SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-98290; File No. 4-698]

Joint Industry Plan; Order Approving an Amendment to the National Market System Plan Governing the Consolidated Audit Trail; Notice

September 6, 2023.

I. Introduction

On March 13, 2023, the Consolidated Audit Trail, LLC ("CAT LLC"), on behalf of the Participants ¹ to the National Market System Plan Governing the Consolidated Audit Trail ("CAT NMS Plan" or "Plan"),2 filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 11A of the Exchange Act 3 and Rule 608 of Regulation National Market System ("Regulation NMS") thereunder,4 a proposed amendment to the CAT NMS Plan ("Proposed Amendment") to implement a revised funding model ("Executed Share Model") for the consolidated audit trail ("CAT") 5 and to establish a fee schedule for Participant

CAT fees in accordance with the Executed Share Model ("Proposed Participant Fee Schedule").⁶ The Proposed Amendment was published for comment in the **Federal Register** on March 21, 2023.⁷

On June 16, 2023, the Commission instituted proceedings pursuant to Rule 608(b)(2)(i) of Regulation NMS ⁸ to determine whether to disapprove the Proposed Amendment or to approve the Proposed Amendment with any changes or subject to any conditions the Commission deems necessary or appropriate after considering public comment ("OIP").⁹

This order approves the Proposed Amendment.

II. Background

On July 11, 2012, the Commission adopted Rule 613 of Regulation NMS, which required the SROs to submit a national market system ("NMS") plan to create, implement and maintain a consolidated audit trail that would capture customer and order event information for orders in NMS securities. 10 On November 15, 2016, the Commission approved the CAT NMS Plan.¹¹ Under the CAT NMS Plan, the Operating Committee of the Company, of which each Participant is a member, has the discretion (subject to the funding principles set forth in the Plan) to establish funding for the Company to operate the CAT, including establishing fees to be paid by the Participants and Industry Members. 12

Under the CAT NMS Plan, CAT fees are to be implemented in accordance with various funding principles, including an "allocation of the Company's related costs among Participants and Industry Members that is consistent with the Exchange Act taking into account . . . distinctions in the securities trading operations of Participants and Industry Members and

their relative impact upon the Company resources and operations" and the "avoid[ance of] any disincentives such as placing an inappropriate burden on competition and reduction in market quality." 13 The Plan specifies that, in establishing the funding of the Company, the Operating Committee shall establish "a tiered fee structure in which the fees charged to: (1) CAT Reporters 14 that are Execution Venues,¹⁵ including ATSs,¹⁶ are based upon the level of market share; (2) Industry Members' non-ATS activities are based upon message traffic; and (3) the CAT Reporters with the most CATrelated activity (measured by market share and/or message traffic, as applicable) are generally comparable (where, for these comparability purposes, the tiered fee structure takes into consideration affiliations between or among CAT Reporters, whether Execution Venues and/or Industry Members)." 17

On May 15, 2020, the Commission adopted amendments to the CAT NMS Plan designed to increase the Participants' financial accountability for the timely completion of the CAT ("Financial Accountability Amendments").18 The Financial Accountability Amendments added Section 11.6 to the CAT NMS Plan to govern the recovery from Industry Members of any fees, costs, and expenses (including legal and consulting fees, costs and expenses) incurred by or for the Company in connection with the development, implementation and operation of the CAT from June 22, 2020 until such time that the Participants have completed Full Implementation of CAT NMS Plan Requirements 19 ("Post-Amendment

¹The Participants are: BOX Exchange LLC, Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe C2 Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe EDGX Exchange, Inc., The Financial Industry Regulatory Authority, Inc. ("FINRA"), 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. (collectively, the "Participants," "self-regulatory organizations," or "SROe")

² The CAT NMS Plan is a national market system plan approved by the Commission pursuant to Section 11A of the Securities Exchange Act of 1934 ("Exchange Act") and the rules and regulations thereunder. 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, 81 FR at 84943–85034. The CAT NMS Plan 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 ("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). The latest version of the CAT NMS Plan is available at https:// catnmsplan.com/about-cat/cat-nms-plan.

³ 15 U.S.C. 78k–1.

^{4 17} CFR 242.608.

⁵ The Proposed Amendment modifies the existing funding model in Article XI. of the CAT NMS Plan.

⁶ See Letter from Brandon Becker, Chair, CAT NMS Plan Operating Committee, to Vanessa Countryman, Secretary, Commission (Mar. 13, 2023) ("Transmittal Letter").

⁷ See Securities Exchange Act Release No. 97151 (Mar. 15, 2023), 88 FR 17086 (Mar. 21, 2023) ("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-a.htm.

^{8 17} CFR 242.608(b)(2)(i).

⁹ See Securities Exchange Act Release No. 97750 (June 16, 2023), 88 FR 41142 (June 23, 2023). Comments received in response to the OIP can be found on the Commission's website at https://www.sec.gov/comments/4-698/4-698-a.htm.

¹⁰ 17 CFR 242.613.

¹¹ See CAT NMS Plan, supra note 2.

¹² The CAT NMS Plan defines "Industry Member" as "a member of a national securities exchange or a member of a national securities association." See CAT NMS Plan, supra note 2, at Section 1.1. See also id. at Section 11.1(b).

¹³ *Id.* at Section 11.2(b) and (e).

¹⁴ The CAT NMS Plan defines "CAT Reporter" as "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)." *Id.* at Section 1.1.

¹⁵ The CAT NMS Plan defines "Execution Venue" as "a Participant or an alternative trading system ('ATS') (as defined in Rule 300 of Regulation ATS) that operates pursuant to Rule 301 of Regulation ATS (excluding any such ATS that does not execute orders)." *Id.*

⁶ Id.

¹⁷ CAT NMS Plan, *supra* note 2, at Section 11.2(c). *See id.* at Article XI for additional detail.

¹⁸ See Securities Exchange Act Release No. 88890, 85 FR 31322 (May 22, 2020).

^{19 &}quot;Full Implementation of CAT NMS Plan Requirements" means "the point at which the Participants have satisfied all of their obligations to build and implement the CAT, such that all CAT system functionality required by Rule 613 and the CAT NMS Plan has been developed, successfully tested, and fully implemented at the initial Error Rates specified by Section 6.5(d)(i) or less, including functionality that efficiently permits the

Expenses"). Section 11.6 establishes target deadlines for four Financial Accountability Milestones (Periods 1, 2, 3 and 4) ²⁰ and reduces the amount of fee recovery available to the Participants if these deadlines are missed.²¹

III. Discussion and Commission Findings

After careful review, the Commission, pursuant to Section 11A of the Exchange Act,22 and Rule 608(b)(2)23 thereunder, is approving the Proposed Amendment. Section 11A of the Exchange Act authorizes the Commission, by rule or order, to authorize or require the self-regulatory organizations to act jointly with respect to matters as to which they share authority under the Exchange Act in planning, developing, operating, or regulating a facility of the national market system.²⁴ Řule 608 of Regulation NMS authorizes two or more SROs, acting jointly, to file with the Commission proposed amendments to an effective NMS plan,25 and further provides that the Commission shall approve an amendment to an effective NMS plan if it finds that the 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.26

The Participants have sufficiently demonstrated that the proposed allocation of fees is reasonable. There are a number of potential approaches to allocating the costs of operating the CAT, all of which have relative strengths and weaknesses. In adopting Rule 613 and approving the CAT NMS Plan, the Commission determined that the CAT was appropriate in order to enable the SROs and the Commission to

Participants and the Commission to access all CAT Data required to be stored in the Central Repository pursuant to Section 6.5(a), including Customer Account Information, Customer-ID, Customer Identifying Information, and Allocation Reports, and to analyze the full lifecycle of an order across the national market system, from order origination through order execution or order cancellation, including any related allocation information provided in an Allocation Report. This Financial Accountability Milestone shall be considered complete as of the date identified in a Quarterly Progress Report meeting the requirements of Section 6.6(c)." CAT NMS Plan, supra note 2, at Section 1.1.

fulfill their responsibilities to oversee the equities and options markets. The CAT NMS Plan requires both Execution Venues (which include the Participants) and Industry Members (which include CAT Executing Brokers) to fund the CAT. The proposed one-third allocation of CAT fees to the applicable Participant in a transaction, the CAT Executing Broker for the buyer in a transaction and the CAT Executing Broker for the seller in a transaction, assesses an equal fee to the three primary roles in a transaction: the buyer, seller and market regulator. In our view, allocating the costs for the CAT among the three parties who play significant roles in transactions reportable to the CAT in this manner represents a reasonable method of allocating costs among the parties who participate in and benefit from those markets.

Commenters expressed concern that the Participant exchanges and FINRA would pass their share of costs on to Industry Members. But the Exchange Act expressly contemplates the ability of the Participants to recoup the costs of fulfilling their statutory obligations under the Exchange Act. And, as we explained in adopting Rule 613 and approving the CAT NMS Plan, the CAT is important to the performance of these regulatory activities in modern, interconnected markets, to the ultimate benefit of investors and market participants. Moreover, these costs will not be unchecked. The Participants must file their proposed rule changes relating to fees with the Commission. Those proposed rule changes are published by the Commission and there is an opportunity for public comment. CAT fees, like any fees the Participants collect from their members to fund their SRO responsibilities in market and member regulation, must be consistent with applicable statutory standards under the Exchange Act, including being reasonable, equitable and not unfairly discriminatory.

We also conclude that the use of executed equivalent share volume provides a reasonable basis for the calculation of these fees. Executed equivalent share volume is readily determinable and—because it is based on trading activity, which impacts CAT costs—provides a reasonable proxy for the costs to CAT, allowing CAT Reporters to be assessed fees corresponding to the cost burden they impose on the CAT. The use of CAT Executing Brokers is also appropriate because the proposed Executed Share Model is based on executed equivalent shares (emphasis added). Therefore, charging the CAT Executing Brokers would reflect their executing role in

each transaction, which is already recorded in transaction reports from the exchanges and FINRA's equity trade reporting facilities for calculating the CAT fees. Because such entities are already identified and their CAT fees are known, this method could streamline the billing process and allow such entities to calculate their own fees. We also conclude that the division of fees into Prospective CAT Fees and the Historical CAT Assessment provides a reasonable method of allowing Participants to recoup their significant expenditures on the development of CAT to date while ensuring funding for future operations of the system. And the provision of fee calculation information, approach to billing and collection of fees, conforming changes and the Proposed Participant Fee Schedule are all reasonable. The Commission is therefore approving the Proposed Amendment.27

A. Funding Model

1. Overview

CAT LLC proposes to replace the funding model set forth in Article XI of the CAT NMS Plan ("Original Funding Model") with the Executed Share Model. The Original Funding Model involved a bifurcated approach, where costs associated with building and operating the CAT would be borne by (1) Industry Members (other than alternative trading systems ("ATSs") that execute transactions in Eligible Securities ("Execution Venue ATSs")) through fixed tiered fees based on message traffic for Eligible Securities, and (2) Participants and Industry Members that are Execution Venue ATSs for Eligible Securities through fixed tiered fees based on market share.²⁸ In contrast, the Executed Share Model would charge fees based on the executed equivalent share volume of transactions in Eligible Securities.²⁹ In addition, instead of charging fees to Industry Members, under the Executed Share Model, fees would be charged to each Industry Member that is a CAT Executing Broker 30 for the buyer in a transaction in Eligible Securities ("CAT Executing Broker for the Buyer" or "CEBB") and each Industry Member that is the CAT Executing Broker for the seller in a transaction in Eligible

 $^{^{20}\,}See$ CAT NMS Plan, supra note 2, at Section 11.6(a)(i).

 $^{^{21}}$ Id. at Section 11.6(a)(ii) and (iii).

^{22 15} U.S.C. 78k-1.

^{23 17} CFR 242.608(b)(2).

²⁴ See 15 U.S.C. 78k-1(a)(3)(B).

²⁵ See 17 CFR 242.608.

²⁶ See 17 CFR 242.608(b)(2).

²⁷ Id.

 $^{^{28}\,}See$ CAT NMS Plan, supra note 2, at Section 11.3(a) and (b).

 $^{^{29}\,}See$ Notice, supra note 7, 88 FR at 17086.

³⁰ See infra Section III.A.4. for the definition of CAT Executing Broker.

Securities ("CAT Executing Broker for the Seller" or "CEBS").³¹

Under the Executed Share Model, CAT LLC proposes to establish two categories of CAT fees. The first category of CAT fees would be fees ("CAT Fees") payable by Participants and Industry Members that are CAT Executing Brokers for the Buyer and for the Seller with regard to CAT costs not previously paid by the Participants ("Prospective CAT Costs").32 The second category of CAT fees would be fees ("Historical CAT Assessments") to be payable by Industry Members that are CAT Executing Brokers for the Buyer and for the Seller with regard to CAT costs previously paid by the Participants ("Past CAT Costs").33

For each category of fees, each CEBB and each CEBS will be required to pay a CAT fee for each such transaction in Eligible Securities in the prior month based on CAT Data.34 The CEBB's CAT fee or CEBS's CAT fee (as applicable) for each transaction in Eligible Securities will be calculated by multiplying the number of executed equivalent shares in the transaction by one-third and by the reasonably determined Fee Rate. 35 as described below.36 Participants would incur CAT Fees only for Prospective CAT Costs and the Participant CAT Fee will be calculated by multiplying the number of executed equivalent shares in the transaction by one-third and by the reasonably determined Fee Rate.37 The Participants' one-third share of Historical CAT Costs 38 and such other additional Past CAT Costs as reasonably determined by the Operating Committee will be paid by the cancellation of loans made to the Company on a pro rata basis based on the outstanding loan amounts due under the loans.³⁹

FINRA CAT would be responsible for calculating the CAT fees and submitting invoices to the CAT Executing Brokers based on this CAT Data. 40 All data used to calculate the fees under the Executed Share Model would be CAT Data, and, therefore, it would be directly available through the CAT to FINRA CAT for calculating CAT fees. 41

Once the Proposed Amendment has been approved by the Commission, the Participants would separately file proposed rule filings pursuant to Section 19(b) of the Exchange Act 42 to establish the amounts of the proposed CAT Fees and Historical CAT Assessments to be charged to Industry Members, subject to the satisfaction of applicable Financial Accountability Milestones as set forth in Section 11.6 of the CAT NMS Plan and the implementation of the billing and collection system for the CAT fees. 43 In each proposed rule filing, if the Participants seek to recover amounts under the Financial Accountability Milestones, they would need to discuss their completion of the applicable milestone.44

2. Allocation of Fee Among Participants and Industry Members

Under the Executed Share Model, CAT fees would be allocated one-third to the applicable Participant, one-third to the CEBS and one-third to the CEBB of a transaction. Certain commenters opposed the proposed allocation.⁴⁵

FINRA stated that, while the Proposed Amendment justified the fairness of the Executed Share Model because it would operate like other fees, like FINRA's Trading Activity Fee ("TAF"), Section 31 fees, and the options regulatory fee, 46 the Proposed Amendment did not support why those fee frameworks should be used as a model in this context.47 For example, FINRA stated that the TAF is designed to recover the costs of FINRA's regulatory activities, while the CAT fees are intended to align with the costs to build, operate and administer the CAT.48 Further, FINRA stated that the Proposed Amendment has insufficiently explained the connection between the TAF and CAT fees, merely stating that they are similar fees because they are transaction-based fees used to provide funding for regulatory costs. 49 FINRA stated that "CAT LLC's observations superficially focus on the fact that these fees also use transaction-based metrics (and may be assessed on members) and neglects other factors relevant to the analysis including, for example, that these fees are used in combination with other funding mechanisms and metrics to support an overall funding framework." 50

Another commenter stated that the proposed CAT funding model cannot be compared to Section 31 fees, the TAF, or the options regulatory fee because the commenter believes that CAT fees appear to be unconstrained and out of the industry's control. ⁵¹ The commenter explained that, unlike the proposed CAT fees, Section 31 fees are based on an annual budget set by Congress and the options regulatory fee is only applied to customer transactions and thus can be easily passed-on to other market participants (unlike CAT fees for market making activity). ⁵² Additionally,

 $^{^{31}\,}See$ Notice, supra note 7, 88 FR at 17087.

³² Id. at 17086; see also proposed Section 11.3(a). The defined term "CAT Fees" applies specifically to CAT fees related to Prospective CAT Costs. Id.

 $^{^{33}\,}See$ Notice, supra note 7, 88 FR at 17086; see also proposed Section 11.3(b).

³⁴ See Notice, supra note 7, 88 FR at 17093; see also proposed Section 11.3(a)(iii), proposed Section 11.3(b)(iii)

³⁵ See infra Section III.A.5.a. (Prospective CAT Fees—Fee Rate Formula) for the definition and description of the calculation of the Fee Rate. See also infra notes 1100–1102 and accompanying text (stating that the anticipated CAT Fee Rate and the fee rate for Historical CAT Assessments are expected to be relatively small).

³⁶ See Notice, supra note 7, 88 FR at 17095; see also proposed Section 11.3(a)(iii), proposed Section 11.3(b)(iii)

³⁷ See Notice, supra note 7, 88 FR at 17094; see also proposed Section 11.3(a)(ii).

³⁸ The actual amount of Past CAT Costs to be recovered through the Historical CAT Assessments would be reduced by an amount of "Excluded Costs." The resulting amount would be defined as "Historical CAT Costs" in proposed Section 11.3(b)(i)(C) of the CAT NMS Plan. See infra Section III.A.6.a. for a discussion of Historical CAT Costs.

³⁹ See proposed Section 11.3(b)(ii).

 $^{^{40}\,}See$ Notice, supra note 7, 88 FR at 17088.

⁴¹ *Id*.

⁴² 15 U.S.C. 78s(b).

⁴³ See Notice, supra note 7, 88 FR at 17086, 7122

⁴⁴Proposed Section 11.3(b)(iii)(B)(III) would prohibit any Participant from filing proposed rule filings pursuant to Section 19(b) of the Exchange Act regarding any Historical CAT Assessment until any applicable Financial Accountability Milestone in Section 11.6 of the CAT NMS Plan has been satisfied.

⁴⁵ See Letters to Vanessa Countryman, Secretary, Commission, from Stephen John Berger, Managing Director, Global Head of Government and Regulatory Policy, Citadel Securities, dated July 14, 2023 ("Citadel July Letter"); August 22, 2023 ("Citadel August Letter"); Marcia E. Asquith, Corporate Secretary, EVP, Board and External Relations, FINRA, dated May 25, 2023 ("FINRA May 2023 Letter"); April 11, 2023 ("FINRA April 2023 Letter"); and June 22, 2022 ("FINRA June 2022 Letter") (the FINRA June 2022 Letter was submitted in response to the prior funding proposal and was attached and incorporated by reference in the FINRA April 2023 Letter); Ellen Greene, Managing Director, Equities & Options Market Structure, and Joseph Corcoran, Managing Director, Associate General Counsel, SIFMA, dated July 13, 2023 ("SIFMA July 2023 Letter"); June 5, 2023 ("SIFMA June 2023 Letter"); May 2, 2023 ("SIFMA May 2023 Letter"); January 12, 2023 ("SIFMA January 2023 Letter"); December 14, 2022 ("SIFMA December

²⁰²² Letter"); October 7, 2022 ("SIFMA October 2022 Letter"); and June 22, 2022 ("SIFMA June 2022 Letter") (the SIFMA June 2022 Letter, SIFMA October 2022 Letter, SIFMA December 2022 Letter and SIFMA January 2023 Letter were submitted in response to the prior funding proposal and incorporated by reference in the SIFMA May 2023 Letter); Joanna Mallers, Secretary, FIA Principal Traders Group, dated July 14, 2023 ("FIA Letter"); Douglas A. Cifu, Chief Executive Officer, Virtu Financial, dated July 13, 2023 ("Virtu Letter"). See infra note 58.

⁴⁶ See Notice, supra note 7, 88 FR at 17122.

⁴⁷ See FINRA June 2022 Letter at 4.

⁴⁸ See FINRA April 2023 Letter at 8.

 $^{^{49}}$ Id. The commenter also stated that "it is unclear how assessing on FINRA the largest allocation of the SRO portion of CAT expenses 'provides funding for regulatory costs' in any reasonable and equitable sense comparable to the TAF . . ." Id.

⁵⁰ FINRA May 2023 Letter at 3.

⁵¹Citadel July Letter at 27.

⁵² *Id.* The commenter also stated that FINRA has sought to avoid increases in the TAF. *Id.*

the commenter stated that there is no precedent for fees to be allocated to Industry Members in perpetuity, stating that this would contravene the Exchange Act. ⁵³

One commenter disagreed with the Participants' statement that the Executed Share Model's similarity to other transaction-based fees approved by the Commission is adequate justification for consistency with the Exchange Act.54 The commenter stated that similarity to other transaction-based fees is not an adequate basis to show that the Executed Share Model is consistent with relevant standards; each proposed fee must be individually supported.55 For example, the commenter stated that the Participants compared the Executed Share Model to Section 31 fees as justification for the Executed Share Model, but failed to address the differences between the Executed Share Model and Section 31 fees, such as the Executed Share Model's treatment of high-volume trades in low-priced stocks while Section 31 fees are based on the notional value of a trade.56

Commenters also questioned the Participants' justifications for the onethird allocation methodology. FINRA stated that the Proposed Amendment did not justify why the proposed allocation by thirds to the Participant, buy-side and sell-side is equitable in the context of the CAT NMS Plan.57 FINRA also stated that the Proposed Amendment did not consider alternatives suggested by commenters on a prior proposed funding model,58 such as a model similar to Section 31 fees and a CAT funding model based on the "Cost Recovery Principle" and the "Benefits Received Principle." 59 FINRA urged the Commission to require those alternatives to be analyzed. 60

One commenter stated that the Participants have not met their burden to demonstrate the proposed allocation is consistent with the Exchange Act fee standards and not arbitrary.⁶¹ The commenter stated that because FINRA is funded by Industry Members, Industry Members would pay over 80% of CAT costs since they must pay not only their own share but FINRA's as well; therefore, the Commission should disapprove the proposal.⁶² The commenter stated that the Proposed Amendment does not explain how allocating 80% of total CAT costs to the industry in perpetuity without a mechanism to limit the budget 63 is consistent with the Exchange Act and guidance on SRO filings related to fees because the industry has no role in the governance, oversight or design of CAT and does not benefit from the CAT.64 Another commenter stated that Industry Members will bear significantly more costs than the Proposal suggests if the Participants decide to charge their members to fund their share of CAT fees.65 The commenter stated that "[i]f the Participants were to do this, it

would render the entire Funding Model meaningless, with Industry Members bearing 100% of CAT costs." ⁶⁶ Another commenter also stated that it was inappropriate to place responsibility for funding the CAT "on industry members that do not stand to benefit from it." ⁶⁷

One commenter stated that the Proposed Amendment does not demonstrate that it is equitable, as required by Section 6(b)(4),68 or rational, as required by the Administrative Procedure Act,69 to allocate two-thirds of CAT costs to Industry Members, stating that "there is no suggestion that Industry Members somehow receive 67% of the benefits from CAT." ⁷⁰ Furthermore, the commenter stated that the Proposed Amendment would result in an inequitable allocation to a small number of Industry Members.

