically without manual intervention for at least six years" 44 and within certain query tool

<sup>40</sup> Id. at 26984.

See id. at 26984-85. The Participants stated that their cost savings estimates assumed an approximate 65% reduction in compute runtime associated with options exchange events and an approximate 80% reduction in storage footprint through the elimination of versioned options quote data (e.g., interim, final, DIVER-optimized, OLA copies). See id. at 26985 n.19.

<sup>42</sup> See id. at 26984-85.

See id.

<sup>44 &</sup>lt;u>See CAT NMS Plan, supra</u> note 3, at Section 6.5(b)(i) and Appendix D, Section 1.4; see also Notice, supra note 7, at 26986.

response times.<sup>45</sup> These requirements apply not only to the final corrected data version that is delivered to regulators by T+5 at 8 a.m. Eastern Time, but also to raw unprocessed data and various types of interim operational data, as well as to copies of all submission and feedback files provided to CAT Reporters as part of the correction process (collectively, "Operational Data").<sup>46</sup> Specifically, with respect to raw unprocessed data and interim operational copies of data created between T+1 and T+5, Section 6.2 of Appendix D of the CAT NMS Plan provides that, prior to 12:00 p.m. Eastern Time on T+1, raw unprocessed data that has been ingested by the Plan Processor must be available to Participants' regulatory staff and the SEC, and between 12:00 p.m. Eastern Time on T+1 and T+5, access to all iterations of processed data must be available to Participants' regulatory staff and the SEC.<sup>47</sup>

Currently, the Participants explained that interim operational data is supplanted in all CAT query tools by the final version of corrected data that is made available at T+5 at 8:00 a.m. Eastern Time. However, they stated that such data remains available to regulators after T+5 "without manual intervention" via the use of CAT data management APIs. Because the Participants believed that regulators generally access the latest, corrected version of CAT data, the Participants believed that interim operational data generally does not provide any regulatory value after the final corrected data version is delivered by T+5 at 8 a.m. Eastern Time. So

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See, e.g., CAT NMS Plan, supra note 3, at Appendix D, Section 8.1 and 8.2; see also Notice, supra note 7, at 26986. The Participants explained that the Commission had granted conditional exemptive relief from certain performance requirements related to the online targeted query tool. See Notice, supra note 7, at 26986; see also November 2023 Exemptive Relief Order, supra note 38.

See Notice, supra note 7, at 26986.

Id.; CAT NMS Plan, supra note 3, at Appendix D, Section 6.2.

See Notice, supra note 7, at 26986.

<sup>49 &</sup>lt;u>Id.</u>

Id. According to the Participants, after four years of operation, the Plan Processor has not seen any regulatory usage of this interim operational data. Id.

The Participants stated that cost savings could be achieved by archiving Operational Data older than 15 days to a more cost-effective storage tier that is optimized for infrequent access. Specifically, the Participants proposed to add new Section 6.3 to Appendix D of the CAT NMS Plan that would state that certain types of data may be retained in an archive storage tier, in which case they would be made available upon request by Participant regulatory staff or the SEC to the CAT Help Desk.<sup>51</sup> These types of data would include:

- "All raw unprocessed data (i.e., as submitted data) and interim operational data older than 15 days. Interim operational data includes all processed, validated and unlinked data made available to regulators by T+1 at 12:00 p.m. ET, and all iterations of processed data made available to regulators between T+1 and T+5, but excludes the final version of corrected data that is made available at T+5 at 8:00 a.m. ET.
- All submission and feedback files older than 15 days."52

Operational Data not older than 15 days, as well as all final, corrected data, would remain accessible "without manual intervention" within required query tool response times.<sup>53</sup> In addition, the Participants proposed to add references to proposed Section 6.3 of Appendix D to Section 6.5(d)(i) and Section 1.4 of Appendix D of the CAT NMS Plan.<sup>54</sup>

Id. at 26987. Exhibit A of the Proposed Cost Savings Amendments sets forth a different version of this rule text, which states, in relevant part, that "[a]ll interim raw unprocessed data (i.e., as submitted data) and operational data older than 15. Interim operational data includes all processed, validated and unlinked data and made available to regulators by T+1 at 12:00 p.m. ET, and all iterations of processed data made available to regulators between T+1 and T+5, but excludes the final version of corrected data that is made available at T+5 at 8:00 a.m. ET." Id. at 26996. The Participants do not indicate which version of this rule text is meant to govern.

<sup>&</sup>lt;sup>51</sup> Id. at 26987.

<sup>&</sup>lt;sup>53</sup> Id. at 26986.

Ld. at 26987. Although the Participants indicated that this was their intent, they did not add this phrase to Section 6.5(d)(i) in Exhibit A of the Proposed Cost Savings Amendments. Id. at 26996. The Participants do not indicate which version of this rule text is meant to govern.

Under proposed Section 6.3 of Appendix D, archived data would not be directly available and searchable electronically without manual intervention and would not be subject to any query tool performance requirements until restored to an accessible storage tier. The Participants explained that archived data would be restored generally within several hours or business days of a request to the CAT Help Desk that is maintained pursuant to Section 10.3 of Appendix D of the CAT NMS Plan, depending on the volume and size of the date range of the requested data restore. For example, a request to restore a single day of data may take less than 24 hours, whereas a request to restore a year's worth of data may take several days. The Participants further represented that the Plan Processor would develop policies and procedures to ensure the confidentiality of any regulator requests to obtain Operational Data.

Accordingly, the Participants believed that the anticipated savings associated with optimizing storage costs, which they estimated as approximately \$1 million in annual costs, outweigh the impact on regulatory access to CAT Data.

### C. Provision of an Interim CAT-Order-ID on an "As Requested" Basis

Appendix D, Section 6.1 of the CAT NMS Plan states that "Noon Eastern Time T+1 (transaction date + one day)" is the deadline for "initial data validation, lifecycle linkages and communication of errors to CAT Reporters." Appendix D, Section 3 of the CAT NMS Plan further requires that the Plan Processor must use a "daisy chain approach," in which "a series of unique order identifiers, assigned to all order events handled by CAT Reporters[,] are linked

<sup>&</sup>lt;sup>55</sup> <u>Id.</u> at 26987.