The commenter also stated that the Proposed Amendment would result in the allocation of all of the costs to build and operate the CAT to Industry Members and would therefore be inconsistent with Section 6(b)(4) to equitably allocate reasonable fees.72 The commenter stated that, in addition to the proposed allocation to Industry Members, FINRA's 11% cost allocation would be passed-on to Industry Members and that exchanges would also pass-on their 22% cost allocation. 73 The commenter stated that, with FINRA's allocation, 78% of the costs to build and operate the CAT would be allocated to Industry Members under the Proposed Amendment.74 The commenter stated that 78% is the same amount allocated to Industry Members in a prior CAT funding model proposal from 2021, and stated that in the Proposed Amendment, the Operating Committee concedes that the 2021 allocation "may have an adverse effect on competition, liquidity or other aspects of market structure," 75 however the Proposed Amendment does not explain why using a different metric—executed share volume rather than message traffic—to create the same allocation would not result in similar consequences.76

Further, the commenter stated that Industry Members may also be required

⁵³ Id. This commenter stated that it is inequitable to require Industry Members to fund CAT costs in perpetuity when they lack representation on the Operating Committee and therefore have little transparency into the drivers of the costs, and there is no plan to contain the costs. See id. at 2.

⁵⁴ See SIFMA June 2022 Letter at 4.

⁵⁵ *Id*.

 $^{^{56}\,}See$ SIFMA October 2022 Letter at 7. See also Citadel August Letter at 5.

 $^{^{57}\,}See$ FINRA June 2022 Letter at 3.

⁵⁸ See Securities Exchange Act Release Nos. 94984 (May 25, 2022), 87 FR 33226 (June 1, 2022); 96394 (Nov. 28, 2022), 87 FR 74183 (Dec. 2, 2022); and Letter from Michael Simon, Chair Emeritus, CAT NMS Plan Operating Committee, to Vanessa Countryman, Secretary, Commission (Feb. 15, 2023).

⁵⁹ See FINRA April 2023 Letter at 5 (citing Letter to Vanessa Countryman, Secretary, Commission, from Lawrence Harris, Fred V. Keenan Chair in Finance, Professor of Finance and Business and Economics, U.S.C. Marshall School of Business, dated June 21, 2022).

⁶⁰ *Id.* Another commenter suggested a review of alternative approaches to funding, such as the extent to which CAT could be funded by Section 31 fees. *See* Letter to Vanessa Countryman, Secretary, Commission, from Kirsten Wegner, Chief Executive Officer, Modern Markets Initiative, dated July 13, 2023 ("MMI July Letter"), at 4.

⁶¹ See SIFMA May 2023 Letter at 6; SIFMA June 2023 Letter at 1–2. The commenter also stated that the Proposed Amendment provides unsupported conclusory statements that it meets the requirements of the Exchange Act. See SIFMA June 2023 Letter at 2. See also id. at n 11; FIA Letter at 2.

⁶² See SIFMA May 2023 Letter at 2. See also SIFMA June 2022 Letter at 1–2 (stating that the proposed cost allocation methodology is inconsistent with Exchange Act fee standards because most costs would be imposed on Industry Members).

⁶³ The commenter stated that the CAT annual budget increased over 30% in the last year. See SIFMA June 2023 Letter at 4. See also Virtu Letter at 4 (stating that the budget increase indicated that the Industry Members could be subject to ever-increasing fees with no say on the budget). See also FIA Letter at 3 (stating that "[w]ith little to no skin-in-the-game, the Participants will not be incentivized to control costs."). See infra Section III.A.5.b (discussing budgeted CAT costs and comments suggesting a review mechanism to control costs).

⁶⁴ See SIFMA June 2023 Letter at 3, 4. The commenter stated that approving such a proposal would "directly threaten[] efficiency, competition, and capital formation in U.S. securities markets." *Id.* at 4. The commenter also quoted a Commission release stating that the Participants are potentially conflicted in allocating CAT fees to themselves and the Industry Members. *See* Securities Exchange Act Release No. 89618 (Aug. 19, 2020), 85 FR 65470, 65482 (Oct. 15, 2020). Another commenter stated that the allocation of 80% to the industry was unfair. *See* Virtu Letter at 4.

⁶⁵ See FIA Letter at 2.

⁶⁶ Id.

 $^{^{\}rm 67}\,See$ Virtu Letter at 2.

^{68 15} U.S.C. 78f(b)(4).

 $^{^{69}\,5}$ U.S.C. 551 et seq.

 $^{^{70}\,}See$ Citadel July Letter at 17.

⁷¹ *Id*.

⁷² Id. at 1, 16, 22.

⁷³ Id. at 1, 21, 22.

⁷⁴ Id. at 21.

⁷⁵ Id.

⁷⁶ See Citadel July Letter at 21.

to pay the exchange cost allocation,77 citing a statement in the Proposed Amendment that "each Participant may determine to charge their members fees to fund their share of the CAT fees." 78 The commenter stated that if exchanges choose to do this, then Industry Members would be responsible for 100% of CAT costs, which would "distort incentives and hinder the prioritization of critical cost-control measures, as the firms governing CAT are not bearing any of the associated costs." 79 The commenter requested that the Commission prohibit exchanges from passing-on their CAT costs.80 The commenter also stated that even after restructuring the funding model to base allocation on share volume instead of message traffic, as in prior funding model proposals, the allocation to exchanges staved the same, arguing that the exchanges are unwilling to allocate themselves more than 22% of total costs.81 The commenter stated that the proposed allocation methodology is inconsistent with the Exchange Act because of the excessive percentage of total costs proposed to be allocated to Industry Members and the unfair method of allocating costs among Industry Members,82 stating, "[t]he allocation methodology will have a direct and negative impact on market efficiency, competition, and capital formation, and the Commission must comprehensively assess those impacts before approving this filing." 83

The commenter stated that the Proposed Amendment does not provide the percentage of total costs to build and operate the CAT that will be borne by Industry Members in practice. 84 The commenter stated that it is necessary to determine the ultimate allocation of CAT costs to evaluate whether the proposed allocation is consistent with the Exchange Act, arguing that the statements made in support of the allocation were premised on the Participants being responsible for one-

third of total CAT costs, and that if this is untrue, "the filing must be completely reconsidered, taking into account (a) the impact on market efficiency, competition and capital formation of allocating this magnitude of additional costs to Industry Members, (b) whether such a lopsided allocation is fair and equitable, and (c) the implications for CAT governance and budget control if the firms governing CAT do not have any skin-in-the-game." ⁸⁵

One commenter stated that the Participants do not account for "the time and expense Industry Members have devoted to developing and maintaining internal systems to be able to report the [sic] CAT, as well as the time and expense Industry Members have devoted to assisting the Operating Committee with its job of developing reporting specifications that allow the CAT to achieve its regulatory purpose" in the proposed allocation 86 and that "this omission is a flaw with the Participants' decision to allocate twothirds of the CAT costs to Industry Members and its inclusion would demonstrate that the Participants' Executed Share Model does not provide for the equitable allocation of reasonable

Similarly, one commenter stated that the allocation does not take into account fees currently paid by the industry and implementation costs incurred by Industry Members to comply with CAT reporting requirements.88 The commenter stated that Industry Members already provide funding for regulatory matters to exchanges through regulatory fees, membership fees, market data fees, and registration fees, and that these fees must be factored into any equitable or rational allocation of CAT costs.⁸⁹ The commenter stated that although the Proposed Amendment argues that there is no precedent for regulatory fees to be determined based on the cost of compliance of a regulated entity, it is necessary to take into account all CAT-related costs including those already allocated to Industry

Members to assess whether the Proposed Amendment is equitable. 90

Commenters also objected to statements made in the Proposed Amendment that the complexity of Industry Member business models contributes substantially to the costs of the CAT.91 One commenter stated that the proposed allocation of two-thirds of CAT costs to Industry Members is unfair, unreasonable and arbitrary because the Participants are equally responsible for the complexity of trading activity in the markets.92 The commenter disagreed with the Participants' argument that the allocation satisfies Exchange Act fee standards because Industry Members and the complexity of their business models drive the costs of the CAT, by stating that the examples of complexities provided were developed to address order types, activities and fee structures (such as the maker-taker fee structure) established by the Participant exchanges.93 The commenter stated that the Participants are just as responsible for such cost-driving complex trading activity in the equity and options markets as Industry Members due to the "large number of equity and options exchanges established by the exchange families with fundamentally different execution models and order types."94 The commenter stated that the Participant exchanges have not analyzed how their own business decisions have resulted in the complexity of Industry Member order routing practices and CAT costs.95 Another commenter stated that the complexity arguments in the Proposed Amendment contradict statements from the Operating Committee that stringent performance and other requirements for processing CAT data are significant drivers of CAT costs,96 and that the complexity arguments suggest that costs should be allocated evenly among Industry Members, not just a small group of Industry Members based on volume.97

Commenters also disagreed with other justifications made in the Proposed Amendment for the proposed allocation; specifically, that there are more Industry Members than Participants and that Industry Members receive more in

⁷⁷ Id. at 22. See also Citadel August Letter at 2.
78 See Citadel July Letter at 22. See also Notice, supra note 7, 88 FR at 17107. The commenter also stated that while the Proposed Amendment describes the funding model as "neutral as to location and manner of execution," counterparties to off-exchange transactions would receive higher fees than on-exchange transactions if exchanges choose not to pass-on their cost allocation to Industry Members. See Citadel July Letter at 21. See also Notice, supra note 7, 88 FR at 17087.

⁷⁹ Citadel July Letter at 22. See also id. at 16. See also Citadel August Letter at 2 (stating that an allocation of 100% of CAT costs to Industry Members cannot be lawful).

⁸⁰ Citadel July Letter at 22.

⁸¹ *Id.* at 10.

⁸² *Id.* at 15

⁸³ Id.

⁸⁴ See Citadel August Letter at 2.

⁸⁵ Id

 $^{^{86}}$ SIFMA June 2022 Letter at 4. See also SIFMA January 2023 Letter at 4.

 $^{^{87}\,\}rm SIFMA$ June 2022 Letter at 4–5. See also SIFMA January 2023 Letter at 5; Virtu Letter at 3.

⁸⁸ See Citadel July Letter at 17. See also Virtu Letter at 2 (noting that Industry Members "already provide the Plan Participants with a very substantial level of funding through membership fees, registration and licensing fees, dedicated regulatory fees, and options regulatory fees").

⁸⁹ See Citadel July Letter at 17 (further stating, "Industry Members are already bearing nearly all of the total CAT-related costs, at a rate much higher than the Commission estimated in its approval of the 2016 CAT NMS Plan." Id. at 18).

⁹⁰ I*d*

⁹¹ See Notice, supra note 7, 88 FR at 17104.

⁹² See SIFMA May 2023 Letter at 3. See also SIFMA January 2023 Letter at 2, 3–4.

 $^{^{93}}$ See SIFMA May 2023 Letter at 6–7. See also SIFMA January 2023 Letter at 3; Notice, supra note 7, 88 FR at 17104.

⁹⁴ SIFMA January 2023 Letter at 3.

⁹⁵ See SIFMA May 2023 Letter at 7.

⁹⁶ See Citadel July Letter at 17-18.

⁹⁷ *Id.* at 18.

revenue than the Participants.98 One commenter stated that these assertions are not relevant in demonstrating that the proposed allocation is fair and reasonable.99 The commenter stated that the Participants are justifying the allocation based on the ability to pay rather than cost generation, which the commenter believes is inconsistent "with the Participant Exchanges" proposed approach . . . of allocating CAT costs based on approximate responsibility for generating them . . ." and "with the historical CAT decision to allocate costs to the parties responsible for generating them." 100 The commenter suggested an alternative allocation that would equally split CAT costs between Participant exchanges and Industry Members, while FINRA would be subject only to a nominal regulatory user fee to access CAT Data.¹⁰¹ Another commenter stated that, while most Industry Members will pay little to no CAT costs, 20 Industry Members will be responsible for 75% of the costs allocated to Industry Members. 102 The commenter said this would contradict the Proposed Amendment's arguments that there are more Industry Members than Participants and that Industry Members have greater financial resources than Participants because the Operating Committee would outnumber the Industry Members that would be paying the most in costs.103

The commenter also stated that the Proposed Amendment lacks support for the proposed allocation. 104 The commenter stated that the Operating Committee has not met its burden to demonstrate that the proposed allocation is consistent with the

Exchange Act. ¹⁰⁵ The commenter also stated that the Proposed Amendment does not consider the impact of the proposed allocation to Industry Members on market efficiency, competition and capital formation, particularly with respect to the costs the industry will incur to build systems to pass-through their CAT fees, the expected impact on volumes, the expected impact on retail investors, and the expected impact on market makers. ¹⁰⁶

The commenter suggested alternatives to the proposed allocation methodology.¹⁰⁷ The commenter stated that Industry Members should not be allocated more than 50% of ongoing CAT costs (including FINRA's allocation) due to their lack of industry voting representation and because they already bear nearly all of the total CATrelated costs. 108 The commenter also suggested that exchanges should be prohibited from passing-on their CAT cost allocation to market participants, 109 and that the Participants consider allocating costs to the Commission "to align incentives." 110 The commenter recommended a consistent methodology for allocating costs to both Industry Members and exchanges. 111 The commenter also recommended an allocation methodology that would ensure that "a small group of firms are not disproportionately bearing costs given that CAT is designed to facilitate market-wide surveillance across all market participants," 112 and would not inequitably allocate costs to specific market segments (such as "retail trading activity in NMS stocks").113 The commenter suggested that the approach could have "(I) minimum and maximum fee levels, (II) appropriate calibrations for liquidity provision, (III) a volume component based on notional (instead of executed shares), and (IV)

consideration of additional metrics that could achieve a more equitable outcome (e.g., broker-dealer capital)." 114

Commenters also raised concerns about statements in the Proposed Amendment that CAT costs would be passed on to investors. 115 One commenter stated, "[s]uch an assertion is inaccurate because it is almost certain that there will be scenarios faced by Industry Members in which they will not be able to figure out who was responsible for generating certain Historical CAT Costs." ¹¹⁶ The commenter stated that such assertions would minimize the Participants' obligation to allocate fees consistent with Exchange Act fee standards and could result in the inequitable allocation of CAT fees to Industry Members under the mistaken belief that such fees would be passed down to investors. 117 FINRA objected to statements in the Proposed Amendment that Industry Members can pass through to their customers their CAT cost allocation and additional costs resulting from an increase in FINRA fees.¹¹⁸ FINRA stated that "[s]ummarily stating that investors can be made to bear the costs resulting from the Funding Model without a detailed description of and transparency into how these fees would be determined or passed on to customers is inadequate, and does not provide interested parties sufficient information to consider the costs and benefits related to the Fee Proposal." $^{\rm 119}$ Another commenter expressed concern that CAT costs will be passed-through to investors directly or indirectly by affecting the transaction prices of equities, stating that this could negatively impact the investment returns of long-term investors (including retail investors). 120 The commenter stated that the Participants have failed to analyze how passing-through CAT costs to investors is consistent with Exchange Act fee standards, and that the Commission has not fully considered

⁹⁸ See Notice, supra note 7, 88 FR at 17104.
99 See SIFMA May 2023 Letter at 7. See also
SIFMA January 2023 Letter at 4.

 $^{^{100}\,}See$ SIFMA May 2023 Letter at 7. The commenter cited to the funding principles in Section 11.2 of the CAT NMS Plan.

¹⁰¹ See SIFMA January 2023 Letter at 4. See also SIFMA May 2023 Letter at 8; SIFMA June 2022 Letter at 5; SIFMA October 2022 Letter at 4. This commenter also suggested another alternative allocation in which costs would be allocated to those Participants and Industry Members most directly responsible for the costs. Under this alternative, Industry Members would be responsible for the cost associated with initial ingestion of the data into the CAT system. The commenter explained that Participants would be responsible for the costs associated with the stages after the data is initially ingested into the CAT system because the regulators directly control and benefit from these stages of the CAT system after ingestion. See SIFMA June 2022 Letter at 5-6.

 $^{^{102}\,}See$ Citadel July Letter at 17. The commenter also stated that the Proposed Amendment does not explain why it would be equitable to allocate 50% of total CAT costs to 20 Industry Members and 22% of total CAT costs to 24 exchanges. *Id.*

¹⁰³ Id.

¹⁰⁴ *Id.* at 13. *See also* Citadel August Letter at 2.

 $^{^{105}\,}See$ Citadel July Letter at 13.

 $^{^{106}}$ Id. at 2, 16, 19, 20. The commenter further stated that the Proposed Amendment is inconsistent with the Exchange Act because it cannot equitably allocate fees and will harm market efficiency, competition and capital formation. Id. at 16.

¹⁰⁷ *Id.* at 3, 30, 31. The commenter stated that the Commission must consider reasonable alternatives and that the proposal should be rejected and replaced by a proposal incorporating the commenter's recommendations. *Id.* at 30, 2.

¹⁰⁸ Id. at 3, 30, 31.

¹⁰⁹ See Citadel July Letter at 3, 30, 31.

¹¹⁰ *Id.* at 3, 31. In response, CAT LLC stated that the Commission is not a party to the CAT NMS Plan, or subject to Rule 608 of Regulation NMS or Section 19(b) of the Exchange Act. *See* Letter to Vanessa Countryman, Secretary, Commission, from Brandon Becker, CAT NMS Plan Operating Committee Chair, dated July 28, 2023 ("CAT LLC July 2023 Response Letter"), at 31, n.144.

¹¹¹ See Citadel July Letter at 30-31.

¹¹² Id. at 30.

¹¹³ *Id.* at 3, 30.

¹¹⁴ See id. at 30. See also Citadel August Letter

¹¹⁵ See SIFMA May 2023 Letter at 8; FINRA April 2023 Letter at 6–7; Citadel July Letter at 20; Citadel August Letter at 3; Letter to Vanessa Countryman, Secretary, Commission, from Lindsey Weber Keljo, Head—Asset Management Group, SIFMA, dated September 5, 2023 ("SIFMA AMG Letter"). See also Virtu Letter at 4 (noting the inherent difficulties in implementing systems and processes to track and pass through fees to the appropriate client firms and stating that executing brokers would likely end up absorbing the fees themselves).

¹¹⁶ See SIFMA May 2023 Letter at 8; see also Virtu Letter at 4.

¹¹⁷ See SIFMA May 2023 Letter at 8.

¹¹⁸ See FINRA April 2023 Letter at 6-7.

¹¹⁹ *Id.* at 7.

¹²⁰ See SIFMA AMG Letter at 2.

these economic effects on clients and other end investors.121

One commenter stated that many of the largest Industry Members would be allocated CAT fees based on proprietary trading activity, so they would not be able to pass through their fees to investors. 122 The commenter urged an analysis of proprietary executed volume compared to customer executed volume in order to evaluate how CAT costs will be allocated among Industry Members and whether the allocation methodology is fair, equitable and not unfairly discriminatory. 123 The commenter also stated that the Proposed Amendment is inconsistent with Section 6(b)(5) by imposing a new and increasing expense on investors, which would negatively impact liquidity and efficiency, and that the proposed allocation to Industry Members would disproportionately impact market makers (because 20 firms would have to pay most of the costs) and retail investors (due to their trading in sub-dollar NMS stocks that increase executed share volume), in violation of Section 6(b)(8).124

In response to the comment stating that the Participants had not analyzed a suggested Section 31-style approach to a funding model,125 CAT LLC stated that the CAT fee approach is similar to the Section 31 fee approach in how an exchange would be obligated to pay a transaction fee based on transactions occurring on that exchange, and that FINRA would be obligated to pay a transaction fee based on transactions in

the over-the-counter market.126 CAT LLC stated that the approaches are also similar because, in both, an exchange would be able to determine to pass the fee onto its members, as would FINRA.¹²⁷ CAT LLC stated that if the Section 31 approach would comply with the Exchange Act, then the proposed CAT fee approach should also comply with the Exchange Act and CEBBs and CEBSs could determine whether to pass such fees onto their clients. 128

In response, FINRA stated that the CAT LLC May 2023 Response Letter misrepresented the commenter's letter by incorrectly stating that the commenter's letter recommended an approach similar to Section 31 fees. 129 FINRA clarified that it was noting that the Commission had received comments suggesting a model like the Section 31 fees, that the Participants had not "meaningfully analyzed" the suggested alternatives in the Proposed Amendment, and that the Commission should require the Participants to analyze the alternatives. 130

CĂT LLC further responded to FINRA's objections to the use of the TAF as precedent for CAT feesspecifically, FINRA's statement that unlike the proposed CAT fees, the TAF recovers the costs of FINRA's regulatory activities, while the Proposed Amendment is designed to align with the costs to build, operate and administer the CAT. 131 CAT LLC stated that there is no distinction between the two points raised by the commenter because CAT only has a regulatory purpose; therefore, costs to build, operate and administer the CAT are inherently regulatory costs. 132 CAT LLC also noted that FINRA distinguished the TAF from the proposed CAT fees by describing the TAF as being used in combination with other funding mechanisms to support a funding framework, but CAT LLC stated that "this does not change the general conclusion that a transaction-based fee complies with the Exchange Act." 133

In response to a commenter that stated that there is no precedent for CAT fees to be allocated to Industry Members in perpetuity, and that the Exchange Act would not allow CAT LLC to require

Industry Members to fund unlimited costs in perpetuity,134 CAT LLC stated that the proposed allocation would not require Industry Members to fund all costs since it would divide CAT costs such that one-third would be paid each by the Participant, CEBB and CEBS in a transaction. 135 Furthermore, CAT LLC stated that fees would not be paid in perpetuity, as the Fee Rate set by the Operating Committee at the beginning of each year would be based on reasonably budgeted CAT costs and projected total executed equivalent share volume for the year and would be adjusted midyear, and that to implement the Fee Rates, the Participants would need to file fee filings pursuant to Rule 19b-4 with the Commission that must be consistent with the Exchange Act and allow the public the opportunity to comment on the fees. 136 CAT LLC added that the Executed Share Model would operate similarly to other fees that the Commission has determined are consistent with the Exchange Act, such as Participants' sales value fees related to Section 31, the TAF and the options regulatory fee, and that the comment did not recognize that Industry Members can choose to pass-through CAT fees to their customers like they do the Section 31-related sales value fees. 137

In response to comments that objected to the proposed allocation to Industry Members because Industry Members would not benefit from the CAT,138 CAT LLC stated allocating costs based on who benefits from the CAT is "not appropriate or practical." 139 CAT LLC stated that the CAT is intended to benefit all market participants, explaining how it would benefit Industry Members, and stated that it would be "impractical to determine a model that allocates a measurable amount of benefit that each market participant receives from the CAT." 140 In response to a commenter that suggested that Industry Members should not be allocated any "costs for matters that primarily benefit the CAT Operating Committee or the SROs," 141 and a commenter that stated that the industry does not benefit from the CAT, 142 CAT LLC disagreed that Industry Members do not benefit from the CAT because CAT is critical for the

¹²¹ Id. at 2, 3. The commenter stated that, ''[u]nder the Exchange Act, the Participants are required to demonstrate that the Proposed Amendment: (1) provides 'for the equitable allocation of reasonable dues, fees, and other charges,' (2) is 'not designed to permit unfair discrimination between customers, issuers, brokers or dealers' and (3) does not 'impose any burden on competition not necessary or appropriate in furtherance of the purposes' of the Exchange Act.' Id. at 1, n.4 (citing to Sections 6 and 15A of the Exchange Act and Rule 700(b)(3)(iii) of the Commission's Rules of Practice. 15 U.S.C. 78s; 15 U.S.C. 150-3; 17 CFR 201.700(b)(3)(iii)). Approval of the Proposed Amendment, however, is governed by Rule 608 of Regulation NMS. That rule requires the Commission to approve a proposed amendment to an effective national market system plan if it finds that the 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 Act. 17 CFR 242.608(b)(2).

¹²² See Citadel July Letter at 20. See also Citadel August Letter at 3.

¹²³ See Citadel August Letter at 3. The commenter said that such an analysis is feasible and should account for aggregate costs to be borne by affiliated entities, stating that this is required in Section 11.2(c) of the 2016 CAT NMS Plan. Id.

¹²⁴ See Citadel July Letter at 2. See also infra notes 260-265.

¹²⁵ See FINRA April 2023 Letter at 5.

¹²⁶ See Letter to Vanessa Countryman, Secretary, Commission, from Brandon Becker, Chair, CAT NMS Plan Operating Committee, dated May 18, 2023 ("CAT LLC May 2023 Response Letter"), at 9.

¹²⁷ Id

¹²⁸ Id

¹²⁹ See FINRA May 2023 Letter at 3, n.8.

¹³⁰ Id

¹³¹ See FINRA May 2023 Letter at 3.

¹³² See CAT LLC July 2023 Response Letter at 35.

¹³³ Id.

¹³⁴ See Citadel July Letter at 27.

¹³⁵ See CAT LLC July 2023 Response Letter at 14. 136 Id

¹³⁸ See Citadel July Letter at 17; Virtu Letter at 2.

¹³⁹ CAT LLC July 2023 Response Letter at 10.

¹⁴⁰ Id. at 11.

¹⁴¹ Citadel July Letter at 32.

¹⁴² See Virtu Letter at 4.

protection of investors and because CAT supports fair and efficient markets. 143 CAT LLC also stated that it was not "reasonable or practical to attempt to parse CAT costs by who 'primarily benefits' from those costs." 144

In response to comments that state that Industry Members could bear 100% of CAT costs if Participants decide to pass-through their costs to them,145 CAT LLC stated that Industry Members can pass through their own CAT fees to their customers, like broker-dealers do for transaction-based fees. 146 CAT LLC stated that this may result in Industry Members not having any funding burden if they decide to entirely passthrough their allocation to investors. 147 In response to commenters that requested that Participant be prohibited from passing-on their CAT costs to their members,148 CAT LLC stated that Participants are permitted by the Exchange Act to charge their members fees to fund the Participants' share of CAT fees, as long as they submit fee filings that demonstrate that any proposed fee is consistent with the Exchange Act. 149

In response to comments objecting to the proposed allocation to Industry Members for not taking into account regulatory fees currently paid by Industry Members, ¹⁵⁰ CAT LLC stated that the Proposed Amendment is intended to assess fees "directly associated with the costs of establishing and maintaining the CAT, and not unrelated SRO services." ¹⁵¹

In response to comments on whether Participants' models are equally to blame for the complexity of the markets, ¹⁵² CAT LLC stated that its analysis of the complexity of the industry's business models is based on the effects of those models on the costs of the CAT, which it stated are more profound than those of Participants, not on complexity of the market in

general.¹⁵³ CAT LLC explained that the complexity of the Industry Members' business models results in significant data processing and storage costs, which Participants do not contribute to as they do not originate market activity or orders. 154 CAT LLC explained that (1) the complexity and diversity of Industry Members' business models and order handling practices require processing and storage of hundreds of reporting scenarios for Industry Members, resulting in significant data processing and storage costs; 155 (2) Industry Members have more late data and corrections than Participants, resulting in significant linker costs; 156 and (3) Industry Members have customers, which results in CAT costs related to customer account information (FDID, CCID and CAIS) and customer investment strategies. 157 CAT LLC also stated that Participants would pay the same amount as the CEBBs and CEBSs in each transaction. 158 In response to one commenter that stated that Industry Members implemented complex routing strategies to optimize exchange fees and rebates because exchange business decisions resulted in these and other exchange fee structures,159 CAT LLC stated that the commenter did not demonstrate a causal connection between exchange fee structures and CAT costs.¹⁶⁰ CAT LLC stated that it was not involved in these Industry Member business decisions and a substantial amount of CAT costs result from such business decisions. 161 CAT LLC also stated that Participant activity does not contribute as much to CAT costs as complex Industry Member activity.162

CAT LLC also disagreed with one commenter's dismissal of CAT LLC's consideration of Industry Members' relative ability to pay, 163 stating that the Exchange Act specifically requires that the fees be fair and reasonable, which necessitates consideration of the relative ability to pay. 164 CAT LLC stated that fairness issues require the Participants to consider the greater financial resources of Industry Members in the

creation of a funding model. CAT LLC also stated that the commenter's position runs contrary to its comments that an Industry Member's ability to pay is an important consideration in the context of CAT fees. 165

Additionally, CAT LLC objected to the commenter's statement that the proposed allocation is "inconsistent with the historical CAT decision to allocate costs to the parties responsible for generating them. "166 CAT LLC stated that, while the CAT NMS Plan does not require CAT costs to be allocated to parties responsible for generating such costs, the proposed allocation addresses cost burden on the CAT by (i) taking into account the impact of Industry Member activity on CAT costs, and (ii) using trading activity, which CAT LLC believes is a "reasonable proxy for cost burden on the CAT," 167 as the metric for cost allocation.¹⁶⁸ CAT LLC also stated that there are other examples of trading activity-based fees so the funding model would not be novel or unique. 169

Additionally, CAT LLC responded to the commenter's suggested alternative proposal that would equally allocate CAT costs to Participant exchanges and Industry Members, stating that the commenter did not explain why the alternative would satisfy the Exchange Act standards, and noting that CAT LLC had previously considered such an allocation but believed that it would not result in a fair and equitable allocation due to the greater number of Industry Members than Participants, the greater financial resources of Industry Members, and the failure of the suggested allocation to take into account how the complexity of Industry Member business models contributes substantially to CAT costs.170

In response, the commenter stated that the CAT LLC Response Letter did not meaningfully address the concerns it raised about the allocation of CAT costs between Participants and Industry Members. ¹⁷¹ CAT LLC further responded, stating that it has responded to the commenter's comments several times and that just because CAT LLC did not adopt the commenter's viewpoints does not mean that CAT LLC

¹⁴³ See CAT LLC July 2023 Response Letter at 13. ¹⁴⁴ Id. at 12. See also id. at 13.

¹⁴⁵ See Citadel July Letter at 16, 22; FIA Letter at

¹⁴⁶ See CAT LLC July 2023 Response Letter at 8.
¹⁴⁷ Id

 $^{^{148}\,}See$ Citadel July Letter at 3, 22, 30; FIA Letter at 2–3.

¹⁴⁹ See CAT LLC July 2023 Response Letter at 9.
¹⁵⁰ See Citadel July Letter at 17; Virtu Letter at 2.
CAT LLC also objected to one commenter's description of the CAT as an exchange "revenue generator," stating that CAT LLC is a business league under Section 501(c)(6) of the Internal Revenue Code, and that enforcement activity obtains restitution for investors and deters future misconduct rather than generating revenue. See CAT LLC July 2023 Response Letter at 13–14 (responding to Citadel July Letter at 17).

¹⁵¹ CAT LLC July 2023 Response Letter at 13. ¹⁵² See SIFMA May 2023 Letter at 3; 6–7. See also SIFMA January 2023 Letter at 2, 3–4.

 $^{^{153}\,}See$ CAT LLC May 2023 Response Letter at 6; CAT LLC July 2023 Response Letter at 6.

 $^{^{154}\,}See$ CAT LLC May 2023 Response Letter at 7; CAT LLC July 2023 Response Letter at 7.

¹⁵⁵ See CAT LLC July 2023 Response Letter at 7.

¹⁵⁶ Id. ¹⁵⁷ Id.

¹⁵⁸ *Id.* at 6.

¹⁵⁹ See SIFMA May 2023 Letter at 7.

 $^{^{160}\,}See$ CAT LLC July 2023 Response Letter at 6. $^{161}\,Id.$

¹⁶² *Id*

 $^{^{163}\,}See$ SIFMA May 2023 Letter at 7. See also SIFMA January 2023 Letter at 4.

 $^{^{164}}$ See CAT LLC May 2023 Response Letter at 7; CAT LLC July 2023 Response Letter at 7.

 $[\]overline{}^{165}$ See CAT LLC July 2023 Response Letter at 7–8.

 $^{^{166}\,}See$ CAT LLC May 2023 Response Letter at 7; CAT LLC July 2023 Response Letter at 8; SIFMA May 2023 Letter at 7.

 $^{^{167}\,}See$ CAT LLC May 2023 Response Letter at 7; CAT LLC July 2023 Response Letter at 8.

 $^{^{168}\,}See$ CAT LLC May 2023 Response Letter at 7; CAT LLC July 2023 Response Letter at 8.

 $^{^{169}}$ See CAT LLC July 2023 Response Letter at 8. 170 See CAT LLC May 2023 Response Letter at 7.

¹⁷¹ See SIFMA June 2023 Letter at 2.

did not consider or respond to the commenter's comments.¹⁷²

In response to a commenter that recommended allocating no more than 50% of CAT costs to Industry Members, including the FINRA allocation, 173 CAT LLC stated that the commenter did not offer a reasoned basis why such an allocation would be consistent with the Exchange Act. 174 CAT LLC also stated that such an allocation would raise fairness concerns because, as compared to Participants, Industry Members have greater financial resources, and their complex business models "contribute substantially to the costs of the CAT." 175 Furthermore, in response to the commenter's other suggested allocation methodology which the commenter believed would ensure that a small group of firms and specific market segments would not be subject to inequitable cost burdens,176 CAT LLC stated that the commenter did not explain how the suggested methodology would fit into a funding model or how such a funding model would be consistent with the Exchange Act. 177 CAT LLC stated that it evaluated various other funding models over the past seven years and concluded that "the Executed Share Model provides a variety of advantages in comparison to the alternatives, and satisfies the requirements of the Exchange Act. . ." 178

In response, the commenter stated that its suggestions, which included minimum and maximum fee levels, calibrations for liquidity provision, and consideration of additional metrics, ¹⁷⁹ were included in prior funding model proposals. ¹⁸⁰ The commenter stated that the CAT Operating Committee should explain why it changed its position on "the importance of these elements as part of a fair and equitable funding proposal that is consistent with the Exchange Act." ¹⁸¹

The Executed Share Model reflects a reasonable approach to funding the building and operation of the CAT. ¹⁸² The CAT NMS Plan requires both

Participants 183 and Industry Members (which would include CAT Executing Brokers) to fund the CAT.¹⁸⁴ The costs of CAT therefore must be allocated in some fashion between Participants and Industry Members, and how to do so is a question of judgment for which there may be multiple reasonable approaches. CAT LLC has proposed to allocate CAT fees equitably among the three parties who have primary roles related to the transaction: the buyer, seller, and market regulator. In response to one commenter that stated that the proposed allocation methodology is inconsistent with the Exchange Act because of an excessive percentage of total costs proposed to be allocated to Industry Members and an unfair method of allocating costs among Industry Members, 185 the Commission believes that the proposed allocation is reasonable as discussed below.186

While a commenter said the Proposed Amendment did not justify why the TAF, options regulatory fee, and Section 31 fees should be used as a model in the context of the Executed Share Model, 187 CAT was created to serve regulatory purposes. Moreover, CAT Data can only be used by SROs and the Commission for regulatory and surveillance purposes. 188 Therefore, the costs incurred by the Participants to build, operate and administer the CAT similarly are regulatory costs, which here the Participants are seeking to recover through the CAT fees.

Commenters expressed concerns that the Participants may impose fees on their members to recoup costs relating to CAT, making Industry Members responsible for CAT funding costs beyond those to which they will be directly assessed pursuant to the Executed Share Model, 189 that CAT

costs will be passed-through to investors and that this aspect of the Proposed Amendment lacks information needed to demonstrate that it meets the approval standard and to allow the Commission and other interested parties to consider the resulting economic effects.¹⁹⁰ In response to the comments, the Commission acknowledges the concerns but also emphasizes that, as discussed above, the CAT provides important benefits in facilitating effective market surveillance and the Exchange Act expressly contemplates the ability of the Participants to recoup their costs to fulfill their statutory obligations under the Exchange Act. 191 To that end, the CAT NMS Plan expressly contemplates the allocation of the costs associated with operating the CAT among the Participants and the Industry Members. The use of the Executed Share Model is a reasonable method, among a number of potential approaches to do so.

The Commission recognizes that these

operational costs may be passed on in other ways, including by both the Participants and Industry Members, who each may elect to pass on such operational costs as fees to customers indirectly through their charges for services to customers. That would be true regardless of how the Proposed Amendment chose to set the initial allocation. Even if the Participants decide to pass-through the costs of CAT to Industry Members, however, in our view, the rule filing process under Section 19(b) and Rule 19b-4 will still incentivize the Participants to control costs. Any effort to pass-through costs will be subject to that process and, if the Participants fail to control costs, their ability to demonstrate that a proposed fee is reasonable and consistent with the Exchange Act may be compromised. After the Participants file their proposed rule changes relating to fees with the Commission, those proposed rule changes are published by the Commission and there is an opportunity

for public comment. 192 Although the

effect upon filing, 193 the Commission

proposed rule changes could likely take

¹⁷² See CAT LLC July 2023 Response Letter at 27.

¹⁷³ See Citadel July Letter at 31.

¹⁷⁴ See CAT LLC July 2023 Response Letter at 10.

¹⁷⁶ See Citadel July Letter at 30.

 $^{^{177}\,}See$ CAT LLC July 2023 Response Letter at 10. $^{178}\,Id.$ at 11–12.

¹⁷⁹ See Citadel August Letter at 5.

¹⁸⁰ Id. (citing the minimum and maximum fees and market making discounts proposed in a funding model proposal from the CAT Operating Committee that was filed in 2021. See Securities Exchange Act Release No. 91555 (Apr. 14, 2021), 86 FR 21050 (Apr. 21, 2021).

¹⁸¹ *Id*.

¹⁸² See 17 CFR 242.608(b)(2).

¹⁸³ The CAT NMS Plan requires Execution Venues and Industry Members to fund the CAT. The definition of "Execution Venue" includes Participants. *See supra* note 15.

¹⁸⁴ See CAT NMS Plan, supra note 2, at Section 11.1(b), 11.3(a) and (b). Section 11.1(b) of the CAT NMS Plan authorizes the Operating Committee to establish fees for Execution Venues (which include Participants) and Industry Members to fund the CAT and Sections 11.3(a) and (b) of the CAT NMS Plan set forth how these fees would be calculated. See also Rule 613(a)(1)(vii)(D) discussing how the CAT NMS Plan shall discuss the proposed allocation of estimated costs among the plan sponsors, and between the plan sponsors and members of the plan sponsors. 17 CFR 242.613(a)(1)(vii)(D).

¹⁸⁵ See Citadel July Letter at 15.

¹⁸⁶ See infra notes 189–201 and accompanying text.

 $^{^{187}}$ See FINRA June 2022 Letter at 4; FINRA April 2023 Letter at 8.

¹⁸⁸ See 17 CFR 242.613(e)(4)(i)(A); CAT NMS Plan Sections 6.5(c) and 6.5(g) and Appendix D, Section

¹⁸⁹ See SIFMA May 2023 Letter at 2; Citadel July Letter at 16, 17, 21, 22; Citadel August Letter at 2.

 $^{^{190}\,}See$ SIFMA AMG Letter at 2; FINRA April 2023 Letter at 6–7.

¹⁹¹ Sections 6(b)(1) and 15A(b)(2) of the Exchange Act require that a national securities exchange or national securities association have the capacity to be able to carry out the purposes of the Exchange Act, the rules and regulations thereunder, and the rules of the exchange or association. 15 U.S.C. 78f(b)(1): 15 U.S.C. 78o–3(b)(2).

¹⁹² 15 U.S.C. 78s(b).

¹⁹³ 15 U.S.C. 78s(b)(3)(A); 17 CFR 240.19b–4(f)(2). Pursuant to Exchange Act Rule 19b–4, a proposed rule change may take effect upon filing with the Commission pursuant to Section 19(b)(3)(A) of the Exchange Act if properly designated by the self-

can temporarily suspend immediately effective rule changes if such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Exchange Act. 194 If the Commission takes such action, the Commission will institute proceedings under Section 19(b)(2)(B) to determine whether the proposed rule changes should be approved or disapproved. 195 Those fees, like any fees the Participants collect from their members to fund their SRO responsibilities in market and member regulation, must be consistent with applicable statutory standards under the Exchange Act, including being reasonable, equitable and not unfairly discriminatory. 196 Additionally, as stated by CAT LLC, Industry Members may be able to offset fees that FINRA assesses them by passing their CAT fees through to their customers,¹⁹⁷ and as discussed further below, the Commission believes that the additional costs borne by investors are likely small relative to current transaction costs. 198 The Commission recognizes that not all Industry Members currently pass through fees and cannot determine in advance the extent to which Industry Members can or will pass-through their CAT fees to investors or would determine to do so in the future. But we believe that many are able to and that at least some will

regulatory organization as: (1) constituting a stated policy, practice, or interpretation with respect to the meaning, administration, or enforcement of an existing rule; (2) establishing or changing a due, fee, or other charge applicable only to a member; (3) concerned solely with the administration of the self-regulatory organization.

do so. For all of these reasons, contrary to the view of some commenters, ¹⁹⁹ the Commission does not believe that the inability to determine the amount of the CAT costs that will be passed along to investors precludes a finding that the allocation model set forth in the Proposed Amendment meets the approval standard.

In response to the commenter stating that proprietary trading firms cannot pass-through fees to investors and suggesting that an analysis of proprietary executed volume compared to customer executed volume is necessary to determine if the allocation is fair, equitable, and unfairly discriminatory,²⁰⁰ the Commission believes it is reasonable to charge executing brokers regardless of whether they are trading for their own account or for a customer's account. The Commission acknowledges that there is not a customer per se for proprietary trades and therefore, proprietary trading firms would not be able to pass-through their CAT fees to customers. However, regardless of whether a firm trades for its own account or for a customer account, in both instances, the firm engages in trading activity to earn a profit. In the Commission's view, it is reasonable to allow a firm to incur CAT fees for its profit-making business activities, such as proprietary activity. The Commission recognizes that Industry Members may pass-through CAT fees for customer executed volume but in the case of proprietary trades where a firm is trading for its own account, there is no customer to which the firm can pass-through fees, as the firm itself is the ultimate investor, and thus it is reasonable for the firm to be responsible for payment of CAT fees for those trades. Further, the Commission believes it is reasonable to allow a firm to incur CAT fees for its profit-making activity, which in this case is proprietary activity. CAT is a regulatory tool that will be used by the Participants and the Commission to oversee the activities for which Industry Members earn profits and therefore it is reasonable for fees to be charged for that profit-making activity, even if those fees cannot be passed on to customers.

While comments raised concerns that the industry would be allocated most of the CAT costs in perpetuity without a mechanism to limit the budget,²⁰¹ there is a statutory process for notice and comment and Commission review of

proposed rule changes relating to fees, under Section 19(b) and Rule 19b-4.202 In addition, the Proposed Amendment requires that the Fee Rate calculated by the Operating Committee twice per year be based on "reasonably budgeted CAT costs" 203 and that such budgeted CAT costs be composed of "all reasonable fees, costs and expenses reasonably budgeted to be incurred by or for the Company in connection with the development, implementation and operation of the ĈAT." 204 The Operating Committee must demonstrate that their proposed budget and associated fees are reasonable, and the Participants must provide support for such reasonableness in their associated fee filings. If a Participant cannot demonstrate that their budgeted CAT costs are reasonable in a particular filing, following notice and public comment, then that would provide the Commission with grounds to suspend the filing and ultimately disapprove it, which should impose discipline or constraints on the fee setting process.

Further, the concerns expressed that the proposed allocation did not account for the costs already incurred by Industry Members to comply with the CAT or other fees paid by Industry Members to exchanges for other regulatory matters do not render that allocation unreasonable. Both Participants and Industry Members have incurred costs in adapting their operations to report to CAT as is required to achieve the benefits anticipated from the CAT. But the purpose of the funding model is to provide a framework for the recovery of a different set of costs—those incurred by the Participants' in developing and maintaining the CAT system. Section 11.1(c) of the CAT NMS Plan explicitly permits the Operating Committee to recover those costs, allowing it to "take into account fees, costs and expenses . . incurred by the Participants on behalf of the Company . . . and such fees, costs and expenses shall be fairly and reasonably shared among the Participants and Industry Members." 205 The decision to exclude the costs of compliance from this funding model is thus a reasonable one.

Further, the Commission does not base its finding with respect to the proposed allocation of costs between Participant and Industry Members on their respective responsibility for any

^{194 15} U.S.C. 78s(b)(3)(C).

^{195 15} U.S.C. 78s(b)(2)(B).

¹⁹⁶ See Section 6(b)(4); Section 15A(b)(5); Section 6(b)(5); Section 15A(b)(6). 15 U.S.C. 78f(b)(4); 15 U.S.C. 78f(b)(6); 15 U.S.C. 78o-3(b)(6); 15 U.S.C. 78o-3(b)(6); 15 U.S.C. 78o-3(b)(6). See also e.g., Schedule A to the By-Laws of FINRA, Section 1(a) (stating "FINRA shall, in accordance with this section, collect member regulatory fees that are designed to recover the costs to FINRA of the supervision and regulation of members, including performing examinations, financial monitoring, and policy, rulemaking, interpretive, and enforcement activities").

¹⁹⁷ See Notice, supra note 7, 88 FR at 17108; see also CAT LLC July Response Letter at 8–9; cf. SIFMA May 2023 Letter at 8; Citadel July Letter at 20.