Id. at 26986. The Participants reasoned that, when the Commission adopted the CAT NMS Plan, it noted that "[m]ost current data sources do not provide direct access to most regulators, and data requests can take as long as weeks or even months to process." See id. (citing CAT NMS Plan Approval Order, supra note 3, at 84833 and Rule 613 Adopting Release, supra note 2, at 45729).

<sup>&</sup>lt;sup>57</sup> Id.

<sup>&</sup>lt;sup>58</sup> <u>Id.</u> at 26987.

together by the Central Repository and assigned a single CAT-generated CAT-Order-ID that is associated with each individual order event and used to create the complete lifecycle of an order."<sup>59</sup>

The Participants explained that they provide a final CAT-Order-ID at T+5 at 8 a.m. Eastern Time, pursuant to the following timeline:

T+1 @ 8 a.m. ET: Initial submissions due

T+1 @ 12 p.m. ET: Initial data validation, communication of errors to CAT Reporters;

unlinked data available to regulators

T+1 @ 9 p.m. ET: Interim CAT-Order-ID available<sup>60</sup>

T+3 @ 8 a.m. ET: Resubmission of corrected data

T+4 @ 8 a.m. ET: Final lifecycle assembly begins, reprocessing of late submissions

and corrections

T+5 @ 8 a.m. ET: Corrected data available to Participant regulatory staff and the SEC

The Participants proposed to amend Section 6.1 of Appendix D of the CAT NMS Plan to require the Plan Processor to provide an interim CAT-Order-ID on an "as requested" basis, rather than on a regular ongoing basis, where there is an immediate regulatory need (for example, in the case of a major market event), upon request of a senior officer of the Division of

<sup>&</sup>lt;sup>59</sup> <u>Id.</u>

The Participants further stated that, pursuant to the November 2023 Exemptive Relief Order, the Plan Processor assigns an interim CAT-Order-ID by T+1 at 9 p.m. Eastern Time, rather than by the T+1 at noon Eastern Time deadline set forth in the CAT NMS Plan. See Notice, supra note 7, at 26987; see also November 2023 Exemptive Relief Order, supra note 38. The Participants stated that the November 2023 Exemptive Relief Order provides that the Plan Processor will no longer be required to provide an interim CAT-Order-ID for Options Quotes once it has developed and implemented the functionality to provide a final CAT-Order-ID and lifecycle linkage for Options Quotes by T+2 at 8 a.m. Eastern Time, including all enrichments currently provided for such order events at T+5 at 8 a.m. Eastern Time. When late or corrected data is received for Options Quotes between T+1 at 8 a.m. Eastern Time and T+4 at 8 a.m. Eastern Time, the Participants stated that the Plan Processor must run, on an ad hoc basis, a second processing cycle such that lifecycle linkage and all enrichments currently provided for such order events are performed by T+5 at 8 a.m. Eastern Time. See Notice, supra note 7, at 26987 n.27. To the extent the proposed amendments are approved, the Participants stated that the Plan Processor would no longer be required to create any lifecycle linkages for Options Market Maker Quotes. See id.

Trading and Markets, the Division of Enforcement, or the Division of Examinations to CAT LLC.<sup>61</sup> In such cases, proposed Section 6.1 of Appendix D states that the Plan Processor would be directed to create an interim CAT-Order-ID and make it available to regulators by T+1 at 9 p.m. ET if the request is received prior to T+1 at 8 a.m. ET, or generally within 14 hours of receiving the request if such request was received after T+1 at 8 a.m. ET.<sup>62</sup> Other conforming changes to Section 6.1 of Appendix D were also proposed.<sup>63</sup>

The Participants clarified that, subject to the proposed amendments described above with respect to Options Market Maker Quotes, there would be no change to any other aspect of the CAT NMS Plan requirements for the processing of data, error feedback, and final delivery of data to regulators by T+5 at 8 a.m. ET, and no impact to Industry Members. Prior to 12:00 p.m. ET on T+1, regulators would continue to have access to raw unprocessed data that has been ingested by the Plan Processor, and between 12:00 p.m. on T+1 and T+5, regulators would continue to have access to all iterations of unlinked, processed data.<sup>64</sup> The Participants believed that the Proposed Cost Savings Amendments would preserve the SEC's ability to obtain an interim CAT-Order-ID on an as needed basis, while avoiding the substantial cost of delivering an interim CAT-Order-ID on a regular ongoing basis.<sup>65</sup>

The Participants therefore stated that the anticipated savings associated with this change would substantially outweigh the minimal regulatory impact. According to the Participants, the Proposed Cost Savings Amendments would result in approximately \$2 million in annual

See Notice, supra note 7, at 26988.

<sup>62 &</sup>lt;u>Id.</u>

<sup>63</sup> Id.

<sup>&</sup>lt;sup>64</sup> Id. at 26987.

<sup>65 &</sup>lt;u>Id.</u>

<sup>66 &</sup>lt;u>Id.</u>

compute savings.<sup>67</sup> They further stated that the estimated cost of an ad hoc interim CAT-Order-ID delivery is approximately \$10,000 to \$12,000 per request, based on current data volumes, <sup>68</sup> and represented that CAT LLC would add a separate line item to its budget to reflect costs related to any SEC requests to generate an interim CAT-Order-ID.<sup>69</sup>

## D. <u>Codification and Expansion of Exemptive Relief Permitting Deletion of Industry</u> Test Data Older Than Three Months

According to the Participants, Industry Members and Participants submit data to the CAT pursuant to required and voluntary testing, feedback files related to such data, and output files that hold the detailed transactions, referred to herein as "Industry Test Data." Under Section 1.2 of Appendix D of the CAT NMS Plan, such Industry Test Data must be saved for three months. Separate from this specific three-month retention requirement, Rule 17a-1 under the Exchange Act requires every national securities exchange and national securities association to keep and preserve at least one copy of all documents, including all correspondence, memoranda, papers, books, notices, accounts, and other such records as shall be made or received by it in the course of its business as such and in the conduct of its self-regulatory activity, and to keep all

Id. The Participants explained that the average typical daily compute costs for interim lifecycle processing is estimated to be approximately \$8,000/day to \$10,000/day for a typical day based on current data volumes (including savings attributable to the daily ODCR and Compute Savings Plans), which totals approximately \$2 million per year based on 252 trading days per year. Id. at 26988 n.28.

According to the Participants, this cost savings estimate was calculated assuming the Plan Processor implements functionality to provide a final CAT-Order-ID and lifecycle linkage for options quotes by T+2 at 8 a.m. Eastern Time (in lieu of T+5 at 8 a.m. Eastern Time), which the Participants stated was expected in April 2024. <u>Id.</u> at 26987 n.24.

<sup>69 &</sup>lt;u>Id.</u> at 26987. The Participants noted, however, that they were unable to predict the number of authorized ad hoc runs per year that would be requested by the Commission. <u>Id.</u> at 26988 n.29.

Separately, the Participants stated that CAT LLC, through the Plan Processor, also retains "[o]perational metrics associated with industry testing (including but not limited to testing results, firms who participated, and amount of data reported and linked)" for six years, in accordance with the CAT NMS Plan. See Notice, supra note 7, at 26988 n.30; see also CAT NMS Plan, supra note 3, at Appendix D, Section 1.2. The Participants explained that the proposed amendments do not affect such operational metrics. See Notice, supra note 7, at 26988 n.30.

<sup>&</sup>lt;sup>71</sup> <u>Id.</u> at 26988.

such documents for a period of not less than five years, the first two years in an easily accessible place, subject to the destruction and disposition provisions of Rule 17a-6 under the Exchange Act.<sup>72</sup> Section 9.1 of the CAT NMS Plan, the general recordkeeping provision for the CAT NMS Plan, also states, in relevant part, that the Company shall maintain complete and accurate books and records of the Company in accordance with SEC Rule 17a-1.<sup>73</sup>

The Participants explained that, on June 2, 2023, CAT LLC requested exemptive relief from Rule 17a-1 under the Exchange Act and certain provisions of the CAT NMS Plan relating to the retention of Industry Test Data beyond three months.<sup>74</sup> On November 27, 2023, the Participants stated that the Commission granted the requested relief.<sup>75</sup> The Participants stated that their request for exemptive relief and the Industry Test Data Exemptive Relief Order apply only to Industry Test Data related to the CAT order and transaction system, not to the customer account and information system ("CAIS").<sup>76</sup>

The Participants proposed to amend Section 1.2 of Appendix D of the CAT NMS Plan to clarify that test data (whether related to the CAT order and transaction system or to the CAIS may be deleted by the Plan Processor after three months.<sup>77</sup> Proposed Section 1.2 of Appendix D

Notice, supra note 7, at 26988. The Participants explained that the CAT is a facility of each of the Participants to the CAT NMS Plan. See Notice, supra note 7, at 26988.

<sup>&</sup>lt;sup>73</sup> See id. at 26988-89.

See Notice, supra note 7, at 26988; see also Letter from Brandon Becker, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, Commission, dated June 2, 2023, <a href="https://catnmsplan.com/sites/default/files/2023-06/06.02.23-Exemptive-Request-Test-Data-Retention.pdf">https://catnmsplan.com/sites/default/files/2023-06/06.02.23-Exemptive-Request-Test-Data-Retention.pdf</a>. As noted in the exemptive request, CAT LLC does not believe that Industry Test Data constitutes documents covered by Rule 17a-1 under the Exchange Act and adheres to its view that the specific three-month period for Industry Test Data supersedes the more general, longer retention periods in the CAT NMS Plan, but submitted the exemptive request to obtain regulatory clarity in light of the SEC staff's comments that the longer retention periods set forth in Rule 17a-1 under the Exchange Act and the CAT NMS Plan may apply to Industry Test Data.

Notice, <u>supra</u> note 7, at 26988; <u>see also</u> Industry Test Data Exemptive Relief Order, <u>supra</u> note 14.

See Notice, supra note 7, at 26988.

<sup>&</sup>lt;sup>77</sup> <u>Id.</u> at 26989.

would continue to state that operational metrics associated with industry testing (including but not limited to testing results, firms who participated, and amount of data reported and linked) must be stored for the same duration as the CAT production data."<sup>78</sup>

Prior to the issuance of the Industry Test Data Exemptive Relief Order, the Participants explained that the Plan Processor had been retaining Industry Test Data beyond the three-month period prescribed by Appendix D of the CAT NMS Plan; they stated that eliminating Industry Test Data older than three months as permitted by the exemptive order is expected to achieve approximately \$1 million per year in savings. According to the Participants, the Proposed Cost Savings Amendments would not generate additional cost savings beyond those achievable pursuant to the Industry Test Data Exemptive Relief Order.

#### III. Summary of Comments

The Commission received four comment letters in connection with the Proposed Cost Savings Amendments. All commenters, CAT LLC, Nasdaq, Inc., the Financial Information Forum ("FIF") and the Securities Industry and Financial Markets Association ("SIFMA") supported the Proposed Cost Savings Amendments. CAT LLC and Nasdaq urged the Commission to approve the Proposed Cost Savings Amendments and all commenters stated that further steps should be taken to reduce costs associated with the CAT.

<sup>&</sup>lt;sup>78</sup> See id.