¹⁹⁸ Any efforts to recoup CAT costs will be subject to statutory and regulatory oversight as appropriate. Under the federal securities laws and FINRA rules, prices for securities and broker-dealer compensation are required to be fair and reasonable, taking into consideration all relevant circumstances. See, e.g., Exchange Act Sections 10(b) and 15(c); FINRA Rules 2121 (Fair Prices and Commissions), 2122 (Charges for Services Performed), and 2341 (Investment Company Securities). See also FINRA Rule 3221 (Non-Cash Compensation). Broker-dealers are also required to disclose the fees they charge related to a transaction pursuant to Exchange Act Rule 10b–10. See 17 CFR 240.10b–10.

¹⁹⁹ See SIFMA AMG Letter at 2; FINRA April 2023 Letter at 6–7.

 $^{^{200}\,}See$ Citadel July Letter at 20; Citadel August Letter at 3.

 $^{^{201}\,}See$ SIFMA June 2023 Letter at 3, 4; Citadel July Letter at 2; FIA Letter at 2–5.

 $^{^{202}}$ See supra notes 192–196 and accompanying text.

 $^{^{203}}$ See proposed Section 11.3(a)(i)(A)(I) and proposed Section 11.3(a)(i)(A)(II).

²⁰⁴ See proposed Section 11.3(a)(i)(C).

 $^{^{205}}$ CAT NMS Plan, *supra* note 2, at Section 11.1(c).

complexity in the markets. Regardless of the origin of that complexity, its existence contributes to the costs of CAT and the purpose of the funding model is to account for those current and future costs, not assess responsibility for the market structure. The Participants' decision to divide the costs evenly among the three parties who have primary roles related to the transaction is reasonable.

As explained below, the Commission agrees with CAT LLC's statements that, "[t]he Executed Share Model . . . reflects a reasonable effort to allocate costs based on the extent to which different CAT Reporters participate in and benefit from the equities and options markets," 206 and is "transparent, would be relatively easy to calculate and administer, and is designed not to have an impact on market activity because it is neutral as to the location and manner of execution." ²⁰⁷ The Participants considered, and have previously proposed, alternative allocations and funding models.²⁰⁸ And the Commission acknowledges the alternative funding models and allocations suggested by commenters.²⁰⁹ Each of those alternatives, as well as those suggested by commenters, has relative strengths and weaknesses. Similarly, the alternatives suggested by a commenter, 210 including maximum and minimum fees, appropriate calibrations for liquidity provision and

consideration of additional provisions (e.g., broker-dealer capital), have strengths and weaknesses. For example, imposing maximum and minimum fees would transfer costs from the largest members to the smallest members, distorting the economic incentives of the Executed Share Model. A similar distortion could arise to the extent market maker volume is discounted or otherwise calibrated or to the extent considering other metrics that are not necessarily correlated with the cost drivers of the CAT. Given the potential distortions that could occur with these alternatives, the Commission does not believe that the existence of those alternatives, or the remaining concerns identified by commenters individually or collectively, call into question the Proposed Amendment's satisfaction of the approval standard in Rule 608(b)(2),²¹¹ or otherwise warrant a departure from the policy choices made by the Participants.

3. Executed Equivalent Shares

Under the Executed Share Model, a CAT fee would be charged with regard to each transaction in Eligible Securities 212 as reported in CAT Data based on executed equivalent shares. 213 A CAT Fee would be imposed with regard to transactions in Eligible Securities in the CAT Data regardless of whether the trade is executed on an exchange or otherwise than on an exchange. 214

Proposed Section 11.3(a)(i)(B) of the CAT NMS Plan describes how executed equivalent shares would be counted for purposes of calculating CAT fees. Specifically, the Executed Share Model uses the concept of executed equivalent shares as the transactions subject to a CAT Fee involve NMS Stocks, Listed Options and OTC Equity Securities, each of which have different trading characteristics.²¹⁵ Proposed Section 11.3(a)(i)(B) would require the shares to be reasonably counted for each type of

Eligible Securities in the following manner:

NMS Stocks. Under the Executed Share Model, each executed share for a transaction in NMS Stocks would be counted as one executed equivalent share. ²¹⁶ Accordingly, proposed Section 11.3(a)(i)(B)(I) of the CAT NMS Plan would state that "[f]or purposes of calculating CAT Fees, executed equivalent shares in a transaction in Eligible Securities will be reasonably counted as follows: (I) each executed share for a transaction in NMS Stocks will be counted as one executed equivalent share." ²¹⁷

Listed Options. Recognizing that Listed Options trade in contracts rather than shares, each executed contract for a transaction in Listed Options will be counted using the contract multiplier applicable to the specific Listed Option in the relevant transaction. Typically, a Listed Option contract represents 100 shares; however, it may also represent another designated number of shares.

OTC Equity Securities. Similarly, in recognition of the different trading characteristics of OTC Equity Securities as compared to NMS Stocks, the Executed Share Model would discount the share volume of OTC Equity Securities when calculating CAT Fees.²²⁰ CAT LLC explained that many OTC Equity Securities are priced at less than one dollar—and a significant number are priced at less than one penny—per share and low-priced shares tend to trade in larger quantities.²²¹ Accordingly, a disproportionately large number of shares are involved in transactions involving OTC Equity Securities versus NMS Stocks.²²² Because the Executed Share Model would calculate CAT Fees based on executed share volume, CAT Reporters trading OTC Equity Securities would likely be subject to higher fees than their market activity may warrant.²²³ To address this potential concern, CAT LLC proposed that the Executed Share Model would count each executed share for a

²⁰⁶ See Notice, supra note 7, 88 FR at 17087.

²⁰⁷ Id.

 $^{^{208}}$ In the Proposed Amendment, CAT LLC stated that it considered but rejected a number of alternative approaches to the CAT funding model; specifically, an approach based on a CAT Reporter's cost burden on the CAT, a 50%-50% allocation of costs between Industry Members and Participant exchanges, a revenue-based funding model in which CAT Reporters would pay fees based on their revenue, a message traffic model in which both Industry Members and Participants would be assessed fees based on message traffic in the CAT, a sales value model in which fees would be calculated based on transaction sales models, an alternative allocation in which fees would only be allocated to the CEBS, and the 2018 and 2021 Fee Proposals, a model in which CAT LLC would allocate all costs among the Participants and permit each Participant to charge its own members as it deems appropriate, and a cost allocation based on a strict pro-rata distribution regardless of the type or size of CAT Reporters. *Id.* at 17105–06, 17117– 19. See also CAT LLC May 2023 Response Letter at 8, where CAT LLC responded that SIFMA did not offer a reasoned basis for why a 50–50 allocation would satisfy the standards set forth in the Exchange Act. While alternative models have been suggested and considered, the proposed Executed Share Model meets the approval standard in Rule 608(b)(2)

²⁰⁹ See FINRA April 2023 Letter at 5; SIFMA January 2023 Letter at 4. See also SIFMA May 2023 Letter at 8; SIFMA June 2022 Letter at 5–6; SIFMA October 2022 Letter at 4; Citadel July Letter at 3, 20, 21, 22

²¹⁰ See Citadel August Letter at 5.

^{211 17} CFR 242.608(b)(2).

²¹² The CAT NMS Plan defines an "Eligible Security" as including all NMS Securities and all OTC Equity Securities. See CAT NMS Plan, supra note 2, at Section 1.1. "NMS Security" is defined as "any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in Listed Options." Id. "OTC Equity Security" is defined by the CAT NMS Plan as "any equity security, other than an NMS Security, subject to prompt last sale reporting rules of a registered national securities association and reported to one of such association's equity trade reporting facilities." Id.

²¹³ See Notice, supra note 7, 88 FR at 17086.

²¹⁴ *Id.* at 17093.

²¹⁵ *Id*.

²¹⁶ *Id*.

 $^{^{217}}$ Proposed Section 11.3(a)(i)(B)(I).

 $^{^{218}\,}See$ Notice, supra note 7, 88 FR at 17093.

 $^{^{219}}$ Id. See also proposed Section 11.3(a)(i)(B)(II). 220 See Notice, supra note 7, 88 FR at 17093.

²²¹ Id.

²²² In an example provided by CAT LLC, based on data from 2021, (1) the average price per executed share of OTC Equity Securities was \$0.072 and the average price per executed share for NMS Stocks was \$49.51; and (2) the average trade size for OTC Equity Securities was 63,474 and the average trade size for NMS Stocks was 166 shares. Trades in OTC Equity Securities accounted for 77% of the number of all equity shares traded, but only 0.51% of the notional value of all equity shares traded. *Id.* at 17093. n.36.

²²³ *Id.* at 17093.

transaction in OTC Equity Securities as 0.01 executed equivalent shares.²²⁴

a. Executed Equivalent Share Volume

CAT LLC had represented that a disproportionately large number of shares are involved in transactions involving OTC Equity Securities versus NMS Stocks,²²⁵ that trades in OTC Equity Securities accounted for 77% of the number of all equity shares traded, but only 0.51% of the notional value of all equity shares traded,226 and that under the Executed Share Model, CAT Reporters trading OTC Equity Securities would likely be subject to higher fees than their market activity may warrant.227 CAT LLC also explained the analysis it undertook to determine to count each executed share for a transaction in OTC Equity Securities as 0.01 executed equivalent shares, stating the discount was the result of an analysis of several different metrics comparing the markets for OTC Equity Securities and NMS Stocks. CAT LLC stated that "(1) the ratio of total notional dollar value traded for OTC Equity Securities to OTC Equity Securities and NMS Stocks was 0.051%; (2) the ratio of total trades in OTC Equity Securities to total trades in OTC Equity Securities and NMS Stocks was 0.90%; and (3) the ratio of average share price per trade of OTC Equity Securities to average share price per trade for OTC Equity Securities and NMS Stocks was 0.065%." 228 For ease of application and because the calculations involve averages, CAT LLC decided to round the metrics to 1%.229

In support of the use of executed equivalent shares to allocate costs under the Executed Share Model, CAT LLC explained that "trading activity provides a reasonable proxy for cost burden on the CAT, and therefore is an appropriate metric for allocating CAT costs among CAT Reporters." 230 CAT LLC stated that it is not feasible to determine the specific cost burden of each CAT Reporter on the CAT, explaining that "[t]he computation of a specific CAT Reporter's burden on the CAT is complicated by the many interrelated factors that contribute to CAT costs, including message traffic, data processing, storage, the complexity of reporting requirements, reporting timelines, infrastructure, connectivity and more." 231 CAT LLC added that

increased trading activity correlates with an increased cost burden on the CAT and Industry Members are generally engaged in effecting transactions in the market, so executed share volume would be an appropriate metric for the allocation of CAT costs.232 CAT LLC stated that this conclusion is consistent with the Commission's prior recognition of the use of transaction volume to set regulatory fees.²³³ Additionally, CAT LLC stated that technology costs dominate all CAT costs, with compute costs comprising more than half of all technology costs, and "[w]hile [compute costs] are related in part to message traffic, they are driven by the stringent performance timelines, data complexity and operational requirements in the CAT NMS Plan." 234 This was one of the reasons CAT LLC decided to change from using message traffic to calculate CAT fees using executed equivalent share volume.235

Commenters questioned the support for the use of executed share volume instead of message traffic, which was previously proposed in prior funding models.²³⁶ FINRA stated that the Proposed Amendment does not explain why the use of executed share volume as the basis of the cost allocation methodology, instead of message traffic, is equitable. 237 FINRA explained that in prior models, message traffic was the key proxy for cost generation used to align CAT fees with CAT costs, but the Executed Share Model would base its cost allocation methodology entirely on executed share volume.238 FINRA stated that the Participants' argument that executed share volume is related to cost generation is not enough to demonstrate that its use is reasonable and equitable.239

Another commenter stated that the Operating Committee cannot explain why the proposed allocation to Industry Members is equitable, noting that it previously stated that charging Industry Members based on message traffic was the most equitable means of establishing fees.²⁴⁰ The commenter stated that allocating costs among Industry Members based on share volume is inconsistent with the Exchange Act.²⁴¹ The commenter stated that there is no

evidence to support the Operating Committee's assertion that trading activity is a reasonable proxy for cost burden on the CAT, explaining that the Operating Committee has stated before that CAT Data processing requirements and message traffic are significant drivers of CAT costs. The same commenter stated that, according to one Participant, options activity creates a greater cost burden than equities trading volume and that the Proposed Amendment does not accurately describe the sources of CAT's cost burdens.²⁴² The commenter stated that the CAT Operating Committee must demonstrate how the proposed allocation would not unfairly discriminate against equities market participants and compare equities and options activity with respect to (i) their cost burden on the CAT and (ii) the allocation of CAT costs to Industry Members.²⁴³ The commenter stated that if the equities markets are subsidizing options activity, this could have broad impacts on equity market liquidity, competition and efficiency that must be assessed under the Exchange Act.²⁴⁴

Further, the commenter stated that allocating costs based on volume would result in costs being mostly allocated to "an extremely small group of broker-dealers," which would unduly burden competition.²⁴⁵ The commenter stated that the Proposed Amendment also lacks a discussion of the impact of this allocation on market competition, efficiency and liquidity, but that the Operating Committee recognized in the Proposed Amendment that prior proposals, where message traffic was a metric used for fee allocation, could impose an outsized financial impact on certain Industry Members.²⁴⁶

Additionally, FINRA objected to the statement in the Proposed Amendment that "trading activity provides a reasonable proxy for cost burden on the CAT, and therefore is an appropriate metric for allocating CAT costs among CAT Reporters." ²⁴⁷ The commenter stated that this statement is inconsistent with information that demonstrates that volume from FINRA's trade reporting facilities ("TRFs") contributes "a very small percentage of annual CAT compute and storage costs." ²⁴⁸ FINRA stated, ". . . despite the minimal data compute and storage costs for

 $^{^{224}\,}See$ proposed Section 11.3(a)(i)(B)(III).

²²⁵ See Notice, supra note 7, 88 FR at 17093.

²²⁶ Id. at 17093, n.36.

²²⁷ *Id.* at 17093.

²²⁸ Id. ²²⁹ Id.

²³⁰ See Notice, supra note 7, 88 FR at 17103.

²³¹ Id. at 17105; see also id. at 17103.

²³² Id. at 17105.

²³³ Id.

²³⁴ Id.

 $^{^{235}\,}See$ Notice, supra note 7, 88 FR at 17105.

 $^{^{236}}$ See FINRA June 2022 Letter at 3, 4; Citadel July Letter at 10.

²³⁷ See FINRA June 2022 Letter at 3.

²³⁸ Id

²³⁹ *Id.* at 4.

²⁴⁰ See Citadel July Letter at 10.

²⁴¹ *Id.* at 19.

²⁴² Id. at 18, 19. See also Citadel August Letter at

²⁴³ See Citadel August Letter at 4.

 $^{^{244}}$ Id

²⁴⁵ Citadel July Letter at 19.

²⁴⁶ *Id. See also* Citadel August Letter at 2–3.

²⁴⁷ FINRA May 2023 Letter at 2 (quoting Notice, supra note 7, 88 FR at 17103.)

²⁴⁸ FINRA May 2023 Letter at 2

transactions reported to the TRF, FINRA would be assessed an estimated 34% of the total CAT costs to be borne amongst the 25 Participants, and more than all options exchanges combined," therefore it cannot support the Participants' assertion that trading activity is a reasonable proxy for cost burden.²⁴⁹ FINRA stated that the Proposed Amendment "fails to provide for reasonable fees that are equitably allocated and not unfairly discriminatory, does not reflect a reasonable approach to allocating costs amongst the Participants, nor does it transparently or accurately present information regarding the true sources of cost burdens on the CAT." 250

FINRA further stated that the Executed Share Model is inconsistent with the "cost alignment" funding principle in Section 11.2(b) of the CAT NMS Plan, which requires the Participants to seek to establish an allocation of costs that takes into account distinctions in the securities trading operations of Participants and Industry Members and their relative impact upon Company resources and operations.²⁵¹ FINRA stated that "the Proposal fails to establish a sufficient nexus between executed share volume and the technology burdens that generate CAT costs and fails to relate each reporter group's allocation to the burden that each reporter group imposes on CAT." 252

In response to FINRA's comment raising concerns about the use of trading activity as a proxy for costs,253 CAT LLČ stated that the Proposed Amendment would provide an appropriate approach for allocating CAT costs because Industry Member activity is generally for the purpose of effecting transactions, and trading activity impacts various factors driving CAT costs, such as storage, data processing and message traffic.²⁵⁴ CAT LLC also stated that the Exchange Act does not require fees to be directly correlated with the costs created by the person charged the fee. 255 CAT LLC stated that it is difficult to determine the precise cost burden created by each CAT Reporter on the CAT, and believes trading activity is a

reasonable proxy for cost burden on the CAT.256

CAT LLC responded to the commenter's statement that the proposed allocation is inconsistent with the cost alignment principles of the CAT NMS Plan by noting that the Proposed Amendment incorporates the concept of cost burden in at least two ways.257 Specifically, CAT LLC stated that it does so because "the allocation of CAT costs contemplates the effect of Industry Member activity on the cost of the CAT. . . and because trading activity provides a reasonable proxy for cost burden on the CAT, trading activity is an appropriate metric for allocating CAT costs among CAT Reporters." 258 CAT LLC added that because there are other examples of trading activity-based fees, the Executed Share Model would not be novel or unique.²⁵⁹

One commenter also stated that the Proposed Amendment made no adjustments for sub-dollar trading activity in NMS stocks, when adjustments were made to volume in OTC Equity Securities to adjust for the large number of shares transacted in sub-dollar securities.²⁶⁰ The commenter also stated that it is arbitrary, capricious, and unfairly discriminatory for the CAT Operating Committee to significantly adjust executed share volumes for sub-dollar OTC Equity Securities but not to do the same for sub-dollar NMS stocks, as retail investor transactions will be allocated a disproportionate percentage of total CAT costs simply due to the securities traded.²⁶¹ The commenter stated that the CAT Operating Committee must explain why it proposes to treat these securities differently and analyze the impact on retail investors.²⁶² The commenter also stated that since fractional shares would be rounded up to one share, the result would overstate volume.²⁶³ The commenter stated that the Proposed Amendment thus discriminates against Industry Members that handle retail orders because of the amount of retail activity in sub-dollar stocks and fractional share trading.264 The commenter stated that the Proposed Amendment does not explain why volume by shares was chosen over notional volume, or address its impact on specific Industry Members, investors, or overall market competition, efficiency and liquidity.265

CAT LLC proposed to delete the requirement in existing Section 11.2(b) of the CAT NMS Plan to take into account "distinctions in the securities trading operations of Participants and Industry Members and their relative impact upon Company resources and operations" in establishing the funding of the Company.²⁶⁶ CAT LLC explained that this requirement is related to using message traffic and market share in the calculation of CAT fees, as message traffic and market share were metrics related to the impact of a CAT Reporter on the Company's resources and operations.²⁶⁷ ČAT LLC explained that the requirement is no longer relevant because the proposed Executed Share Model uses the executed equivalent shares metric instead of message traffic and market share.268

With respect to the deletion in Section 11.2(b) of the requirement that, when establishing the funding of the CAT, the Operating Committee must take into account "distinctions in the securities trading operations of Participants and Industry Members and their relative impact upon Company resources and operations," FINRA stated that the Participants have proposed to delete the language in Section 11.2(b) because the proposed Executed Share Model is inconsistent with the language.²⁶⁹ FINRA stated that the Proposed Amendment "seeks to amend the core funding principles to align with an unjustified allocation methodology." 270 FINRA stated that any changes to the funding principles "must be well-reasoned and transparent and must continue to support the achievement of a fair and equitable outcome." 271

In the Commission's view, the use of executed equivalent share volume as the basis of the proposed cost allocation methodology is reasonable and consistent with the approach taken by the funding principles of the CAT NMS Plan.²⁷² The proposed use of executed equivalent shares would continue to incorporate the concept of cost

²⁴⁹ *Id. See also* FINRA April 2023 Letter at 8. 250 FINRA May 2023 Letter at 4.

²⁵¹ Id. See also FINRA April 2023 Letter at 7-9; Section 11.2(b) of the CAT NMS Plan. The Proposed Amendment would amend Section 11.2(b). See proposed Section 11.2(b); see also infra Section III.A.8 (Additional Changes from Original Funding Model).

²⁵² FINRA June 2022 Letter at 4.

²⁵³ See FINRA May 2023 Letter at 2.

²⁵⁴ See CAT LLC July 2023 Response Letter at 34.

²⁵⁵ Id.

²⁵⁶ Id.

²⁵⁷ CAT LLC May 2023 Response Letter at 7.

²⁵⁸ Id

²⁶⁰ See Citadel July Letter at 20.

²⁶¹ See Citadel August Letter at 4-5.

²⁶² Id. at 5.

²⁶³ See Citadel July Letter at 20.

²⁶⁴ Id. See also Citadel August Letter at 4-5.

²⁶⁵ See Citadel July Letter at 20. See also Citadel August Letter at 5

²⁶⁶ See proposed Section 11.2(b).

²⁶⁷ See Notice, supra note 7, 88 FR at 17099.

²⁶⁹ See FINRA June 2022 Letter at 4; see also FINRA April 2023 Letter at 7.

²⁷⁰ FINRA June 2022 Letter at 4. The commenter states that the Executed Share Model instead places the greatest emphasis on the funding principle relating to the "ease of billing and other administrative functions," favoring that principle over cost alignment. Id. at 5.

²⁷¹ Id.; FINRA April 2023 Letter at 8-9.

²⁷² See Section 11.2(b) of the CAT NMS Plan.

alignment because trading activity, as reflected through executed equivalent share volume, would, as CAT LLC explained, correlate with the cost burden on the CAT.273 It may not be possible to directly calculate each CAT Reporter's cost burden on the CAT due to the many factors impacting CAT costs, such as data processing, storage, reporting timelines and requirements, and connectivity. But executed equivalent share volume is a reasonable proxy for those costs because it is a result of trading activity, which CAT LLC explained impacts various CAT cost drivers, such as storage, data processing and message traffic.274 In addition, because the proposed use of executed equivalent share volume would preserve the cost alignment principle, while no longer relying on message traffic, the deletion of the requirement in Section 11.2(b) of the CAT NMS Plan that the Operating Committee, in allocating costs, take into account "distinctions in the securities trading operations of Participants and Industry Members and their relative impact upon Company resources and operations" ²⁷⁵ is reasonable.

In response to the commenter that urged the CAT Operating Committee to demonstrate how the proposed allocation would not unfairly discriminate against equities market participants by subsidizing CAT costs related to options market activity, 276 the Commission believes that subsidization of options market activity likely is reduced due to other CAT cost burdens, such as those relating to data processing (such as equity linkage processing, which the Commission understands is more complex than options order linkage processing, and thus more costly),²⁷⁷ imposed on the CAT by equity market activity. The Commission, however, does not believe the failure to eliminate the potential subsidization of options market activity (and any potential attendant impacts on liquidity, competition and efficiency) renders the Participants' Funding Model proposal inconsistent with the Exchange Act. The Commission does not believe it is possible for the Participants to predict with certainty how the magnitude of each driver of CAT costs will change over time. To the extent the other costs noted above exceed, for example, the subsidy accorded to options market

participants when calculating their executed equivalent shares, there may be no subsidy or even a reverse subsidy from options to equities markets. When the relative magnitudes of these cost drivers change, the amount of any subsidy changes. In light of the potential for the cost drivers to change over time, the Commission believes that the Participants' proposal is reasonable.