See Letter from Howard Meyerson, Managing Director, Financial Information Forum, to Secretary, Commission, dated May 7, 2024, available at https://www.sec.gov/comments/4-698/4698-467591-1256394.pdf ("FIF Letter"); Letter from Ellen Greene, Managing Director, Equities and Options Market Structure, and Joseph Corcoran, Managing Director, Associate General Counsel, The Securities Industry and Financial Markets Association, to Vanessa Countryman, Secretary, Commission, dated May 31, 2024, available at https://www.sec.gov/comments/4-698/4698-479631-1372454.pdf ("SIFMA Letter"); Letter from Jeffrey S. Davis, Senior Vice President, Principal Deputy General Counsel, Nasdaq, Inc. to Vanessa Countryman, Secretary, Commission, dated July 1, 2024, available at https://www.sec.gov/comments/4-698/4698-487351-1391254.pdf ("Nasdaq Letter"); See Letter from Brandon Becker, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, Commission, dated July 8, 2024, available at https://www.sec.gov/comments/4-698/4-698-d.htm ("SRO Letter").

### A. <u>Processing, Query, and Storage Requirements for Options Market Maker Quotes</u>

All commenters supported this aspect of the Proposed Cost Savings Amendments. FIF and CAT LLC supported this proposed change because as the Participants had stated in the Proposed Cost Savings Amendments "the vast majority of Options Market Maker Quote lifecycles do not involve any execution or allocation and usage data demonstrates that such data is very rarely accessed by regulators." FIF further supported "eliminating Options Market Maker Quotes from CAT" altogether and requested that the Commission and the Participants "conduct" and make public "a cost-benefit analysis of maintaining Options Market Maker Quotes in CAT vs. removing them from CAT."

CAT LLC stated that eliminating optimizations that are currently required to make Options Market Maker Quotes accessible to regulatory users via DIVER would result in significant savings. CAT LLC stated that the "Plan Processor estimates that the continued optimization of Options Market Maker Quotes to make them available via DIVER would cost approximately \$2.8 million per year. According to CAT LLC, this estimate consists of approximately (i) \$2.2 million per year in compute costs for producing the DIVER-specific hash partition copy of Options Market Maker Quotes, and (ii) \$600,000 per year in storage costs for one year's worth of DIVER-specific copies of Options Market Maker Quotes." CAT LLC further stated that it "does not believe such costs are justified given the multiple additional and less costly alternative means that exist for regulatory users to access such data." CAT LLC stated that although Options Market Maker Quotes would no longer be accessible via DIVER,

See FIF Letter at 2; SRO Letter at 2 and 5 (citing Notice, supra note 7).

FIF Letter at 2.

See SRO Letter at 5.

<sup>83 &</sup>lt;u>Id.</u>

Options Market Maker Quotes would remain accessible through BDSQL and Direct Read interfaces, which represent more cost-efficient methods of providing access to the data. A CAT LLC also stated that the "regulatory groups of each of the Participants have indicated that they are able to conduct their regulatory programs accessing Options Market Maker Quotations via BDSQL and/or Direct Read."

Further, CAT LLC stated that the Proposed Cost Savings Amendments will eliminate the following Plan Processor enrichments: "(i) derived next event timestamp; (ii) lifecycle sequence number; and (iii) the CAT Lifecycle ID (collectively, the "Eliminated Enrichments")." CAT LLC stated that only one Participant has used any of the three Eliminated Enrichments in connection with Options Market Maker Quotes, but that the Plan Processor will provide the existing code and/or logic required to derive the Eliminated Enrichments to the SEC and Participant regulators upon request. This logic would include written technical requirements explaining how regulators can generate the Eliminated Enrichments themselves, and CAT LLC stated that it "believes that regulators have demonstrated the technical ability to integrate this code into their own environments and to process data sets of this size in their regulatory and surveillance activities to date." Following approval of the Cost Savings Amendments, CAT LLC stated that the Plan Processor will not maintain the code or logic, but it will maintain a copy of each so that they may be provided to any regulators that might request them in the future.

<sup>4 &</sup>lt;u>Id.</u>

<sup>85 &</sup>lt;u>Id.</u>

<sup>86 &</sup>lt;u>Id.</u>

<sup>87</sup> Id

See SRO Letter at 6.

<sup>89 &</sup>lt;u>Id.</u>

CAT LLC clarified that only market maker quotes that are reported to CAT as quote events would be affected by the Proposed Cost Savings Amendments, and that market maker quotes reported to CAT as order events will not be impacted by this proposal and will continue to receive all enrichments and be fully available to regulatory users in DIVER. OCAT LLC stated that market maker quotes that are reported as quote events are primarily responsible for driving CAT operating costs. For example, over the last year, there has been an average of approximately 214 billion market maker quotes reported as quote events each day compared to an average of approximately 13 billion market maker quotes reported as order events each day. Additionally, CAT LLC stated that (i) quote events are clearly identifiable as quotes while it would be difficult for the Plan Processor to discern which order events represent market maker quotes, and (ii) the Eliminated Enrichments are not required to determine the correct sequence of events for quotes like they are for orders.

SIFMA also supported this aspect of the Proposed Cost Savings Amendments, stating that the "enormity of this data set . . . has created costs and challenges far beyond those envisioned when CAT was approved." SIFMA explained that the "quote-to-trade ratio in listed options markets is so large that the operational costs of linking quotes to trades is an unreasonable burden" that had not been supported by a cost-benefit analysis. <sup>94</sup> Moreover, SIFMA noted that "the ratio keeps increasing, with [its] member data showing the most recent peak of 32,000 quotes per trade in the U.S. options market in December 2023," a ratio that they

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<sup>&</sup>lt;u>Id.</u> at 7.

<sup>&</sup>lt;sup>91</sup> <u>Id.</u>

<sup>&</sup>lt;sup>92</sup> <u>Id.</u>

<sup>93</sup> SIFMA Letter at 2.

<sup>94 &</sup>lt;u>Id.</u> at 2-3.

order. SIFMA further expressed concern that there were no forces to "constrain the increase in this ratio" and stated that "certain SEC market structure initiatives might only accelerate the increase." Given the "extremely small number of quotes" with a "corresponding trade," SIFMA did not believe it was reasonable to spend so much on processing and storage costs for Options Market Maker Quotes, especially if such data would continue to be reported to the CAT and if "the SEC or a Participant can use the quote data as part of its surveillance or investigation patterns, albeit with the need to perform some additional computations."