The Proposed Amendment's treatment of sub-dollar NMS stocks and fractional shares is appropriate. The Commission does not believe that the Participants' failure to discount subdollar NMS stocks renders the Proposed Amendment inconsistent with the Exchange Act. The Commission acknowledges one commenter's statement that retail investors could be allocated a disproportionate percentage of total CAT costs due to the lack of a discount for sub-penny NMS stocks.278 However, treating a subset of NMS stocks differently from NMS securities could introduce unnecessary complexity or administrative burdens to the extent an NMS stock price falls or rises above a dollar. It is therefore reasonable for the Proposed Amendment to treat all NMS stocks the same, even though certain sub-dollar NMS stocks and fractional shares might have characteristics similar to OTC Equity Securities. Additionally, in response to the commenter's statement that since fractional shares would be rounded up to one share, the result would overstate volume,²⁷⁹ the Commission notes that CAT fees will be based on the data contained in the transaction reports and transaction reports do not provide for fractional quantities; therefore, CAT fees cannot be calculated using fractional shares or fractional share components of executed orders at this time.²⁸⁰ CAT LLC stated that if FINRA's equity transaction reporting facilities or the exchanges report transactions in fractional shares in the future, then the calculation of CAT fees would also reflect fractional shares.²⁸¹ In response to the comment that stated that the Proposed Amendment does not explain why volume by shares was chosen over notional volume,282 calculating the notional value of stock introduces additional complexity as the notional value would have to be calculated and would depend on the value of the

execution or trade, whereas the number

of executed shares is reported and, in the cases of options for example, is based on a known multiplier (1/100). While the Commission does not disagree that using executed notional shares may offer advantages and may lessen any discrimination, the Commission believes that the Proposed Amendment's use of executed shares is administratively easier, less prone to error, and thus for these reasons and the reasons set forth above, ²⁸³ is a reasonable proxy for allocating the cost of the CAT.

The Commission also believes that CAT LLC's explanation that increased trading activity correlates with an increased cost burden on the CAT is reasonable and that executed share volume is a reasonable proxy for a CAT Reporter's cost burden on the CAT 284 because increased trading activity impacts message traffic, but also data processing and storage costs.²⁸⁵ The Original Funding Model would have used message traffic and market share to assess CAT fees on Industry Members and Execution Venues, respectively.²⁸⁶ CAT LLC expressed its belief that the use of executed equivalent share volume would be an improvement on the Original Funding Model's use of message traffic,²⁸⁷ explaining that the use of executed equivalent share volume would result in fees tied to transactions (which CAT LLC stated is the "traditional source of revenue for Industry Members" 288), that the resulting CAT fees would not adversely impact market makers, and that the Executed Share Model is simple to understand and to implement.²⁸⁹ CAT LLC stated that Industry Member revenue is often driven by transactions, but "[b]ecause message traffic is separate from whether or not a transaction occurs, fees based on message traffic may not correlate with common revenue or fee models," 290 which could negatively impact certain Industry Members in a significant way.²⁹¹ CAT LLC stated that use of message traffic to calculate fees for Industry Members could adversely impact market makers because they

²⁷³ CAT LLC May 2023 Response Letter at 7. ²⁷⁴ Id. See also Notice, supra note 7, 88 FR at 17105; see also id. at 17103.

 $^{^{275}}$ See Notice, supra note 7, 88 FR at 17105; see also id. at 17103.

²⁷⁶ See Citadel August Letter at 4.

²⁷⁷ See infra notes 1075–1082 and accompanying

²⁷⁸ See Citadel August Letter at 4–5.

 $^{^{279}\,}See$ Citadel July Letter at 20.

²⁸⁰ See Notice, supra note 7, 88 FR at 17089.

²⁸¹ Id. at 17089, n.23.

 $^{^{282}\,}See$ Citadel July Letter at 20. See also Citadel August Letter at 5.

 $^{^{283}\,}See\,supra$ notes 272–275 and accompanying text.

 $^{^{284}}$ See Notice, supra note 7, 88 FR at 17105; id. at 17101–03.

²⁸⁵ *Id.* at 17105.

²⁸⁶ See CAT NMS Plan, supra note 2, at Section 11.3(a) and (b).

²⁸⁷ See Notice, supra note 7, 88 FR at 17102–03. The Original Funding Model uses message traffic as the basis of Industry Member CAT fees. See CAT NMS Plan, supra note 2, at Section 11.3(b).

²⁸⁸ Notice, *supra* note 7, 88 FR at 17103.

²⁸⁹ Id.

²⁹⁰ *Id.* at 17102.

²⁹¹ Id.

generally create high levels of message traffic.²⁹² We agree with CAT LLC regarding the benefits of the Executed Share Model and the drawbacks of the Original Funding Model, and thus believe that the decision to replace the use of message traffic to calculate CAT fees with executed equivalent share volume in the Executed Share Model is reasonable.

The Commission acknowledges that executions do not take place on FINRA; however, the CAT NMS Plan already categorizes FINRA as an Execution Venue because it has trades reported by its members to its TRFs for reporting transactions effected otherwise than on an exchange. Thus, treatment of FINRA as an Execution Venue is not a change to the existing CAT NMS Plan.²⁹³ Additionally, this allocation of fees to FINRA is similar to how Section 31 fees are assessed on FINRA.²⁹⁴

Moreover, the Executed Share Model does not change the criteria used to charge Execution Venues (market share).295 While there are differences in how the CAT fees would be allocated among the Participants under the Executed Share Model and the existing Original Funding Model, under the Executed Funding Model, as in the Original Funding Model, the fees charged to Participants will continue to be based upon the level of market share of each Participant.²⁹⁶ The Original Funding Model approved by the Commission would have assessed CAT fees on Execution Venues (which would include the Participants) 297 based on market share determined by the share volume for a national securities exchange and determined by reported share volume of trades for a national securities association (i.e., FINRA) that had trades reported by its members to its trade reporting facility or facilities for reporting transactions effected otherwise than on an exchange in NMS

Stocks or OTC Equity Securities.²⁹⁸ Additionally, this allocation is similar to how Section 31 fees are assessed on the exchanges and FINRA. FINRA's allocation of CAT fees under the Executed Share Model will continue to be based on its off-exchange market share.

The Commission recognizes that the proposed use of executed equivalent share volume is not a perfect proxy for CAT costs, but believes it is nonetheless a reasonable proxy. The costs of CAT are attributable to a number of factors, such as message traffic, storage, and data processing costs, and that for these reasons, the Commission understands that it is difficult to calculate each CAT Reporter's individual cost burden on the CAT. Additionally, there are other operational costs of the CAT that cannot be easily attributed to a particular CAT Reporter and that need to be funded, such as costs for CAT NMS Plan requirements related to intake capacity,299 data search tools300 and data security.301 Based on the breadth of CAT costs, it is not feasible to calculate the cost burden on CAT of each CAT Reporter. A reasonable proxy for CAT cost burden must therefore be used. As discussed above, the Commission believes the proposed use of executed equivalent share volume is a reasonable method of approximating the cost burden of CAT.³⁰² Additionally, CAT LLC stated that the proposed Executed Share Model would not unfairly burden or favor a product or product type because the model would recognize the different types of securities by counting executed equivalent share volume differently for NMS Stocks, Listed Options and OTC Equity Securities.303 The proposed treatment of these different types of securities would result in the equitable allocation of reasonable CAT fees across these securities. The Executed Share Model would count each executed contract for a transaction in Listed Options using the contract multiplier applicable to the specific Listed Option in the relevant

transaction,304 which is appropriate because a Listed Option contract typically represents 100 shares, or it could represent another designated number of shares, and since Listed Options trade in contracts instead of shares, they would need to be converted into shares for purposes of calculating the executed equivalent share volume of a transaction in Listed Options. For OTC Equity Securities, the Executed Share Model would count each executed share for a transaction in OTC Equity Securities as 0.01 executed equivalent shares,305 which is appropriate because CAT LLC represented that this amount was a result of an analysis it conducted of several different metrics comparing the markets for OTC Equity Securities and NMS Stocks, specifically total notional dollar value, total trades, and average share price per trade. 306 Additionally, since transactions in OTC Equity Securities typically are priced below one dollar, or even one penny, and tend to trade in larger quantities, this treatment is appropriate to prevent **CAT Reporters trading OTC Equity** Securities from being assessed higher CAT fees than their activity would deserve.

b. Options vs. Equities

The equal allocation of Participant CAT fees to Participants, regardless of whether they are transacting in options or in equities, is reasonable. The Original Funding Model would have divided Participant CAT fees by Execution Venues that execute transactions (or in the case of a national securities association, has trades reported by its members to its trade reporting facility or facilities for reporting transactions effected otherwise than on an exchange) in NMS Stocks or OTC Equity Securities and by Execution Venues that execute transactions in Listed Options. 307 The Executed Share Model instead assesses a CAT fee based purely on executed equivalent share volume.308 CAT LLC explained that the use of equivalent executed share volume is designed to

²⁹² Id. at 17103.

²⁹³ See CAT NMS Plan Approval Order, supra note 2, 81 FR at 84793; CAT NMS Plan, supra note 2, at Section 1.1. (defining "Executing Venues").

²⁹⁴ 15 U.S.C. 78ee; Section 31 of the Securities Exchange Act requires each national securities exchange and national securities association to pay transaction fees to the Commission. Specifically, Section 31(c) requires each national securities association to pay to the Commission fees based on the aggregate dollar amount of covered sales transacted by or through any member of the association other than on an exchange. 15 U.S.C. 78ee(c). Section 31(a) permits the Commission to collect transaction fees and assessments designed to recover the costs to the Government of the annual appropriation to the Commission by Congress. 15 U.S.C. 78ee(a).

²⁹⁵ See CAT NMS Plan Approval Order, supra note 2, 81 FR at 84793–97; CAT NMS Plan, supra note 2, at Section 11.2, Section 11.3.

²⁹⁶ Id.

 $^{^{297}\,}See\,supra$ note 15.

 $^{^{298}}$ See CAT NMS Plan, supra note 2, at Section 11.3(a)(i).

²⁹⁹ In the CAT NMS Plan Notice, the Commission said that it preliminarily believed that intake capacity level is likely to be a primary cost driver for the Central Repository. *See* Securities Exchange Act Release No. 77724 (Apr. 27, 2016), 81 FR 30614 (May 17, 2016), 81 FR at 30770.

 $^{^{300}}$ See CAT NMS Plan, supra note 2, at Appendix C, Section 8.1–8.2.

³⁰¹ *Id.* at Appendix D, Section 4.

 $^{^{302}\,}See\,\,supra$ notes 271–274 and accompanying text.

³⁰³ See Notice, supra note 7, 88 FR at 17116.

 $^{^{304}}$ Id. at 17093. A Listed Option contract typically represents 100 shares, or it could represent another designated number of shares. Id.

³⁰⁵ See proposed Section 11.3(a)(i)(B)(III). ³⁰⁶ See supra notes 227–229 and accompanying

text.

 $^{^{307}}$ See CAT NMS Plan, supra note 2, at Section 11.3(a)(i), (ii).

³⁰⁸ The Executed Share Model would count executed equivalent share volume differently for NMS Stocks, OTC Equity Securities and Listed Options for purposes of calculating a CAT fee. CAT LLC explains that the proposed approach "would not favor or unfairly burden any one type of product or product type." See Notice, supra note 7, at 17116. See also supra Section III.A.3.

normalize options and equities in the calculation of fees, and to recognize and address the different trading characteristics of different types of securities by counting executed equivalent share volume differently for Listed Options and for equities.³⁰⁹ The use of executed equivalent share volume and, in particular, the different weights assigned to equities versus options, are designed to result in an equitable treatment of the equities and options markets. The proposed treatment of these different types of securities reasonably equalizes the CAT fees across these securities. The Executed Share Model would count each executed contract for a transaction in Listed Options using the contract multiplier applicable to the specific Listed Option in the relevant transaction,310 which is appropriate because one options contract typically represents 100 shares.

c. FINRA Allocation

Under the Executed Share Model, because FINRA is the Participant primarily responsible for oversight of off-exchange securities trading activity,311 FINRA will likely have greater executed equivalent share volume than other Participants 312 and thus will be responsible for a significant portion of total CAT fees. In the Proposed Amendment, CAT LLC stated that the size of FINRA's fee is calculated based on the activity in the over-thecounter market.313 CAT LLC stated that the executed equivalent share volume for over-the-counter trades in Eligible Securities in 2021 was 1,361,484,729,008 out of a total volume of 3,963,697,612,395 executed equivalent shares for trades in Eligible Securities.314 CAT LLC stated that approximately 34% of the executed equivalent share volume in Eligible Securities took place in the over-thecounter market.315

CAT LLC stated that the assessment of a CAT fee on FINRA in the same manner as the other Participants would not result in a burden on competition for FINRA or for Industry Members engaging in off-exchange activity.316 CAT LLC also stated that FINRA and the exchanges should not be evaluated differently based upon the potential for a particular Participant to recoup its CAT fees through charging fees to its members or through revenue-generating activity other than passing its fees through to its members.317 CAT LLC stated that each Participant, including FINRA, can choose to charge its members fees to fund the Participant's CAT fees.³¹⁸ Additionally, CAT LLC stated that FINRA, just like the exchange Participants, has revenue sources other than membership fees,319 explaining that FINRA generates significant revenues via Regulatory Services Agreements ("RSAs") with the exchanges, among other sources.320 According to CAT LLC, these other revenue sources may be used to pay CAT fees, and, if they are used, would not lead to an increase in fees for Industry Members.321

Certain commenters objected to the proposed allocation of Participant CAT fees to FINRA.322 A subset of these commenters objected to the allocation to FINRA of 34% of the total CAT costs 323 to be borne by the Participants.324 FINRA stated that this amount was a "disproportionate share of CAT costs," 325 especially as FINRA does not

operate a market,326 and that the Proposed Amendment would place an undue burden on FINRA.327 FINRA stated that its share was "more than double that of the next highest Participant and \$4 million more than all option exchanges combined." 328 FINRA also stated that its allocation would largely be based on transaction volume reported to the TRF; however, FINRA stated that TRF transactions generate fewer costs for the CAT,329 as opposed to options activity, but that only 25% of total Participant CAT fees would be assessed for options activity, while the remaining 75% would be assessed for equities activity.330 FINRA stated that . . . FINRA would be assessed an estimated 34% of the total CAT costs to be borne amongst the 25 Participants, and more than all options exchanges combined." 331

FINRA stated that, unlike the exchange Participants, transactions are not executed on a FINRA marketplace and FINRA does not receive commercial revenue for those transactions.332 FINRA explained that "while the NMS stock allocation to FINRA under the Funding Model is based on transactions that are reported to FINRA [TRFs], these transactions are not executed on a FINRA marketplace and FINRA does not retain commercial revenues from those transactions" 333 unlike the exchanges that operate each FINRA TRF, which retain the market data and trade reporting revenue of the TRF.334 FINRA stated that, unlike itself, these exchanges would thus have a revenue stream related to the transactions that would be assessed a CAT fee, and that also, unlike FINRA, exchanges generate revenue from listings and proprietary data feeds in NMS securities.335 FINRA also stated that FINRA members can report over-the-counter transactions in listed stocks to the FINRA Alternative Display Facility, although most transactions are reported to a TRF.336

FINRA further stated that it cannot necessarily recoup its costs through RSAs that it has entered into with

³⁰⁹ See Notice, supra note 7, 88 FR at 17108. 310 Id. at 17093.

³¹¹ See Securities Exchange Act Release No. 95388 (July 29, 2022), 87 FR 49930 (Aug. 12, 2022), at 49931 (stating that FINRA historically has overseen off-exchange securities trading activity and that "the Exchange Act's statutory framework places SRO oversight responsibility with a [national securities association] for trading that occurs elsewhere than an exchange to which a broker or dealer belongs as a member."), 49932 (stating that an exchange would primarily have SRO oversight responsibility of its members and their trading on the exchange, while SRO oversight of other trading activity, such as off-exchange trading, is primarily the responsibility of a national securities association).

³¹² See Notice, supra note 7, 88 FR at 17107.

³¹⁴ Id

³¹⁵ Id.

 $^{^{317}}$ Id. See also CAT LLC May 2023 Response Letter at 9.

³¹⁸ See Notice, supra note 7, 88 FR at 17107.

³¹⁹ *Id.* at 17108.

³²⁰ Id.

³²¹ Id

³²² See FINRA May 2023 Letter; FINRA April 2023 Letter; FINRA June 2022 Letter; SIFMA May 2023 Letter; SIFMA June 2022 Letter; SIFMA October 2022 Letter. One of the commenters supported the points raised in the FINRA April 2023 Letter that stated that the Proposed Amendment would result in the inequitable allocation of fees and should be disapproved. See SIFMA May 2023 Letter at 2. Another commenter supported these points and stated that the fact that one of the biggest Participants was so strongly opposed to the plan was evidence that it should be disapproved. See Virtu Letter at 3.

³²³One commenter stated that this estimate is based on 2021 data and urged the Commission to require the Participants to amend the Proposed Amendment to include the 2022 data and fee allocation estimates, stating that the CAT budget has grown significantly from 2021. See FINRA April 2023 Letter at 3, 4-5. In its response to comments, CAT LLC provided the Historical CAT Costs for 2022. The total operating expenses increased from \$144,415,268 in 2021 to \$181,107,294 for 2022. See Notice, supra note 7, 88 FR at 17111; CAT LLC May 2023 Response Letter at 13.

³²⁴ See FINRA May 2023 Letter at 2; FINRA April 2023 Letter at 3; SIFMA May 2023 Letter at 2.

³²⁵ FINRA April 2023 Letter at 3.

³²⁶ Id

³²⁷ See FINRA June 2022 Letter at 6.

³²⁸ FINRA April 2023 Letter at 4; see also FINRA June 2022 Letter at 5.

³²⁹ See FINRA April 2023 Letter at 8, n.23. The commenter also stated that "TRF volume contributes to only a very small percentage of annual CAT compute and storage costs." FINRA May 2023 Letter at 2.

³³⁰ See FINRA April 2023 Letter at 8, n.23; FINRA May 2023 Letter at 2.

³³¹ FINRA May 2023 Letter at 2.

 $^{^{332}\,}See$ FINRA April 2023 Letter at 3.

³³³ Id.

³³⁴ Id

³³⁵ Id. at 4.

³³⁶ Id. at 3, n.8.

certain exchanges 337 because the exchanges must first agree to be charged CAT costs under the RSAs; therefore, RSAs would not be a reliable source of CAT funding for FINRA.338 Additionally, FINRA questioned CAT LLC's statement that the Proposed Amendment "reflects a reasonable effort to allocate costs based on the extent to which different CAT Reporters participate in and benefit from the equities and options markets." 339 Specifically, FINRA asked how this explains the size of its allocation 340 and noted that this statement "conflates the costs to create and operate the CAT with the usage of CAT data." 341

In the Proposed Amendment, CAT LLC contested the view that FINRA should not be treated as a market center for CAT funding purposes merely because FINRA is not treated as a market center for governance purposes under the National Market System Plan Regarding Consolidated Equity Market Data ("CT Plan").342 CAT LLC explained that the purpose and implementation of the CT Plan and the CAT NMS Plan are different.343 CAT LLC stated that while the CAT NMS Plan explicitly contemplates charging fees to all Participants, including FINRA,344 and that the CAT is solely for regulatory purposes, providing a regulatory system to facilitate the performance of the self-regulatory obligations of all of the Participants, including the exchanges and FINRA,345 "[i]n contrast, the CT Plan governs the public dissemination of real-time consolidated equity market data for NMS stocks." 346

11.2 and 11.3.

a New National Market System Plan Regarding

Consolidated Equity Market Data).

Certain commenters expressed concern about alleged arbitrary treatment of FINRA by the other Participants of the CAT NMS Plan.347 FINRA believes that its "outsized allocation" 348 was because of its limited voting power, only having one out of 25 votes on the Operating Committee as it does not control, nor is under common control with, any other Participant.349 Another commenter stated that the current CAT NMS Plan voting structure results in the unfair and inequitable treatment of FINRA.350 Both commenters believe that the exchange Participants treat FINRA arbitrarily to benefit themselves, treating FINRA as a market center in the CAT NMS Plan while not as a market center under the CT Plan, which governs the public dissemination of real-time consolidated market data for national market system stocks.351 One commenter stated that the Participants do not treat FINRA as a market center under the CT Plan in order to limit FINRA's voting power and therefore its ability to decide how to allocate market data revenue.352 The commenter stated that this example demonstrates the ". . . inherent conflicts of interest that for-profit exchanges have in operating as SROs. . ." 353

Certain commenters suggested that the Commission issue an order soliciting comment on whether the Operating Committee should be reorganized consistent with the CT Plan.³⁵⁴ One commenter stated, "[w]e believe such a governance structure for the CAT would help facilitate a fairer structure for the views of the SROs and industry to be heard and incorporated into any further CAT funding proposal by reducing the ability of the largest exchange groups to dictate the terms of any CAT funding proposal over the objections of other SRO Participants and the industry." 355

Commenters also believe the allocation to FINRA would increase the allocation to Industry Members.356 FINRA stated that because it relies on regulatory fees from its members for funding, it must increase its member fees in order to fund CAT costs that it cannot recover from contractual arrangements with TRF business members.357 FINRA stated that the Proposed Amendment does not adequately analyze the allocation's impact, including whether the allocation would increase Industry Members' allocation of total costs beyond two-thirds.358 FINRA dismissed as inadequate the Participants' argument that Industry Members can pass through their costs, stating that the Proposed Amendment lacks a detailed description of and transparency into how the fees may be passed on to customers.359 Another commenter stated that the Participants "do not address the fact that the Executed Share Model for Prospective CAT Costs allocates twothirds of CAT costs to Industry Members for exchange transactions and more for off-exchange transactions" 360 because they cannot demonstrate that the proposed allocation results in an equitable allocation of reasonable fees.361 The commenter stated that Industry Members, who would be subject to two-thirds of Prospective CAT Costs under the Executed Share Model, already pay FINRA's operating costs through regulatory fines and fees;

³³⁷ This statement was made in response to a statement in the Proposed Amendment that FINRA, like the exchange Participants, has revenue sources other than membership fees, giving as an example the RSAs. See Notice, supra note 7, 88 FR at 17107.

³³⁸ See FINRA April 2023 Letter at 4.

³³⁹ *Id.* at 7.

³⁴⁰ Id.

³⁴¹ *Id.;* see also FINRA June 2022 Letter at 6.
342 See Notice, supra note 7, 88 FR at 17108. See also Joint Industry Plan; Order Approving, as Modified, a National Market System Plan Regarding Consolidated Equity Market Data; Securities Exchange Act Release No. 92586 (Aug. 6, 2021), 86 FR 44142 (Aug. 11, 2021) (File No. 4–757) ("Order Approving the CT Plan"). The Order Approving the CT Plan was vacated by the D.C. Circuit on July 5, 2022. See The NASDAQ Stock Market LLC et al. v. SEC, Case No. 21–1167, D.C. Cir. (July 5, 2022). See also Securities Exchange Act Release No. 88827; File No. 4–757 (May 6, 2020), 85 FR 28702 (May 13, 2020) (Order Directing the Exchanges and the Financial Industry Regulatory Authority to Submit

³⁴³ See Notice, supra note 7, 88 FR at 17108. 344 See CAT NMS Plan, supra note 2, at Sections

 $^{^{345}}$ See Notice, supra note 7, 88 FR at 17108. 346 Id.

³⁴⁷ See FINRA April 2023 Letter at 6; SIFMA October 2022 Letter at 3. See also SIFMA May 2023 Letter at 6, n.11.

 $^{^{348}\,\}mathrm{FINRA}$ April 2023 Letter at 7; FINRA June 2022 Letter at 6.

³⁴⁹FINRA April 2023 Letter at 4, 8. *See also* FINRA June 2022 Letter at 8.

³⁵⁰ See SIFMA January 2023 Letter at 3, n.7.

³⁵¹ See FINRA April 2023 Letter at 6, n.16; SIFMA October 2022 Letter at 3. See also SIFMA May 2023 Letter at 6, n.11. One commenter stated that the Participants treat FINRA in ways that are financially beneficial to them without considering FINRA's role in the marketplace ". . . as the notfor-profit self-regulator for the entire brokerage industry. . ." SIFMA October 2022 Letter at 3. See also SIFMA January 2023 Letter at 4; SIFMA October 2022 Letter at 4; SIFMA May 2023 Letter at 8 (recommending that FINRA be treated differently from the Participant exchanges due to its unique role).

³⁵² See SIFMA October 2022 Letter at 3–4. See also SIFMA May 2023 Letter at 6, n.11.

 $^{^{353}\,\}rm SIFMA$ October 2022 Letter at 3. See also SIFMA June 2023 Letter at 4 (quoting a Commission release stating that the Participants are potentially conflicted in allocating CAT fees to themselves and the Industry Members); supra note 64.

³⁵⁴ SIFMA October 2022 Letter at 2. See also infra Section III.A.9.f. (suggesting changes to the governance structure of the CAT NMS Plan); see also MMI July Letter at 1–3. The latter commenter also felt that there should be a disclosure of the conflicts of interest the commenter believes are

inherent in having the funding model determined by the Participants.).

³⁵⁵ SIFMA October 2022 Letter at 2. The commenter also stated that the Industry Members are not voting members of the Operating Committee and have no way to direct the cost control efforts of the Participants or change their course if the cost control efforts prove to be unsuccessful. See SIFMA June 2022 Letter at 8.

³⁵⁶ See FINRA April 2023 Letter at 5–7; SIFMA
June 2022 Letter at 4; Citadel July Letter at 2, 16,
21, supra notes 73–74 and accompanying text. See also SIFMA October 2022 Letter at 2, 3.

³⁵⁷ See FINRA April 2023 Letter at 5–6. See also FINRA June 2022 Letter at 7.

³⁵⁸ See FINRA April 2023 Letter at 6.

³⁵⁹ *Id.* at 6–7.

 $^{^{360}\,\}rm SIFMA$ June 2022 Letter at 4. See also SIFMA October 2022 Letter at 3 (". . . we believe the proposal is flawed because it fails to appropriately consider that Industry Members pay the full costs of operating FINRA.").

³⁶¹ See SIFMA June 2022 Letter at 4.

therefore, Industry Members would additionally be indirectly assessed FINRA's one-third CAT fee for off-exchange transactions. The commenter suggested an alternative allocation that would subject FINRA only to a nominal regulatory user fee to access CAT Data. 164

CAT LLC disagreed with the commenter's proposal to charge FINRA only a nominal regulatory fee.365 CAT LLC stated that the proposed transaction-based CAT fee is purposely agnostic as to the location of where a trade occurs, and an intent of this design is to avoid influencing whether or where any trading activity would take place. Moreover, CAT LLC stated that FINRA is no different from the exchanges in terms of its regulatory obligations regarding the CAT.366 CAT LLC also stated that FINRA's allocation is "fair and reasonable as FINRA is currently, and is expected to continue to be, one of the largest regulatory users of the CAT, and it is responsible for the oversight of the very large over-thecounter securities market." 367

FINRA requested that if the Commission were to approve the Proposed Amendment, that it acknowledge "FINRA's need and ability to cover CAT costs that are not recovered through contractual arrangements through member fee increases, so as not to jeopardize FINRA's ability to carry out its critical regulatory mission." ³⁶⁸ FINRA also stated that it would file a rule change to increase its member fees with the filing of any proposed rule change to effectuate the Funding Model. ³⁶⁹

The Commission acknowledges the comments objecting to the allocation to FINRA of 34% of the total CAT costs to be borne by Participants,³⁷⁰ but believes that it is reasonable for the Proposed Amendment to assess fees to FINRA based on executed equivalent share

volume like the other Participants for purposes of CAT funding. FINRA is a Participant of the CAT NMS Plan. All Participants are mandated under the CAT NMS Plan to fund the CAT.³⁷¹ The Executed Share Model would assess CAT fees based on executed equivalent share volume. Under the Executed Share Model, CAT fees would be allocated among the buyer, seller, and the market regulator in each transaction. FINRA would pay the Participant CAT fee based on off-exchange trades reported by its members to its trade reporting facilities because FINRA is the market regulator responsible for the market in which the TRF transactions occur. The Executed Share Model, like the current funding model, is designed to allocate CAT fees among the Participants based on market share. Since FINRA is generally the market regulator for the over-the-counter markets, its CAT fees, and thus market share, will be based on the trading activity in the over-the-counter markets reported to it by its members. The trading volume of the over-the-counter markets is greater than that on the exchanges; consequently, FINRA will likely be allocated a greater executed equivalent share volume than the other Participants. However, trading volume generates costs for CAT, therefore, given its role overseeing the over-the-counter market, it is reasonable for FINRA to incur a greater share of CAT fees based on the over-the-counter market's trading volume. As discussed above, it is difficult to calculate each CAT Reporter's individual cost burden on the CAT, and a reasonable proxy for CAT cost burden must be used. The proposed use of executed equivalent share volume is a reasonable method of allocating costs because it is readily determinable and equitable since executed share volume is based on trading activity, which impacts CAT costs. In practice, CAT Reporters will be assessed fees corresponding to the cost burden they impose on the CAT through their trading activity, or in FINRA's case, trading activity in the over-the-counter markets reported to it by its members.

The Commission recognizes that there could be other methodologies for allocating costs among CAT Reporters, such as allocations that take into account the manner in which each Participant earns revenue, but these other methodologies may be significantly more complex and would not necessarily more accurately reflect the cost burden of each CAT Reporter. CAT LLC chose to propose the use of

executed equivalent share volume, explaining why trading activity is a reasonable proxy for cost burden and an appropriate metric for allocating CAT costs.³⁷² Although there may be multiple permissible approaches to cost allocation, the proposed allocation of Participant CAT fees based on executed equivalent share volume is reasonable and meets the Rule 608 approval standard.³⁷³

The Commission agrees with CAT LLC that the Executed Share Model reasonably assesses fees to FINRA in the same manner based on transaction volume as other Participants. The Executed Share Model is reasonably designed to be neutral as to the manner of execution and place of execution.³⁷⁴ All Participants are self-regulatory organizations that have the same regulatory obligations under the Exchange Act, regardless of whether they operate as a for-profit or not-forprofit entity. Their regulatory responsibilities for the operations of CAT are the same.375

The Commission acknowledges the concerns expressed by commenters that FINRA's allocation could indirectly increase the allocation of CAT fees to Industry Members since Industry Members contribute to FINRA's funding.376 As discussed above, however, the costs of CAT must be allocated between the Participants and Industry Members according to some formula. Although the Participants and Industry Members have different means of potentially recovering from others some of the costs allocated to them (e.g., the Participants from Industry Members and Industry Members from customers), it is reasonable to allocate costs evenly among the three parties who have primary roles related to the transaction. The Commission agrees with CAT LLC that Industry Members may be able to offset any fees that FINRA assesses them by passing their CAT fees through to their customers, just as they may do with Section 31-related fees and other fees. The Commission recognizes, however, that not all Industry Members currently pass through fees or would determine to do so in the future.

Finally, the Commission does not agree that the Participants' treatment of FINRA is arbitrary because FINRA is treated as a market center for purposes

³⁶² Id. The commenter also stated that the proposed allocation would result in two-thirds of CAT costs for exchange transactions being imposed on Industry Members, and that this amount would be higher for off-exchange transactions as FINRA would be assessed one-third as the venue fee and Industry Members would be indirectly assessed FINRA's portion of CAT costs as they pay the entire costs of operating FINRA. Id. See also SIFMA October 2022 Letter at 2.

³⁶³ See supra notes 100–101 and accompanying text

³⁶⁴ See SIFMA January 2023 Letter at 4. See also SIFMA May 2023 Letter at 8; SIFMA June 2022 Letter at 5; SIFMA October 2022 Letter at 4; supra notes 100–101 and accompanying text.

³⁶⁵ See CAT LLC May 2023 Response Letter at 8.

 $^{^{367}}$ See CAT LLC July 2023 Response Letter at 35. 368 FINRA April 2023 Letter at 7.

³⁶⁹ Id.

 $^{^{370}}$ Id. at 3; SIFMA May 2023 Letter at 2.

 $^{^{371}}$ See CAT NMS Plan, supra note 2, at Section 11.1(b); Section 11.3(a).

³⁷² See Notice, supra note 7, 88 FR at 17103.

³⁷³ See 17 CFR 242.608(b)(2).

 $^{^{\}rm 374}$ See Notice, supra note 7, 88 FR at 17107. $^{\rm 375}$ Id.

³⁷⁶ See FINRA April 2023 Letter at 5–7; SIFMA June 2022 Letter at 4; Citadel July Letter at 2, 16, 21, supra notes 73–74 and accompanying text. See also SIFMA October 2022 Letter at 2, 3; FINRA June 2022 Letter at 4.

of determining its CAT funding obligations while the CT Plan, which governs the public dissemination of consolidated market data, would not have counted FINRA's market activity for purposes of determining the allocation of votes on the Operating Committee.³⁷⁷ The different treatment of FINRA in these NMS plans reasonably reflects the very different roles that a market center is used for in these contexts. The CT Plan provisions discussed by the commenters involve the determination of which Participant(s) could be eligible for a second vote on the Operating Committee,378 while the Executed Share Model proposes to assess FINRA a Participant CAT Fee based on its role as the regulator for the over-the-counter market in which such trades occur.379 The commenter's request that the Commission issue an order soliciting comment on whether the Operating Committee should be reorganized consistent with the CT Plan 380 would be better addressed in the context of a separate plan amendment.

4. CAT Executing Broker

As noted above, CAT Executing Brokers will be charged CAT fees.³⁸¹ CAT LLC proposed to add a definition of "CAT Executing Broker" to Section 1.1 of the CAT NMS Plan. The definition would explain which party would be identified as a CAT Executing Broker in a transaction.

With respect to transactions on an exchange and over-the-counter transactions, CAT LLC would use transaction reports reported to the CAT by FINRA or the exchanges to identify the transaction, as well as the CAT Executing Broker for each transaction, for purposes of calculating the CAT fees.³⁸² Under the Participant Technical

Specifications, for transactions occurring on a Participant exchange, there is a field for the exchange to report the market participant identifier ("MPID") of "the member firm that is responsible for the order on this side of the trade." 383 The Industry Members identified in these fields for the transaction reports would be the CAT Executing Brokers for transactions executed on an exchange.384 FINRA is required to report to the CAT transactions in Eligible Securities reported to a FINRA trade reporting facility (i.e., the TRF, Over-the Counter Reporting Facility ("ORF") and Alternative Display Facility ("ADF")).385 Under the Participant Technical Specifications, for such transactions reported to a FINRA trade reporting facility, FINRA is required to report the MPID of the executing party as well as the MPID of the contra-side executing party.386 The Industry Members identified in these two fields for the transaction reports would be the CAT Executing Brokers for over-thecounter transactions.387

For transactions on ATSs, if an ATS is identified as the executing party and/or the contra-side executing party in the TRF/ORF/ADF Transaction Data Event, then the ATS would be a CAT Executing Broker for purposes of the Executed Share Model. ³⁸⁸ If the ATS is identified as the executing party for the buyer in such transaction reports, then the ATS would be the CEBB. ³⁸⁹ If the ATS is identified as the executing party for the seller in such transaction reports, then the ATS would be the CEBS. ³⁹⁰ If the

ATS is identified as both the executing party and contra-side executing party, the ATS would be both the CEBB and the CEBS.³⁹¹ ATSs would determine the executing party and the contra-side executing party reported to FINRA's equity trading facilities in accordance with the transaction reporting requirements for FINRA's equity trading facilities.³⁹²

For transactions that do not occur on an exchange and there is only a FINRA member identified for one side of the trade, that FINRA member would be treated as the CAT Executing Broker for both the buy-side and the sell-side of the transaction, that is, as the CEBS and CEBB.393 Additionally, "[f]or any trade report on which a Canadian nonmember appears as a party to the trade, the FINRA member must appear as the reporting party." 394 In this situation. the executing broker identified in the "reportingExecutingMpid" field would be billed for both sides of the transaction.395

The Executed Share Model also provides for cancellations and corrections.³⁹⁶ CAT LLC stated that it expects to determine CAT fees based on the transaction reports for a month as of a particular day.³⁹⁷ To the extent that changes are made to the transaction reports on or before the day the CAT fees are determined for the given month, the changes will be reflected in the monthly bill.398 To the extent that changes are made to the transaction reports after the day the CAT fees are determined for that month, subsequent bills will reflect any changes via debits or credits, as applicable.399 CAT LLC represented that it will establish specific policies and procedures regarding the treatment of such adjustments as those related to cancellations and corrections, as is required under the CAT NMS Plan to adopt policies, procedures, and practices regarding the billing and collection of fees. 400 Furthermore, CAT LLC stated that it will inform Industry Members and other market participants

³⁷⁷ The CT Plan provided that an exchange group or independent exchange that has more than 15 percent of consolidated equity market share during four of the six calendar months preceding a vote of the operating committee would be authorized to cast two votes. The CT Plan stated that FINRA is not considered a market center for purposes of determining consolidated equity market share solely by virtue of facilitating trades through any TRF that FINRA operates in affiliation with a national securities exchange designed to report transactions otherwise than on an exchange. See supra note 342.

³⁷⁸ See FINRA April 2023 Letter at 6; SIFMA October 2022 Letter at 3. See also SIFMA January 2023 Letter at 4; SIFMA October 2022 Letter at 4; SIFMA May 2023 Letter at 8.

 $^{^{379}\,}See\,\,supra$ notes 371–372 and accompanying text.

 $^{^{380}\,}See$ SIFMA October 2022 Letter at 2.

³⁸¹ See Notice, supra note 7, 88 FR at 17087.

 $^{^{382}}$ Id. at 17088. The transaction reports used to identify transactions and CAT Executing Brokers do not provide for fractional quantities; therefore, CAT fees would not be calculated using fractional shares

or fractional share components of executed orders. *Id.* at 17089. *See supra* notes 280–266 and accompanying text.

³⁸³ Section 4.7 (Order Trade Event) and Section 5.2.5.1 (Simple Option Trade Event: Side Details) of the CAT Reporting Technical Specifications for Plan Participants, Version 4.1.0–r17 (Feb. 21, 2023), https://www.catnmsplan.com/sites/default/files/2023-02/02.21.2023-CAT-Reporting-Technical-Specifications-for-Participants-4.1.0-r17.pdf.

³⁸⁴ See Notice, supra note 7, 88 FR at 17087-88. 385 See Section 6.1 of the CAT Reporting Technical Specifications for Plan Participants (Feb. 21, 2023). A CAT Executing Broker in over-thecounter transactions identified on the TRF/ORF/ ADF Transaction Data Event is determined based on the tape or media report, that is, a trade report that is submitted to a FINRA trade reporting facility and reported to and publicly disseminated by the appropriate exclusive Securities Information Processor. A CAT Executing Broker for over-thecounter transactions is not determined based on a non-tape report (e.g., a regulatory report or a clearing report), which is not publicly disseminated. There is an exception to this statement for away-from-market trades. These are non-media trades reported to the TRF with an "SRO Required Modifier Code" of "R"

³⁸⁶ See Notice, supra note 7, 88 FR at 17087–88.

³⁸⁷ Id. at 17088.

³⁸⁸ Id. at 17088-89.

³⁸⁹ Id. at 17089.

³⁹⁰ Id.

³⁹¹ Id. See also FINRA, Trade Reporting Frequently Asked Questions at Section 203, available at https://www.finra.org/filing-reporting/ market-transparency-reporting/trade-reportingfaq#203; FINRA Regulatory Notice 09–08, available at https://www.finra.org/rules-guidance/notices/09-08.

 ³⁹² See Notice, supra note 7, 88 FR at 17089.
 ³⁹³ See proposed Section 1.1. (definition of "CAT Executing Broker").

³⁹⁴ Notice, *supra* note 7, 88 FR at 17089.

³⁹⁵ Id.

³⁹⁶ Id.

³⁹⁷ Id.

³⁹⁸ Id.

 $^{^{400}\,}See$ CAT NMS Plan, supra note 2, at Section 11.1(d).

of these policies and procedures via FAQs, CAT Alerts and/or other appropriate methods.⁴⁰¹

Certain commenters objected to the proposed definition of "CAT Executing Broker." 402 One commenter stated that the term "CAT Executing Broker" "does not appear to be universally defined or accepted by Option Industry Members or Participants" and that such lack of acceptance "present[s] a challenge when firms try to assess the impact the 'Funding Proposal' will have on their respective businesses." 403 Accordingly, the commenter advocated that the Executed Share Model follow the 'structure already in place for [collecting] Regulatory Fees," such as charging Člearing Brokers. 404

Another commenter stated that the proposed definition of executing broker would result in the inequitable allocation of fees. 405 While the commenter supported the change from having clearing firms be assessed Industry Member CAT fees to executing brokers having this obligation, 406 because clearing firms would have been unfairly burdened with CAT costs and could have been placed in situations in which they would have been unable to identify the client responsible for the costs, 407 the commenter expressed

401 See Notice, supra note 7, 88 FR at 17089. $^{402}\,See$ SIFMA May 2023 Letter; Letter from Timothy Miller, Chief Operating Officer, DASH Financial Technologies, LLC to Vanessa Countryman, Secretary, Commission (July 13, 2023) ("DASH July 2023 Letter"), at 1-2; Letter from Timothy Miller, Chief Operating Officer, DASH Financial Technologies, LLC to Vanessa Countryman, Secretary, Commission (April 11, 2023) ("DASH April 2023 Letter"), at 1-2. Both the DASH July 2023 Letter and the DASH April 2023 Letter incorporated by reference a separate letter submitted by the commenter on the prior funding proposal (stating that the concerns expressed in the prior letter concerning the operating and competitive burdens of the proposed funding model are unchanged). See Letter from Timothy Miller, Chief Operating Officer, DASH Financial Technologies LLC, to Vanessa Countryman, Secretary, Commission (Jan. 3, 2023) ("DASH January 2023 Letter").

⁴⁰³ DASH April 2023 Letter at 1. See also DASH July 2023 Letter at 1–2.

⁴⁰⁴DASH April 2023 Letter at 2. See also DASH July 2023 Letter at 1–2. The commenter reiterated that it believes clearing firms are still best suited to process the collection of fees, as this can occur at trade settlement and the cost is ultimately borne by the end beneficiary of each transaction. The commenter further stated that "there is precedent to follow with other Regulatory Fees, such as ORF and OCC, to streamline the workflow and reduce the number of counterparties involved in the payment/collection process," and "that in the options industry, ORF and Section 31 fees are not consistently billed to the exchange facing member; but, most of the time, these fees follow the clearing firm associated with the order."

 $^{405}\,See$ SIFMA May 2023 Letter at 3. $^{406}\,Id.$ See also SIFMA January 2023 Letter at 7–

concerns with how the Participants determined which entities would be considered executing brokers. 408 In comment letters on the prior funding model proposal,409 which was amended to require executing brokers instead of clearing firms to be assessed CAT fees,410 the commenter requested additional detail on how an executing broker would be defined.411 The commenter subsequently stated that the definition in the current Proposed Amendment suffers from the same problems as the prior proposal in which CAT fees were allocated to clearing firms and would result in the inequitable allocation of CAT fees among Industry Members.412

The commenter explained that CAT operates on a cost-recovery basis, with costs resulting from the number of messages that Participants and Industry Members report to the CAT, the processing and linking of such messages, and the costs of providing tools to regulators to analyze CAT data.413 The commenter stated that the use of message traffic as the basis of fees, in the Original Funding Model, would have ensured that all CAT Reporters would contribute to CAT's funding.414 However, the commenter stated that, since the Proposed Amendment would not impose fees on all CAT Reporters, instead imposing fees on executing brokers, it would result in an inequitable allocation of fees as the executing brokers would be the last broker among many other brokers handling an order.415 The commenter stated that any analysis of

also expressed concerns about the assessment of CAT fees on clearing firms because clearing firms would be required to collect fees and thus would have to develop new systems and processes under the Executed Share Model, and because a clearing firm for a buyer or seller would not always be a party to a trade as it could be the clearer of a trade on behalf of an executing broker. See SIFMA June 2022 Letter at 9; SIFMA October 2022 Letter at 7.

such a funding model must evaluate whether (i) the executing brokers would pass-through or absorb the CAT fees and any negative impacts on competition, noting that the Proposed Amendment would require executing brokers to incur expenses that other Industry Members would not incur since they would be required to collect the Industry Member portion of CAT fees on behalf of the Participants, 416 and (ii) Industry Members that executed trades for introducing brokers and acted as order consolidators and ATSs would be responsible for CAT fees for transactions they did not originate and would have to either pay the fee for their clients or develop software and processes to collect the fees from their clients as they often are not capable of passing through fees to the clients that sent them the orders.417 The commenter stated that the Proposed Amendment would subject executing brokers to unfair burdens and require them to "shoulder CAT costs in scenarios in which they could not determine which client firm was responsible for creating the CAT costs by initiating the transaction." 418

The commenter suggested instead an allocation in which the Industry Member that originated an order would be treated as an "executing broker" and therefore be responsible for Industry Member CAT fees. 419 Under this alternative, "the Industry Member who originates a new principal order or the Industry Member who initially receives and routes a customer order for execution on an agency basis would be directly assessed CAT Fees." 420 The commenter stated that this would be the most reasonable way to allocate CAT costs among Industry Members 421 and that it would be "relatively easy to accommodate this approach." 422 One other commenter also suggested allocating costs to the party originating an order, stating that this would

⁴⁰⁷ See SIFMA May 2023 Letter at 3–4. See also SIFMA October 2022 Letter at 5. The commenter

⁴⁰⁸ See SIFMA May 2023 Letter at 4.