Additionally, Nasdaq supported this proposed change and stated that Options Market Maker Quotes "are the single largest data source for the CAT and the cost impact of storing and processing Options Market Maker Quotes remains a significant percentage of overall CAT costs." Nasdaq further stated that if the proposed amendment is adopted, CAT is expected to save \$20 million related to options quotes. 99

CAT LLC reiterated the \$20 million annual savings and stated that "this number is based on an estimated 65 percent reduction in compute runtime associated with Options Exchange events, and an estimated 80 percent reduction in storage footprint through the elimination of versioned quote data (e.g., T+2 8AM version, Final, DIVER, and OLA copies)." CAT LLC further stated that the cost savings estimates reflect the Plan Processor's knowledge of current

<sup>&</sup>lt;sup>95</sup> <u>Id.</u> at 2 (citing CAT NMS Plan Approval Order, <u>supra</u> note 3, at 84750).

<sup>96 &</sup>lt;u>Id.</u> For example, SIFMA explained that the Commission's recent "tick size proposal has the potential to significantly expand the amount of quoting activity in the equities and listed options markets." <u>Id.</u> at 2 n.7.

<sup>97 &</sup>lt;u>Id.</u> at 2-3.

<sup>98 &</sup>lt;u>See</u> Nasdaq Letter at 2.

<sup>&</sup>lt;sup>99</sup> Id.

See SRO Letter at 3.

conditions and other factors, and that the estimated cost savings could change based on available AWS offerings or other variables.<sup>101</sup> Further, CAT LLC clarified that the Plan Processor would continue to perform ingestion validation on Options Market Maker Quotes, but would stop performing linkage validation.<sup>102</sup>

## B. <u>Storage for Raw Unprocessed Data and Interim Operational Copies of CAT Data</u> <u>Older Than 15 Days</u>

All commenters supported this aspect of the Proposed Cost Savings Amendments. <sup>103</sup> SIFMA further stated the Commission should consider "whether its recordkeeping requirements are appropriate" and recommended that the SEC "embark on a more comprehensive undertaking about what other data can be moved to more cost-effective storage solutions." <sup>104</sup>

FIF also stated that "further steps can be taken." For instance, FIF stated that, "[i]f the Operational Data does not provide any value to CAT Reporters<sup>106</sup> or to regulators after T+5, there is no reason to store this data after T+5." Conversely, if the Commission and the Participants issued a public report that "explains the regulatory value of maintaining this Operational Data," FIF stated that it would "agree with the proposal . . . to move the Operational Data to a more cost-effective storage tier." FIF further requested that the Commission and the Participants "publish an analysis as to whether this data could be stored in tiers within AWS S3,

<sup>&</sup>lt;sup>101</sup> <u>Id.</u>

<sup>102 &</sup>lt;u>Id.</u> at 4.

See, e.g., FIF Letter at 3; SIFMA Letter at 3; Nasdaq Letter at 2; SRO Letter at 2-7.

SIFMA Letter at 3.

FIF Letter at 3.

<sup>&</sup>quot;CAT Reporter" means "each national securities exchange, national securities association and Industry Member that is required to record and report information to the Central Repository pursuant to SEC Rule 613(c)." See CAT NMS Plan, supra note 3, at Section 1.1.

FIF Letter at 3.

<sup>&</sup>lt;sup>108</sup> <u>Id.</u>

such as Glacier or Glacier Deep Archive, that could be more cost effective than the AWS S3 Intelligent Tier, as proposed in the Participant filing."<sup>109</sup>

In addition, FIF stated that "enhanced transparency regarding the operation of the CAT system is necessary and appropriate" and expressed concern that "there could be other requirements that the Commission is imposing on the . . . Participants that either do not provide regulatory value or are beyond the scope of CAT." FIF requested that the Commission "provide clarification" as to why Industry Members and their customers should be "required to incur costs for storage of data that has no regulatory value." <sup>111</sup>

With regard to additional information requested on the cost calculations for moving

Operational Data older than 15 days to a different storage tier, CAT LLC explained that their \$1

million per year savings estimate is "based on current storage tier pricing differentials and a

1:1:8 ratio of the data between the three S3 storage tiers. Operational Data older than 15 days is

currently stored at the 'S3-FA' storage tier. AWS cloud offers three storage tiers that are

cheaper than the S3-FA storage tier, including Glacier Deep Archive. Moving Operational Data

older than 15 days from S3-FA to Glacier Deep Archive, as contemplated in the Cost Savings

Amendments, would result in storage savings of more than 90 percent the cost of continuing to

store such data in the S3-FA storage tier, representing cost savings of approximately \$1 million

per year."

CAT LLC further explained the storage tier pricing ratio of 1:1:8 and stated that

specific to storage cost estimates, S3 Intelligent Tier storage fees are allocated at a ratio of 1 (S3)

<sup>&</sup>lt;u>Id.</u>

<sup>110 &</sup>lt;u>Id.</u> at 3-4.

<sup>&</sup>lt;sup>111</sup> Id.

SRO Letter at 3-4.

Frequent Access): 1 (S3 Infrequent Access): 8 (S3 Archive Instant Access). 113 CAT LLC stated that "this ratio describes the current percentage distribution of data files between storage tiers, which is driven by regulatory usage." 114 Data files that are either new or that have recently been read by regulatory users are stored in S3 Frequent Access, and less frequently used files are moved to other S3 storage tiers based on usage. The Plan Processor's storage cost model is based on a 1:1:8 ratio across the S3 storage tiers, in accordance with current observed regulatory usage. If regulatory users begin to read older data files more frequently, then those files would be moved up to S3 Frequent Access, and the 1:1:8 ratio between the S3 storage tiers would change. 115 Because each S3 storage tier has its own cost-per-petabyte of data, any change in the 1:1:8 ratio based on regulatory usage would affect storage costs. 116

CAT LLC further stated that after moving raw unprocessed data and interim operational data older than 15 days to a more cost-effective storage tier, retrieving such data for regulators would require some "manual intervention" by the Plan Processor. CAT LLC noted that the Commission sought clarification on this "manual intervention", as this data is currently available "without manual intervention" in accordance with the CAT NMS Plan via the use of CAT data management APIs. CAT LLC stated that during the four year operation of the CAT, the Plan Processor had not observed any regulatory usage of the data in question, the Plan Processor would restore

See SRO Letter at 3.