⁴⁰⁹ See Securities Exchange Act Release No. 94984 (May 25, 2022), 87 FR 33226 (June 1, 2022) ("Prior Funding Model Proposal").

⁴¹⁰ Two partial amendments were submitted on the Prior Funding Model Proposal. The first partial amendment initially proposed the use of executing brokers. See Securities Exchange Act Release No. 96394 (Nov. 28, 2022), 87 FR 74183 (Dec. 3, 2022). The Prior Funding Model Proposal, as modified by the two partial amendments, was withdrawn by the Participants on March 1, 2023. See Securities Exchange Act Release No. 97212 (Mar. 28, 2023), 88 FR 19693 (Apr. 3, 2023).

⁴¹¹ See SIFMA January 2023 Letter at 2, 8; SIFMA December 2022 Letter at 3. See also SIFMA May 2023 Letter at 4.

 $^{^{412}\,}See$ SIFMA May 2023 Letter at 4. See also SIFMA June 2022 Letter at 9–10; SIFMA October 2022 Letter at 5.

⁴¹³ See SIFMA May 2023 Letter at 4.

⁴¹⁴ Id

⁴¹⁵ Id. at 4-5.

⁴¹⁶ *Id.* at 5. *See also* Virtu Letter at 5 (stating that it is "highly likely" that executing brokers would end up absorbing the fees themselves, as they would not have the systems in place to trace to whom the fees were properly allocable).

⁴¹⁷ See SIFMA May 2023 Letter at 5.

⁴¹⁸ Id. Another commenter similarly objected to the imposition of CAT fees on Executing Brokers. This commenter, a major wholesaler who also serves as the Executing Broker on many transactions, stated it was unjust to disproportionately burden Executing Brokers in this manner, and noted that the cost of designing processes and systems to route the fees to the appropriate parties could be prohibitive to smaller brokers. See Virtu Letter at 4–5.

⁴¹⁹ See SIFMA May 2023 Letter at 5.

⁴²⁰ *Id.* at 6.

⁴²¹ *Id.* at 5.

⁴²² Id. at 6.

"streamline the process and more accurately allocate costs . . ." 423

One commenter expressed concerns about the imposition of CAT fees on CAT Executing Brokers. 424 The commenter stated that charging CAT Executing Brokers "inordinately burdens Broker Dealers, especially small to medium-sized firms." 425 This commenter recommended using instead the existing structure for regulatory fees, including "the efficiencies afforded by the current structure, and the resulting alleviation of risk." 426 In this regard, the commenter stated that "Clearing Firms are best suited to process the collection of fees as it can occur at trade settlement and the cost is ultimately borne by the end beneficiary of each transaction." 427 The commenter also stated that small and medium-sized executing brokers could expect a significant negative impact on their net capital as a result of the proposal, stating, ". . . the firms will be forced to recoup these costs by passing them on to their clients, either in the form of higher commission rates or as a separate transactional fee. Using [Clearing Member Trade Agreement | commission invoicing and/or SEC 31(b) fees in a broker-to-broker relationship as a proxy, these invoices are generally paid well after the 60-day milestone to qualify the receivable as 'good capital.''' ⁴²⁸

In response to the comment about the definition of CAT Executing Broker and the billing and collection process being better suited for clearing firms, CAT LLC stated that the proposed assessment of CAT fees on CAT Executing Brokers only addresses the party obligated to pay the CAT fee. 429 CAT LLC stated that a ČAT Executing Broker would not be required to follow a particular process for paying CAT fees, as it could pay the fees itself, or require a clearing firm or other third party to pay CAT fees on its behalf.430 For example, CAT LLC stated that a CAT Executing Broker can decide to enter into an arrangement with its clearing broker for the clearing broker to collect and pass-through the CAT fees like it does in other contexts.⁴³¹

With respect to alternatives to the proposed definition of the CAT Executing Broker, CAT LLC stated that the "originating broker" suggestion was from a commenter who had previously recommended charging executing brokers in comment letters on the Prior Funding Model Proposal.⁴³² CAT LLC stated that the commenter's objection to charging executing brokers in the Executed Share Model was an attempt to further delay the approval of a funding model and the resultant payment of CAT fees by its members, rather than expressing a concern about the merits of charging executing brokers. 433

In response, the commenter stated that the Operating Committee mischaracterized the commenter's position on the assessment of CAT fees to executing brokers by stating in the CAT LLC Response Letter that the commenter changed its position on this proposed change to delay adoption of a CAT funding model.⁴³⁴ The commenter represented that it stated in comment letters it submitted on the Prior Funding Model Proposal 435 that initially proposed the use of executing brokers 436 that (1) the Participants did not define who would be an executing broker in a transaction, (2) a clear definition is necessary for Industry Members to understand when they would be assessed costs under the Executed Share Model, and (3) its understanding was that the concept of executing broker generally refers to the Industry Member that initiates an order.437 The commenter stated that the Participants only provided a definition of executing broker in the Proposed Amendment. 438 The commenter stated that it provided concerns about the proposed definition in its May 2023 comment letter, which the commenter stated were mischaracterized by the Operating Committee in the CAT LLC Response Letter in an attempt to rush the Commission to a decision on the Proposed Amendment.439

In response to the comment that imposing fees on executing brokers would result in an inequitable allocation of fees and the suggestion that the use of message traffic as the basis of fees would have ensured that all CAT

Reporters would contribute to CAT's funding, CAT LLC disagreed and stated that because the message traffic is separate from whether or not a transaction occurs, fees based on message traffic may not correlate with common revenue or fee models.440 CAT LLC stated that, as a result, CAT fees based on message traffic could impose an outsized adverse financial impact on certain Industry Members, raising this same issue of an inequitable allocation of fees.441 Further, in response to the commenter's criticism that in charging executing brokers, the fee would be charged to a subset of Industry Members and, as a result, that subset of Industry Members would incur expenses that other Industry Members would not incur, CAT LLC stated that it continues to believe that charging CAT Executing Brokers would satisfy the requirements of the Exchange Act. 442 CAT LLC stated that in the past, the Commission has approved fees that are charged to some, but not all, broker-dealers.443 CAT LLC noted that, for example, FINRA's TAF is assessed to a subset of FINRA members—that is, it is assessed on the sell side of member transactions.444 CAT LLC also stated that the options exchanges charge options regulatory fees per executed contract side, and, for both options and equities, Section 31related fees are charged to the sell-side in a transaction.445 CAT LLC recognized that, under the proposal to charge CAT Executing Brokers, the CAT Executing Broker, but not other Industry Members involved in a given order lifecycle, would be required to pay the CAT fees, and that Industry Members that sought to recoup such fees would have to develop processes to collect such fees from their clients. 446 CAT LLC stated that this regulatory requirement would have a similar effect as other types of regulatory fees, such as the FINRA TAF, the options regulatory fee and Section 31-related sales value pass-through fees because, "[i]n each such case, a subset of broker-dealers is required to pay a transaction-based regulatory fee, and those broker-dealers seeking to recover such fees from other broker-dealers or non-broker-dealers have established processes with regard to the passthrough of such fees." 447

CAT LLC further stated that it disagrees with charging an originating

 $^{^{423}}$ See Citadel July Letter at 20. See also id. at 3, 30, 31.

⁴²⁴ See DASH April 2023 Letter. See also DASH July 2023 Letter at 1–2.

 $^{^{425}}$ See DASH April 2023 Letter at 1. See also DASH January 2023 Letter at 1; DASH July 2023 Letter at 1.

⁴²⁶DASH January 2023 Letter at 3. *See also* DASH April 2023 Letter at 1–2; DASH July 2023 Letter at 1–2.

⁴²⁷ DASH April 2023 Letter at 1. See also DASH January 2023 Letter at 1; DASH July 2023 Letter at 1

 $^{^{428}\,\}mathrm{DASH}$ January 2023 Letter at 2; DASH July 2023 Letter at 1–2.

 $^{^{429}\,}See$ CAT LLC May 2023 Response Letter at 12; CAT LLC July 2023 Response Letter at 3.

⁴³⁰ See CAT LLC July 2023 Response Letter at 3.

⁴³¹CAT LLC May 2023 Response Letter at 12.

⁴³² Id. at 2. See also supra note 409.

⁴³³CAT LLC May 2023 Response Letter at 3.

⁴³⁴ See SIFMA June 2023 Letter at 5.

⁴³⁵ See supra note 409.

⁴³⁶ See supra note 410.

⁴³⁷ See SIFMA June 2023 Letter at 5.

⁴³⁸ Id.

⁴³⁹ Id. at 5-6.

 $^{^{440}\,}See$ CAT LLC May 2023 Response Letter at 4.

⁴⁴¹ *Id*.

⁴⁴² *Id.* at 3.

⁴⁴³ Id.

⁴⁴⁴ *Id*.

⁴⁴⁶ See CAT LLC May 2023 Response Letter at 4.

⁴⁴⁷ Id.

broker instead of an executing broker because there are already several existing examples of transaction-based fees being assessed to executing brokers as opposed to the originating broker (e.g., TAF, Section 31 fees, ORF fees), and it disagrees with the assertion that charging originating brokers would be easier.448 CAT LLC stated that charging the originating Industry Member would be difficult to implement and would increase the costs of implementing CAT fees, whereas charging CAT Executing Brokers is simple, straightforward and in line with existing fee and business models because for any given trade (buy or sell), there is only one CAT Executing Broker to which shares can be allocated.449 As such, CAT LLC stated that "charging the CAT Executing Broker is simple and straightforward, and leverages a one-to-one relationship between billable events (trades) and billable parties." 450 CAT LLC stated that, for a single trade event, there may be many originating brokers, and each trade must be broken down on a pro-rata basis, "to account[] for one or more layers of aggregation, disaggregation, and representation of the underlying orders." 451 Therefore, CAT LLC stated that one commenter's 452 "suggestion of a model that begins the funding analysis with new order events (e.g., MENO or MONO events) and then looks for any execution or fulfillment that is directly associated with that event does not reduce or mitigate the complexity associated with aggregation." 453 Further, CAT LLC stated that the commenter's recommendation would not work with the design of the CAT system, stating that "[w]hile CAT is indeed designed to capture and unwind complex aggregation scenarios, the data and linkages are structured to facilitate regulatory use, and not a billing mechanism that assesses fees on a distinct set of executed trades; it is not simply a matter of using existing CAT linkages." 454 CAT LLC also stated that charging originating brokers would implicate issues related to lifecycle linkage rates, and issues related to corrections, cancellations and allocations, but charging CAT Executing Brokers would avoid such

complications. 455 CAT LLC also stated that allocating to the originating broker would not include Industry Members that were only involved in routing and execution, which would include "some of the largest Industry Members," 456 and that these Industry Members "are not involved in the origination of orders or originate few orders in relation to their overall market activity." 457 Furthermore, CAT LLC stated that originating brokers would also need to establish processes for paying CAT fees, just as CAT Executing Brokers would. 458

One commenter expressed uncertainty about CAT LLC's response that some of the largest Industry Members are not involved in order origination or originate few orders relative to their market activity, stating that it is unclear to whom the statement is referring since the executing broker and the originating broker would be the same firm in the case of proprietary trading activity. 459 Additionally, the commenter stated that the originating broker model should be pursued if it dramatically reduces market-wide implementation costs with a marginal increase in CAT costs, noting that Industry Members could bear most, if not all, CAT costs to implement the originating broker model.460 The commenter stated that, before proceeding, the CAT Operating Committee must publish an analysis of the costs and benefits of the executing broker and originating broker models including any differences in CAT implementation costs and Industry Member implementation costs.⁴⁶¹

In response to a comment stating that executing brokers lacked systems and processes to recover costs from their clients and would either choose to absorb the CAT fees or exit the business because of the investments necessary for the cost-recovery process,462 CAT LLC stated that those Industry Members that pass-through CAT fees will accordingly need to develop processes to recover the fees from their clients, like they do for other regulatory-related fees, like the TAF, the options regulatory fee and Section 31-related fees. 463 CAT LLC also stated that CAT Executing Brokers would "have full discretion as to whether and the manner and extent to which they pass on their CAT fees, if at

In the Commission's view, CAT LLC's definition of "CAT Executing Broker" is reasonable given that the Executed Share Model is based upon the calculation of executed equivalent shares (emphasis added),467 and the executing brokers are reasonably suited to know their own volume and plan for future volume of executed equivalent shares to pay the CAT fees. One commenter's suggested approach would also result in the assessment of fees on a subset of Industry Members —originating brokers—and thus could raise similar allocation concerns as those raised by the commenter about the proposed approach.468 In addition, as discussed below, the Commission agrees with the Participants that the ease of administration in using the transaction reports to identify the executing broker is an advantage of the Proposed Amendment. Given the similar issues with either approach—either charging the fees to a subset of Industry Members based on whether they are the "CAT Executing Broker" or the originating broker—it is reasonable to choose the less administratively burdensome of the two options. Accordingly, the assessment of CAT fees on CAT Executing Brokers is reasonable.469

In response to the commenter that questioned CAT LLC's response that some of the largest Industry Members are not involved in order origination or originate few orders relative to their market activity,⁴⁷⁰ the Commission is not relying on this statement by CAT LLC and understands that the executing broker and the originating broker would be the same in the case of proprietary

⁴⁴⁸ Id. at 5. See also CAT LLC July 2023 Response Letter at 3–4, 4 (detailing challenges of allocating CAT costs to originating brokers).

 $^{^{449}\,}See$ CAT LLC May 2023 Response Letter at 5. See also CAT LLC July 2023 Response Letter at 3. $^{450}\,CAT$ LLC May 2023 Response Letter at 5. See

also CAT LLC July 2023 Response Letter at 4. 451 CAT LLC May 2023 Response Letter at 5. See also CAT LLC July 2023 Response Letter at 3.

⁴⁵² See SIFMA May 2023 Letter at 5.

 $^{^{453}\,}See$ CAT LLC May 2023 Response Letter at 5. $^{454}\,Id.$

all," noting that "a CAT Executing Broker could round up its fees to the nearest cent, or decide to charge for, or not charge for certain transactions, or assess a specific fee or incorporate the costs into other fee programs." 464 CAT LLC stated that assessing a transactionbased fee to an executing broker and the executing broker deciding whether and how to pass-through its costs to clients is "not new or novel." 465 Finally, CAT LLC noted that the Plan Processor would provide trade-by-trade data to CAT Executing Brokers, and will offer a training program for CAT Executing Brokers to help them understand their CAT bills,466

⁴⁵⁵ Id.

⁴⁵⁶ See CAT LLC July 2023 Response Letter at 3.

⁴⁵⁷ Id.

⁴⁵⁸ Id.

⁴⁵⁹ See Citadel August Letter at 6.

⁴⁶⁰ *Id*.

⁴⁶¹ *Id*.

⁴⁶² See Virtu Letter at 5.

 $^{^{463}\,}See$ CAT LLC July 2023 Response Letter at 9. See also id. at 5.

 $^{^{464}}$ CAT LLC July 2023 Response Letter at 10. See also id. at 5 (adding that broker-dealers pass-through fees to customers related to Section 31 fees).

⁴⁶⁵ Id

⁴⁶⁶ Id. at 10. See also id. at 5.

⁴⁶⁷ See Notice, supra note 7, 88 FR at 17086.

⁴⁶⁸ See SIFMA May 2023 Letter at 5, 6.

⁴⁶⁹ See 17 CFR 242.608(b)(2).

⁴⁷⁰ See Citadel August Letter at 6.

trading activity. Although one commenter suggested that the originating broker model should be pursued if it dramatically reduces market-wide implementation costs with a marginal increase in CAT costs,471 the Commission believes that the executing broker model is reasonable. The Commission understands the argument that charging originating brokers instead of executing brokers would be easier and more cost effective for the executing brokers, but it would be at the expense of the originating brokers. The Commission also understands that charging executing brokers instead of originating brokers is easier and more cost effective for the CAT Plan Processor. Using CAT Data, the CAT Plan Processor can more easily determine which executing broker to charge. On the other hand, if the CAT Plan Processor were to charge originating brokers, the Commission believes the CAT Plan Processor would have to rely on linkages, which may not be one-for-one in all circumstances, to determine which originating broker to charge for an execution. And this difficulty not only would add to the costs of the CAT but also would impact transparency and potentially the relative simplicity of the CAT Fees. Moreover, the Proposed Amendment does not address how executing brokers passthrough CAT fees to their customers.

Using transaction reports to identify the transaction for purposes of calculating the CAT fees as well as the CAT Executing Broker for each transaction for purposes of calculating the CAT fees is a straightforward and more objective method of identifying executing brokers than other methods, such as identifying an originating broker through an evaluation of CAT linkages. Although the definition of "CAT Executing Broker" may not be used by the industry or universally accepted, CAT Executing Brokers will be able review their transactions reports and request details regarding the calculation of their fees, which should allow them to better assess the impact of the Executed Share Model on their business models.472 It is appropriate for CAT LLC to establish policies and procedures on the treatment of adjustments related to cancellations and corrections. CAT LLC stated that to the extent changes are made to the transaction reports on or before the day the CAT fees are determined for the given month, the

changes will be reflected in the monthly bill.⁴⁷³ To the extent that changes are made to the transaction reports after the day the CAT fees are determined for that month, subsequent bills will reflect any changes via debits or credits, as applicable.474 It is appropriate to adjust an Industry Member's or Participant's CAT fees for cancellations and corrections when such adjustments are made to the transaction reports that are used for calculate CAT fees for that month. Additionally, under Section 11.1(d) of the CAT NMS Plan, the Operating Committee is required to adopt policies and procedures regarding the billing and collection of fees. 475

It is the Commission's view that charging CEBBs and CEBSs is reasonable. The Executed Share Model recognizes that there are three parties who play significant roles in transactions reportable to the CAT: the Participant, the buy-side and the sellside.476 The Proposed Amendment also is based on *executed* equivalent shares (emphasis added).477 As such, CAT LLC stated that charging the CEBBs and CEBSs would reflect the executing role the CEBB and CEBS have in each transaction.478 Additionally, charging CEBBs and CEBSs is in line with the use of transaction reports from the exchanges and FINRA's equity trading reporting facilities for calculating the CAT fees. 479 Specifically, these transaction reports identify CEBBs and CEBSs, so charging such entities potentially streamlines the fee charging process.480 CAT LLC also explained that charging both the buy-side and the sellside of a transaction would be consistent with other fees, such as the options regulation fee.481

In Rule 613, the Commission made the determination that the costs of the CAT should be shared by the Participants and Industry Members. Charging CAT Executing Brokers, clearing firms or "originating brokers" all would impose the costs initially on a subset of Industry Members. As discussed above, given that the charges are based on executed equivalent shares, it makes sense to use the CAT Executing Brokers as the immediate recipients of the charge. Accordingly, the Commission agrees with CAT LLC that it is reasonable to impose the charge on

CAT Executing Brokers. The Commission acknowledges that charging CEBBs and CEBSs would impose a burden on such firms, which could potentially have an effect on their net capital. However, currently, such firms regularly pay transaction-based fees to the Participants, which they may pass-through to their customers who, in turn, could pass their CAT fees to their customers, until the fee is imposed on the ultimate participant in the transaction.482 Additionally, unlike clearing firms that may simply clear a trade on behalf of the executing broker, executing brokers are always parties to a transaction, including instances that may result in CAT costs but not in actual trades, such as unexecuted orders. The Commission therefore agrees with CAT LLC that assessing Industry Members CAT fees on CEBBs and CEBSs would be reasonable for their "executing role" in each transaction.483

5. Prospective CAT Fees

a. Fee Rate Formula

Under the Executed Share Model. Participants, CEBSs and CEBBs would be subject to fees designed to cover the ongoing budgeted costs of the CAT, as determined by the Operating Committee. 484 Each Participant and CAT Executing Broker would be required to pay a CAT Fee related to Prospective CAT Costs for each transaction in Eligible Securities in the prior month based on CAT Data.485 CAT Fees would be calculated by multiplying the executed equivalent shares in the transaction by one-third and the applicable "Fee Rate." 486 The Commission received no comments on the Fee Rate Formula.

At the beginning of each year, the Operating Committee would set the Fee Rate to be used to determine CAT Fees.⁴⁸⁷ To calculate the Fee Rate for Prospective CAT Costs, the Operating Committee would divide the reasonably budgeted CAT costs by the reasonably projected total executed equivalent share volume of all transactions in Eligible Securities for that year. 488 The Operating Committee would base the projected total executed equivalent

⁴⁷¹ Id.

⁴⁷² See proposed Section 11.3(a)(iv)(A) and 11.3(b)(iv)(A). See also infra Section III.A.7. (Calculation Information; Billing and Collection of CAT Fees).

⁴⁷³ See Notice, supra note 7, 88 FR at 17089.

 $^{^{475}\,}See$ CAT NMS Plan, supra note 2, at Section 11.1(d).

⁴⁷⁶ See Notice, supra note 7, 88 FR at 17104.

⁴⁷⁷ Id. at 17086.

⁴⁷⁸ Id. at 17103.

⁴⁷⁹ Id

⁴⁸⁰ *Id*.

⁴⁸¹ Id. at 17108.

⁴⁸² See Notice, supra note 7, 88 FR at 17103. 483 Id.

⁴⁸⁴ See proposed Section 11.3(a)(i)(A)(I) and (II); proposed Section 11.3(a)(iii)(A).

⁴⁸⁵ See proposed Section 11.3(a)(ii)(A) and (iii)(A).

⁴⁸⁷ See proposed Section 11.3(a)(i)(A)(I). The Fee Rate would be established through a majority vote of the Operating Committee. See Notice, supra note 7, 88 FR at 17108.