<sup>114 &</sup>lt;u>Id.</u>

<sup>115 &</sup>lt;u>Id.</u>

<sup>&</sup>lt;sup>116</sup> Id.

See SRO Letter at 7.

<sup>118 &</sup>lt;u>Id.</u>

<sup>119 &</sup>lt;u>Id.</u>

archived data to an accessible storage tier so that it is available to and searchable by regulatory users directly. 120

### C. Provision of an Interim CAT-Order-ID on an "As Requested" Basis

All commenters supported this aspect of the Proposed Cost Savings Amendments.

Nasdaq stated that this proposal could save "\$2[sic] by changing the availability of the interim CAT-Order-ID from a daily basis to an as requested basis." CAT LLC stated that by multiplying the "\$8,000 to \$10,000 cost per day by 252 trading days per year," the "Plan Processor estimates that it costs approximately \$2 million per year to generate an interim CAT-Order-ID on a daily basis." The Proposed Cost Savings Amendments would change this from an ongoing daily expense to an "as requested" expense, which the Plan Processor estimates would cost between \$10,000 and \$12,000 per request. CAT LLC stated that this estimate is "based on on-demand AWS rates for a typical day with average data volumes, less Options Market Maker Quotes data volume and its associated storage needs. CAT LLC noted that the Plan Processor did not estimate the number of requests that it may receive from regulators each year to generate an interim CAT-Order-ID, so the estimated \$2 million in annual savings would decrease depending on number of requests received from regulators.

FIF agreed with the Participants that "the substantial cost of delivering an interim CAT-Order-ID on a continuous basis outweighs any regulatory benefit." FIF also requested that the

See Nasdaq Letter at 2.

124 <u>Id.</u>

<sup>120 &</sup>lt;u>Id.</u>

See SRO Letter at 4.

<sup>&</sup>lt;sup>123</sup> Id.

<sup>&</sup>lt;sup>125</sup> Id.

FIF Letter at 4 (citing Notice, <u>supra</u> note 7); <u>see also SIFMA Letter at 4 ("This is yet another illustration of incurring costs without a corresponding regulatory benefit.").</u>

Commission and the Participants "publish a cost-benefit analysis of the current and proposed mandates relating to the assignment of an interim CAT-Order-ID," including an analysis of why assignment of an interim CAT-Order-ID would be appropriate even on an "as requested" basis. 127

SIFMA stated that the Participants had proposed to "provide an interim CAT-Order-ID on an as needed basis and in doing so would realize substantial cost savings." SIFMA therefore stated that the proposed changes were "essential and long overdue" and stated that "[d]ecisions made by the SEC years ago about what it thought it needed in terms of the timeliness and availability of interim data must be re-examined by the SEC in light of its real-world experience and its understanding of the incremental costs to provide such data."

# D. <u>Codification and Expansion of Exemptive Relief Permitting Deletion of Industry</u> Test Data Older Than Three Months

Two commenters supported this aspect of the Proposed Cost Savings Amendments.

SIFMA stated that it supported this change, "as it incorporates into the [CAT NMS] Plan previously-granted relief as well as applies that relief to test data used in connection with the CAT CAIS." FIF stated that it supported this change "because storage of test data in CAT is not relevant for regulatory surveillance." FIF further stated that it supported "deletion of all test data after one week" and requested that the Commission and the Participants "publish a cost-benefit analysis of any mandate to retain test data beyond one week," which analysis should

FIF Letter at 4.

SIFMA Letter at 3.

<sup>129 &</sup>lt;u>Id.</u> at 3-4.

<sup>&</sup>lt;sup>130</sup> Id. at 4.

FIF Letter at 5.

"identify any use cases that would involve access to test data beyond one week, including the regulatory purpose." 132

#### E. Additional Information on the Participants' Proposed Cost Savings Amendments

In response to the Commission staff's request for additional details regarding their cost savings calculations, CAT LLC stated that "all cost and savings projections necessarily are good faith estimates based on current information and reflect the current state and costs of CAT operations, including the current number of exchanges." CAT LLC also stated that "it would be unduly burdensome and not necessarily meaningful to require CAT LLC and the Plan Processor to provide separate cost estimates attributable to each interdependent subcomponent of a particular proposal...All of the cost savings estimates for the Cost Savings Amendments are based on, among other factors: current CAT NMS Plan requirements; reporting by Participants, Industry Members, and market data providers; observed data rates and volumes; current storage and compute pricing discounts, compute reservations, and cost savings plans (i.e., including savings attributable to the daily On-Demand Capacity Reservations and Compute Savings Plans); and associated cloud fees. Actual future savings could be more or less than estimated due to changes in any of these variables." 134

#### F. Other Comments

All commenters requested that additional steps be taken to further manage and reduce CAT operating costs. <sup>135</sup> For instance, SIFMA suggested that the Commission and the Participants should "assess their own CAT usage patterns and needs to identify further cost

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FIF Letter at 5.

See SRO Letter at 2.

<sup>134</sup> Id. at 2-3.

See, e.g., FIF Letter at 2; SIFMA Letter at 1; Nasdaq Letter at 2.

saving measures."<sup>136</sup> SIFMA stated that the CAT "should be operated to meet the reasonable and legitimate needs of regulators, and not as a monolith to address any regulatory use case regardless of the costs."<sup>137</sup> SIFMA also stated that the Participants and the Commission could "provide Industry Members with a more meaningful opportunity to contribute their experience and expertise to the CAT's budget setting and cost savings processes."<sup>138</sup> Specifically, SIFMA recommended that the Participants establish a separate working group that includes Industry Members to focus on ways the CAT system can be made more efficient from a cost perspective while still achieving its goals. <sup>139</sup> "Without more direct involvement by Industry Members in the CAT budgeting process," SIFMA stated that "there is an insufficient structural framework and incentives to bring CAT costs under control."<sup>140</sup>

FIF expressed similar concerns.<sup>141</sup> FIF stated that it was important for the Commission to "provide transparency about any proposed CAT processing changes and the associated costs of those changes."<sup>142</sup> FIF stated that the Commission "should not impose CAT reporting requirements that are beyond the scope of Commission Rule 613 and the CAT NMS Plan" and that "[p]roposed changes to current CAT processing or reporting requirements that could involve

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See, e.g., SIFMA Letter at 2.

<sup>137 &</sup>lt;u>Id.</u>

See, e.g., SIFMA Letter at 1.

<sup>139 &</sup>lt;u>Id.</u>

<sup>140 &</sup>lt;u>Id.</u>

These concerns were also set forth in a previous comment letter to the Commission that was jointly submitted by SIFMA and FIF. <u>See</u> FIF Letter, at 5 n.19; <u>see also</u> Letter from Joseph Corcoran, Managing Director, Associate General Counsel, and Ellen Greene, Managing Director, Equities & Options Market Structure, SIFMA, and Howard Meyerson, Managing Director, FIF, to Secretary, Commission, dated July 31, 2023, <u>available at https://www.sec.gov/comments/4-698/4698-238359-498762.pdf</u>.

FIF Letter at 5.

further significant increases in CAT operating costs should be subject to an appropriate costbenefit analysis that is included as part of a CAT NMS Plan amendment."<sup>143</sup>

The SRO Letter and Nasdaq Letter reiterated the Participants' points in the Proposed Cost Savings Amendments regarding the impact on regulatory usage by stating that the proposals would have a minimal impact on regulatory usage and that the Participants believe that the expected savings substantially outweigh the minimal regulatory impact of the proposed changes. Both commenters further stated that they note that SIFMA and FIF are in support of the Proposed Cost Savings Amendments. Amendments.

IV. Proceedings to Determine Whether to Approve or Disapprove the Proposed Amendment

The Commission is instituting proceedings pursuant to Rule 608(b)(2)(i) of Regulation NMS, <sup>146</sup> and Rules 700 and 701 of the Commission's Rules of Practice, <sup>147</sup> to determine whether to disapprove the Proposed Cost Savings Amendments or to approve the Proposed Cost Savings Amendments with any changes or subject to any conditions the Commission deems necessary or appropriate. Institution of proceedings does not indicate that the Commission has reached any conclusions with respect to any of the issues involved. Rather, the Commission seeks and encourages interested persons to provide additional comment on the Proposed Cost Savings Amendments to inform the Commission's analysis.

Rule 608(b)(2) of Regulation NMS provides that the Commission "shall approve a national market system plan or proposed amendment to an effective national market system plan,

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<sup>143 &</sup>lt;u>Id.</u>

See Nasdaq Letter at 2; SRO Letter at 2.

See Nasdaq Letter at 2; SRO Letter at 8.

<sup>17</sup> CFR 242.608(b)(2)(i).

<sup>17</sup> CFR 201.700; 17 CFR 201.701.

with such changes or subject to such conditions as the Commission may deem necessary or appropriate, if it finds that such plan or amendment is necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanisms of, a national market system, or otherwise in furtherance of the purposes of the [Exchange] Act."<sup>148</sup> Rule 608(b)(2) further provides that the Commission shall disapprove a national market system plan or proposed amendment if it does not make such a finding.<sup>149</sup> In the Notice, the Commission sought comment on the Proposed Cost Savings Amendments, including whether the Proposed Cost Savings

Amendments are consistent with the Exchange Act.<sup>150</sup> In this order, pursuant to Rule 608(b)(2)(i) of Regulation NMS,<sup>151</sup> the Commission is providing notice of the grounds for disapproval under consideration:

- Whether, consistent with Rule 608 of Regulation NMS, the Participants have demonstrated how the Proposed Cost Savings Amendments are necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanisms of, a national market system, or otherwise in furtherance of the purposes of the Exchange Act; 152
- Whether the Participants have demonstrated how the Proposed Cost Savings

  Amendments are consistent with Section 6(b)(5)<sup>153</sup> and Section 15A(b)(6)<sup>154</sup> of the

<sup>&</sup>lt;sup>148</sup> 17 CFR 242.608(b)(2).

<sup>&</sup>lt;sup>149</sup> Id

See Notice, <u>supra</u> note 7, at 26997-98.

<sup>17</sup> CFR 242.608(b)(2)(i).

<sup>17</sup> CFR 242.608(b)(2).

<sup>15</sup> U.S.C. 78f(b)(5).

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

Exchange Act, which require that the rules of a national securities exchange or national securities association be "designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest";

- Whether the Participants have demonstrated how the Proposed Cost Savings

  Amendments are consistent with Section 11A of the Exchange Act, 155 which directs the

  Commission, "having due regard for the public interest, the protection of investors, and
  the maintenance of fair and orderly markets, to use its authority under this chapter to
  facilitate the establishment of a national market system . . . in accordance with the
  findings and to carry out the objectives" expressed by Congress, including, among other
  things, that "[i]t is in the public interest and appropriate for the protection of investors
  and the maintenance of fair and orderly markets to assure . . . (i) economically efficient
  execution of securities transactions; [and] (ii) fair competition among brokers and
  dealers, among exchange markets, and between exchange markets and markets other than
  exchange markets," as well as "to authorize or require self-regulatory organizations to act
  jointly with respect to matters as to which they share authority under this chapter in
  planning, developing, operating, or regulating a national market system (or a subsystem
  thereof) or on or more facilities thereof";
- Whether the Participants have demonstrated how the Proposed Cost Savings

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

Amendments are consistent with Section 17 of the Exchange Act<sup>156</sup> and Rules 17a-1 and 17a-4,<sup>157</sup> which set forth requirements for national securities exchanges, national securities associations, brokers, and dealers related to making, keeping, furnishing, and disseminating records;

- Whether and if so how, the Proposed Cost Savings Amendments would affect efficiency, competition, or capital formation, which analysis is required by Rule 613 under the Exchange Act<sup>158</sup>; and
- Whether modifications to the Proposed Cost Savings Amendments, or conditions to its approval, would be necessary or appropriate in the public interest, for the protection of investors and the maintenance of orderly markets, to remove impediments to, and perfect the mechanisms of, a national market system, or otherwise in furtherance of the Exchange Act. 159

Under the Commission's Rules of Practice, the "burden to demonstrate that a NMS plan filing is consistent with the Exchange Act and the rules and regulations issued thereunder . . . is on the plan participants that filed the NMS plan filing." The description of the NMS plan filing, its purpose and operation, its effect, and a legal analysis of its consistency with applicable requirements must all be sufficiently detailed and specific to support an affirmative Commission finding. Any failure of the plan participants that filed the NMS plan filing to provide such detail and specificity may result in the Commission not having a sufficient basis to make an

<sup>15</sup> U.S.C. 78q.

<sup>17</sup> CFR 240.17a-1.

<sup>17</sup> CFR 242.613(a)(5).

<sup>17</sup> CFR 242.608(b)(2).

<sup>160 17</sup> CFR 201.701(b)(3)(ii).

<sup>161 &</sup>lt;u>Id.</u>

affirmative finding that the NMS plan filing is consistent with the Exchange Act and the applicable rules and regulations thereunder.<sup>162</sup>

## V. Commission's Solicitation of Comments

The Commission requests that interested persons provide written submissions of their views, data, and arguments with respect to the issues identified above, as well as any other concerns they may have with the Proposed Cost Savings Amendments. In particular, the Commission invites the written views of interested persons concerning whether the Proposed Cost Savings Amendments are consistent with the Exchange Act, the rules and regulations thereunder, or any other provisions of the CAT NMS Plan. The Commission asks that commenters address the sufficiency and merit of the Participants' statements in support of the Proposed Cost Savings Amendments, in addition to any other comments they may wish to submit about the proposed rule changes.

To consider the impact of the Proposed Cost Savings Amendments on efficiency, competition, and capital formation, <sup>163</sup> the Commission requests additional information. In particular:

• To understand the effect of the Proposed Cost Savings Amendments on the operational efficiency of the Central Repository (and the follow-on effects on market efficiency, competition, and capital formation), the Commission requests additional details and underlying calculations used to estimate the cost savings as well as information on the costs to the Plan Processor of implementing each element of each of the proposed amendments (e.g., some amendments would require coding changes, which would

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<sup>&</sup>lt;sup>162</sup> Id.

The Commission is required to consider the impact of amendments to the CAT NMS Plan on efficiency, competition, and capital formation. <u>See</u> 17 CFR 242.613(a)(5).

impose costs). The Commission also requests more specific information on data processes, such as processes for identifying and tracking linkage-related errors without the use of an interim CAT-Order-ID, that inform on how the Proposed Cost Savings Amendments affect operational efficiency.

• To understand the effect of the Proposed Cost Savings Amendments on regulatory efficiency (and follow-on effects on investor protection and capital formation), in addition to the three "Eliminated Enhancements" discussed in the SRO Letter, <sup>164</sup> the Commission requests more information on data elements—namely, a list of fields and variables for various event types in current CAT Data—that would no longer be directly available, would only be available indirectly (via notifications or making of requests to the Plan Processor or other entities), or would be available on a delay relative to today. The Commission also requests information on existing substitutes for such data elements (e.g., substitutes for interim CAT-Order-ID), and on how these substitutes could be used by data users to alleviate any reductions in regulatory efficiency.

Although there do not appear to be any issues relevant to approval or disapproval that would be facilitated by an oral presentation of views, data, and arguments, the Commission will consider, pursuant to Rule 608(b)(2)(i) of Regulation NMS, <sup>165</sup> any request for an opportunity to make an oral presentation. <sup>166</sup>

Interested persons are invited to submit written data, views, and arguments regarding whether the Proposed Cost Savings Amendments should be approved or disapproved by [insert

<sup>165</sup> 17 CFR 242.608(b)(2)(i).

See SRO Letter at 5.

Rule 700(c)(ii) of the Commission's Rules of Practice provides that "[t]he Commission, in its sole discretion, may determine whether any issues relevant to approval or disapproval would be facilitated by the opportunity for an oral presentation of views." 17 CFR 201.700(c)(ii).

date 21 days after publication in the <u>Federal Register</u>]. Any person who wishes to file a rebuttal to any other person's submission must file that rebuttal by [insert date 35 days after publication in the <u>Federal Register</u>]. Comments may be submitted by any of the following methods:

- Use the Commission's internet comment form (<a href="https://www.sec.gov/rules/sro.shtml">https://www.sec.gov/rules/sro.shtml</a>); or
- Send an e-mail to rule-comments@sec.gov. Please include file number 4-698 (CAT Cost Savings Amendment) on the subject line.

#### Paper Comments:

**Electronic 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 4-698 (CAT Cost Savings Amendment). 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 (<a href="https://www.sec.gov/rules/sro.shtml">https://www.sec.gov/rules/sro.shtml</a>). 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 also will be available for inspection and copying at the Participants' principal offices. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in

part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to File Number 4-698 (CAT Cost Savings Amendment) and should be submitted on or before [insert date 21 days after publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.  $^{167}$ 

# J. Matthew DeLesDernier,

Deputy Secretary.

17 CFR 200.30-3(a)(85).

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