⁴⁸⁸ See proposed Section 11.3(a)(i)(A)(I).

share volume on the total executed equivalent share volume of transactions in Eligible Securities from the prior twelve months.489 Additionally, CAT LLC would permit the Operating Committee to use its discretion to analyze likely volume for the upcoming year 490 and Participants would be required to describe the calculation of the projection in their fee filings submitted to the Commission pursuant to Section 19(b) to implement the CAT Fee for Industry Members. 491 The Operating Committee also would be required to perform a mid-year adjustment of the Fee Rate for CAT Fees related to Prospective CAT Costs. 492

CAT LLC proposed Section 11.3(a)(i)(A)(I) of the CAT NMS Plan to describe the annual calculation of the Fee Rate and the requirement for Participants to file a fee filing for CAT Fees to be charged to Industry Members calculated using the Fee Rate. Under the Executed Share Model, the Operating Committee will calculate the Fee Rate by dividing the reasonably budgeted CAT costs for the year by the reasonably projected total executed equivalent share volume of all transactions in Eligible Securities for the year.⁴⁹³ Should the budgeted costs be higher than actual costs, any budget surplus will be credited against the fees for the following year, as CAT LLC cannot hold higher than a 25% reserve. 494

Once the Operating Committee has approved such Fee Rate, the Participants shall be required to file with the Commission, pursuant to Section 19(b) of the Exchange Act,495 CAT Fees to be charged to Industry Members calculated using such Fee Rate. 496 Participants and Industry Members will be required to pay CAT Fees calculated using this Fee Rate once such CAT Fees are in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act. 497

Proposed Section 11.3(a)(i)(A)(II) of the CAT NMS Plan describes the mandatory mid-year calculation of the Fee Rate and the requirement for

Participants to file a fee filing for CAT Fees to be charged Industry Members calculated using the Fee Rate. Under the Executed Share Model, the Operating Committee will adjust the Fee Rate once mid-year 498 by dividing the reasonably budgeted CAT costs for the remainder of the year by the reasonably projected total executed equivalent share volume of all transactions in Eligible Securities for the remainder of the year.499 Once the Operating Committee has approved the new Fee Rate, the Participants shall be required to file with the Commission, pursuant to Section 19(b) of the Exchange Act, CAT Fees to be charged to Industry Members calculated using the new Fee Rate. 500 Participants and Industry Members will be required to pay CAT Fees calculated using this new Fee Rate once such CAT Fees are in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act.501

CAT LLC proposed to add Section 11.3(a)(i)(A)(III) to the CAT NMS Plan to state that CAT Fees related to Prospective CAT Costs do not sunset automatically; such CAT Fees would remain in place until new CAT Fees are in place with a new Fee Rate.502

ČAT LLC proposed to add Section 11.3(a)(i)(A)(IV) to the CAT NMS Plan to provide that the first CAT Fee may commence at the beginning of the year or during the year. If it were to commence during the year, the CAT Fee would be calculated as if it were a midyear calculation.503

The proposed recovery of Prospective CAT Costs is appropriate. It is appropriate to require that each Participant, CEBB and CEBS pay a CAT Fee related to Prospective CAT Costs for each transaction in the prior month based on CAT Data.⁵⁰⁴ Basing the CAT Fee on transaction data from the prior month is appropriate as it is recent in time and therefore more reflective of current market data, and the Commission did not receive any comments on this issue.

The manner in which the Fee Rate for Prospective CAT Costs will be calculated (i.e., by dividing the CAT

costs reasonably budgeted for the upcoming year by the reasonably projected total executed equivalent share volume of all transactions in Eligible Securities for the year) is reasonable.⁵⁰⁵ The use of projected executed equivalent share volume in determining the Fee Rate is appropriate because it would provide the likely volume for the year to be used as the denominator. It is reasonable to use the prior twelve months to determine the projected total executed equivalent share volume of all transactions in Eligible Securities for the year 506 because it would be the most recent data available to use to make a projection needed to calculate the Fee Rate, and the most recent data is on balance more likely to resemble the near future. Additionally, as noted above, that the Commission agrees with CAT LLC's analysis that "trading activity provides a reasonable proxy for cost burden on the CAT, and therefore is an appropriate metric for allocating CAT costs among CAT Reporters." 507 Further, requiring that the CAT costs be "reasonably budgeted" and projected total executed equivalent share volume be "reasonably projected" is designed to help impose some discipline or constraints in the fee setting process. It is reasonable for CAT LLC to permit the Operating Committee to project the upcoming volume for the upcoming year. 508 It is not possible to know exactly what the volume will be before the year begins, so a projection will be necessary. If the volume turns out to be higher than projected, then CAT LLC will be able to use its reserve to cover any shortage. If it is lower, resulting in a budget surplus, the CAT fees for the following year would be lower. 509 Furthermore, since the Participants would be required to describe the calculation of the projected total executed equivalent share volume in the fee filings submitted to the Commission, pursuant to Section 19(b) of the Exchange Act, to implement CAT Fees for Industry Members, the public will have an opportunity to review the projection and provide comment.510

⁴⁸⁹ See proposed Section 11.3(a)(i)(D).

⁴⁹⁰ See Notice, supra note 7, 88 FR at 17094.

⁴⁹¹ See proposed Section 11.3(a)(iii)(B); 15 U.S.C.

 $^{^{492}}$ See proposed Section 11.3(a)(i)(A)(II).

 $^{^{493}\,}See$ proposed Section 11.3(a)(i)(A)(I).

⁴⁹⁴ See infra Section III.A.5.c (Reserves).

^{495 15} U.S.C. 78s(b).

⁴⁹⁶ See proposed Section 11.3(a)(i)(A)(I).

⁴⁹⁸ See proposed Section 11.3(a)(i)(A)(II).

⁴⁹⁹ Id.

⁵⁰⁰ *Id*.

⁵⁰¹ *Id*.

⁵⁰² See proposed Section 11.3(a)(i)(A)(III).

⁵⁰³ See proposed Section 11.3(a)(i)(A)(IV).

⁵⁰⁴ See proposed Section 11.3(a)(ii)(A) and (iii)(A).

⁵⁰⁵ See proposed Section 11.3(a)(i)(A)(I).

⁵⁰⁶ See proposed Section 11.3(a)(i)(D).

⁵⁰⁷ See Notice, supra note 7, 88 FR at 17103.

⁵⁰⁸ Id. at 17094.

⁵⁰⁹ See infra Section III.A.5.c (Reserves).

⁵¹⁰ See proposed Section 11.3(a)(iii)(B).

The annual and mid-year adjustments of the Fee Rate for Prospective CAT Costs 511 are appropriate because they would ensure that CAT Fees related to Prospective CAT Costs would stay aligned with changes to the budget and projected volume occurring as the year progresses with contemporaneous data. Additionally, calculating a CAT Fee that starts mid-year as if it were a mid-year Fee Rate calculation is appropriate because calculating it that way would base the CAT Fee on the budgeted CAT costs and projected total executed equivalent share volume of all transactions in Eligible Securities for the remainder of the year, rather than for the entire year. This is an appropriate treatment of a CAT Fee that would commence mid-year, not at the beginning of the year.

b. Budgeted CAT Costs

The calculation of the Fee Rate for CAT Fees related to Prospective CAT Costs requires the determination of the Budgeted CAT Costs for the year or other relevant period.512 Proposed Section 11.3(a)(i)(C) of the CAT NMS Plan provides that the budgeted CAT costs for the year shall be comprised of all reasonable fees, costs and expenses reasonably budgeted to be incurred by or for the Company in connection with the development, implementation and operation of the CAT as set forth in the annual operating budget approved by the Operating Committee pursuant to Section 11.1(a) of the CAT NMS Plan, or as adjusted during the year by the Operating Committee. 513

Section 11.1(a) of the CAT NMS Plan describes the requirement for the Operating Committee to approve an operating budget for CAT LLC on an annual basis. It requires the budget to "include the projected costs of the Company, including the costs of developing and operating the CAT for the upcoming year, and the sources of all revenues to cover such costs, as well as the funding of any reserve that the Operating Committee reasonably deems appropriate for prudent operation of the

Company." ⁵¹⁴ CAT LLC proposed to amend Section 11.1(a) to require the Operating Committee to approve a reasonable operating budget for CAT LLC on an annual basis.⁵¹⁵

CAT LLC also proposed to amend Section 11.1(b) of the CAT NMS Plan to add a reference to Section 11.1. Currently, Section 11.1(b) states that '[s]ubject to Section 11.2, the Operating Committee shall have the discretion to establish funding for the Company' including establishing fees to be paid by the Participants and Industry Members (that shall be implemented by the Participants) . . . "516 CAT LLC proposed to add a reference to Section 11.1 so that "[s]ubject to Section 11.1 and Section 11.2" the Operating Committee would have the discretion to establish funding for the Company.517 CAT LLC explained that this proposed change is relevant because Section 11.1 relates to the budget and the budget is used to calculate fees.518

CAT LLC also proposed to add subparagraph (i) to Section 11.1(a) of the CAT NMS Plan to list the types of CAT costs to be included in the budget. Specifically, CAT LLC proposed to state that "[w]ithout limiting the foregoing, the reasonably budgeted CAT costs shall include technology (including cloud hosting services, operating fees, CAIS operating fees, change request fees and capitalized developed technology costs), legal, consulting, insurance, professional and administration, and public relations costs, a reserve, and such other categories as reasonably determined by the Operating Committee to be included in the budget." 519

Certain commenters noted a lack of detail provided on the cost categories.⁵²⁰ One commenter stated

that the budget line item categories are too high level.⁵²¹ The commenter urged the inclusion of much greater detail and specificity on the budget spending choices, especially in technology,⁵²² to allow Industry Members and the public to understand and evaluate CAT spending decisions. 523 Similarly, other commenters requested more transparency into the drivers of CAT costs, in particular, technology costs, which they stated is the largest expense item.524 One commenter stated that their "concerns are exacerbated by the general lack of transparency coming from the CAT Operating Committee. Despite continued requests for information about key drivers of the rapidly growing CAT costs, the CAT Operating Committee points to highlevel financial and operating budgets published by the Committee that merely provide broad categories of costs and expenses. Likewise, in the current structure, the SEC staff also have no incentive to control costs . . . This process does not afford industry members with appropriate notice of, and opportunity to comment on, material changes to the CAT. Nor does it adhere to the requirements under the Exchange Act to weigh the costs and benefits of proposed changes to the NMS plan." 525 Another commenter stated that the Operating Committee refuses to provide cost transparency, such as more details on the broad expense categories provided in the operating expenses (as well as the Historical CAT Costs) provided in the Proposed Amendment. 526 The

⁵¹¹ See proposed Section 11.3(a)(i)(A)(I) and (II). ⁵¹² See proposed Section 11.3(a)(i)(A)(I).

⁵¹³ CAT LLC proposed to use budgeted CAT costs in calculating CAT Fees rather than costs incurred. CAT LLC explained that using budgeted CAT costs is necessary to build financial stability to support the Company as a going concern, in accordance with the funding principle in Section 11.2(f) of the CAT NMS Plan, because it would allow CAT LLC to collect fees before bills become payable. CAT LLC stated that if CAT Fees were only collected after bills become payable, Participants would have to continue to fund the CAT for all CAT costs to pay bills as they are due. See Notice, supra note 7, 88 FR at 17114.

 $^{^{514}\,}See$ CAT NMS Plan, supra note 2, at Section 11.1(a).

⁵¹⁵ See proposed Section 11.1(a).

⁵¹⁶ See CAT NMS Plan, supra note 2, at Section 11.1(b).

 $^{^{517}}$ See Notice, supra note 6, 88 FR at 17090. 518 Id.

⁵¹⁹ Id. CAT LLC has stated that it will consider providing additional detailed subcategories regarding technology costs, but notes that what it is currently providing is consistent with what is made publicly available on its website. CAT LLC has stated that it will consider the need to provide additional detailed subcategories for any area besides technology, both because technology costs account for the majority of the budget and because it is not considered "best practices" to disclose detailed legal or insurance information, as these are particularly sensitive. Id. Detailed information is always available to the Commission for review upon request. Id.

⁵²⁰ See SIFMA January 2023 Letter at 6; Citadel July Letter at 13–14; FIA Letter at 2–5; Letter to Vanessa Countryman, Secretary, Commission, from Joseph Corcoran, Managing Director, Associate General Counsel and Ellen Greene, Managing Director, Equities and Options Market Structure,

SIFMA, and Howard Meyerson, Managing Director, Financial Information Forum, dated July 31, 2023 ("FIF and SIFMA Letter"), at 8.

⁵²¹ See SIFMA January 2023 Letter at 6.

⁵²² Id. (stating that CAT spending on technology should be broken into further refined cost breakdowns of the following categories: cloud hosting services, operating fees, CAIS operating fees and change request fees). The proposed breakdown is consistent with what is currently provided to the public. See Notice, supra note 6, 88 FR at 17090. See also FIF and SIFMA Letter at 8.

⁵²³ See SIFMA January 2023 Letter at 6.

⁵²⁴ See FIF and SIFMA Letter at 8. The commenter stated that the 2023 budget divides technology costs, estimated to be \$222.5 million and 95.3% of total operating costs, into four categories with cloud hosting services represents 75.5% of estimated CAT costs for 2023. Id. The commenter requested the Commission and the Participants to make publicly available the financial terms of the contract between the Participants and Amazon Web Services ("AWS"), the cloud hosting services provider, and publish all invoices from AWS. Id. The Commission declines to mandate the publication of a contract between private parties. Similarly, the Commission declines to mandate the publication of AWS invoices. The Participants can choose to publish this information if they believe it is appropriate.

⁵²⁵ See FIA Letter at 2–5.

⁵²⁶ See Citadel July Letter at 13–14. See also id.

commenter believes that the lack of transparency into costs would prevent the Commission from finding that the proposed allocation methodology is reasonable 527 and would raise concerns that inappropriate expenses would be allocated to Industry Members, like litigation expenses incurred by the Operating Committee against the Commission, and expenses prohibited by the Financial Accountability Amendments from being recovered by the Operating Committee.528 The commenter also stated that the Proposed Amendment lacks sufficient detail for the Commission to perform the required economic analysis. 529

The commenter suggested enhancements to improve budget transparency. The commenter suggested that all CAT operating budgets should remain published on the CAT website 31 and that any material change to the CAT system, related technology contracts or implementation scope should require the filing of an NMS plan amendment explaining the necessity of the change and include a robust cost-benefit analysis. 32

In addition, the commenter suggested that exchanges be responsible for costs that exceed the budget in order to incentivize cost control,533 and that Industry Members should not be allocated costs for matters specifically for the benefit of the Operating Committee or the Commission (such as costs related to litigation "or filings that are inconsistent with the Exchange Act" 534), stating that "Industry Members should also not be allocated costs relating to how data is presented to, and used by, regulatory Staff at the SROs or the Commission." 535 Furthermore, the commenter suggested that change requests that do not involve specific NMS Plan requirements should be allocated to the requestor, including the Commission. 536

Commenters also discussed a need for a cost review mechanism,537 with several commenters citing to high operating costs as evidence for the need of one.538 One commenter stated that CAT costs are increasing at an unsustainable level and need to be controlled.539 The commenter stated that the Commission lacks a process to manage CAT costs as CAT operating costs are not part of the Commission's budget and do not require an appropriation.540 The commenter urged that there is a need to allow the public, the Commission and industry to have a better understanding of the drivers of CAT operating costs,⁵⁴¹ why they have exceeded the operating costs estimated in the CAT NMS Plan,542 and why they are projected to increase 27% from 2022 to 2023.543 The commenter requested that the Commission direct the Participants to analyze the increase in CAT operating costs and to evaluate future expected annual CAT operating cost increases,544 and also advised the Commission not to mandate any new processing or reporting requirements until such analysis has concluded.545

One commenter stated that asset managers were concerned about the lack of an independent cost review mechanism for the CAT budget to ensure that future fees are fair and reasonable and spending will be appropriate and cost-effective. 546 Similarly, another commenter stated that an independent cost review mechanism is necessary to ensure future CAT fees are fair and reasonable and to safeguard against unchecked spending. 547 The commenter urged the

inclusion of a mechanism to allow the public to review the annual CAT budget before it is finalized, since, as proposed, the public would only have the opportunity to review the CAT budget when the Participants submit proposed rule changes, pursuant to Section 19(b) of the Exchange Act,548 to implement CAT fees on Industry Members.⁵⁴⁹ The commenter also stated that it is unlikely that the Commission would decide that a proposed CAT fee does not meet Exchange Act fee standards and require the Participants to modify the CAT budget because it would be a lengthy, time-consuming process and due to "the regulatory value of CAT data and the CAT system to the Commission." 550 The commenter stated that the Commission is "directly conflicted in its role as the user and beneficiary of the CAT system for regulatory functions and its role as the reviewer of the CAT budget and fee filings, a conflict that is only heightened due to a lack of a Commission funding obligation for CAT." 551 The commenter also requested that "the Participants" proposed budget include as a separate line-item projected usage costs and system change costs related to the Commission's use and design of the CAT system." 552 Similarly, another commenter suggested that an independent expert committee assess whether cost levels and third party arrangements are reasonable, and whether more cost-control measures are warranted,⁵⁵³ and that the Commission formally approve the CAT budget on an annual basis.554 The commenter further stated that the Proposed Amendment made no attempt to specify the key drivers of costs, such as explaining the requirements that resulted in significant cost increases, or the design alternatives the Operating Committee previously considered.⁵⁵⁵ The commenter added that Industry Members must fund a 25% reserve above budgeted amounts, and ad-hoc discussions between the Operating Committee and the

⁵²⁷ *Id.* at 2, 15, 26.

⁵²⁸ Id. at 2.

⁵²⁹ Id. at 11. Rule 613(a)(5) of Regulation NMS requires the Commission to conduct an assessment of the Proposed Amendment's impact on efficiency, competition and capital formation, which is not the same economic analysis as the Commission conducts when engaged in a rulemaking. 17 CFR 242.613(a)(5). The Proposed Amendment contains the information needed for the Commission to conduct this assessment. See infra Section IV. See also infra note 1044.

⁵³⁰ See Citadel July Letter at 33-35.

⁵³¹ Id. at 3, 34.

⁵³² Id. See also FIF and SIFMA Letter at 13.

⁵³³ See Citadel July Letter at 3, 32.

⁵³⁴ *Id.* at 32.

⁵³⁵ *Id*.

⁵³⁶ Id.

⁵³⁷ See SIFMA May 2023 Letter at 3, 8–10; Citadel July Letter at 8, 26, 27; FIF and SIFMA Letter at 8–9; SIFMA AMG Letter at 3. See also SIFMA October 2022 Letter at 5–6; SIFMA January 2023 Letter at 2, 5–6; SIFMA June 2023 Letter at 2, n.10, 4; Virtu Letter at 4; MMI July Letter at 3–4; FIA Letter at 3, 5

⁵³⁸ See, e.g., MMI July Letter at 3; Virtu Letter at 4, FIF and SIFMA Letter at 2, 5–9; SIFMA AMG Letter at 3.

⁵³⁹ FIF and SIFMA Letter at 2, 5. The commenter stated that internal costs and costs associated with trading workflow changes to comply with certain CAT reporting requirements should also be considered, arguing that these costs would significantly exceed CAT operating costs are 100% paid for by broker-dealers and exchanges. *Id.* at 2, 5, 6.

⁵⁴⁰ *Id.* at 8.

⁵⁴¹ *Id*.

⁵⁴² *Id.* at 7, 9.

⁵⁴³ *Id.* at 9.

⁵⁴⁴ FIF and SIFMA Letter at 4.

⁵⁴⁵ *Id*.

 $^{^{546}\,}See$ SIFMA AMG Letter at 3.

⁵⁴⁷ See SIFMA May 2023 Letter at 3, 8–10. See also SIFMA October 2022 Letter at 5–6; SIFMA January 2023 Letter at 2, 5–6; SIFMA June 2023 Letter at 2, n.10, 4; Citadel July Letter at 2, 26 (stating that that "the trajectory of annual operating expenses is unconstrained," and that the

[&]quot;magnitude and trajectory" of the costs are not reasonable since Industry Members have borne nearly all CAT-related costs"); Citadel August Letter at 7.

⁵⁴⁸ 15 U.S.C. 78s(b).

⁵⁴⁹ See SIFMA May 2023 Letter at 8–9. See also SIFMA June 2022 Letter at 8–9; SIFMA October 2022 Letter at 6; SIFMA January 2023 Letter at 5, 6

⁵⁵⁰ SIFMA May 2023 Letter at 9.

⁵⁵¹ Id. at 9-10.

⁵⁵² Id. See also SIFMA January 2023 Letter at 6.

⁵⁵³ See Citadel July Letter at 3, 33.

⁵⁵⁴ Id.

⁵⁵⁵ *Id.* at 14.

Commission could result in higher costs. 556

The commenter also suggested enhancements to reduce overall CAT operating costs.⁵⁵⁷ Specifically, the commenter suggested that the Operating Committee and the Commission stop making changes to the CAT to stabilize operating costs, stating that there are changes slated for development that are currently subject to exemptive relief, and other requirements the commenter believes are outside the scope of the CAT NMS Plan that would result in costs that outweigh benefits.558 The commenter suggested that the Operating Committee file an updated NMS plan to reflect the status quo,559 and work with the Commission and industry to identify technical requirements that could be modified to reduce costs without sacrificing the key benefits of the CAT system, like moving timelines from T+1 to T+2.560 The commenter also suggested that steps should be taken to streamline the CAT submission process to minimize reporting errors and to reduce industry implementation costs, like implementing further data validation.⁵⁶¹ One commenter stated that if the Participants "determine to charge their members fees to fund their share of CAT fees," then Industry Members would bear 100% of CAT costs, and thus,"[w]ith little to no skinin-the-game, the Participants will not be incentivized to control costs." 562 The commenter further stated that they join other commenters in calling for an "independent cost review mechanism." 563

In response to the comment that suggested that all CAT operating budgets should remain published on the CAT website, ⁵⁶⁴ CAT LLC stated that it publishes its annual financial statements from 2017-on and voluntarily publishes its annual operating budget and updates to the budget occurring during the year. ⁵⁶⁵ CAT LLC stated that, in response to the comment, it intends that prior CAT operating budgets will stay available on the CAT website. ⁵⁶⁶

In response to a commenter suggesting that the exchanges be responsible for any costs that exceeded the approved budget,567 CAT LLC stated that this suggestion would not result in a fair and equitable allocation consistent with the Exchange Act because Industry Member trading activity "contributes significantly" 568 to CAT costs and it would not be fair for Participants to bear CAT costs exceeding the budget if unexpected increases in trading volume resulted in the increased CAT costs.⁵⁶⁹ CAT LLC also stated that this suggestion could incentivize the Participants to base the budget on "the most conservative projections for future Industry Member data volume" 570 to not be responsible for costs that go over the budget. 571 In addition, CAT LLC noted that the Proposed Amendment would include both a requirement to adjust the Fee Rate during the year to address any changes in projected or actual transaction volume or budgeted or actual CAT costs, and an operational reserve to address shortfalls in collected fees versus actual CAT costs.572

In response to suggestions to use an independent cost review mechanism,⁵⁷³ CAT LLC stated that such a review process is unnecessary because it would go beyond what is required by either Rule 613 or the CAT NMS Plan, and would be superfluous since any CAT fees must, prior to being implemented, undergo the review process detailed in Rule 608 and Section 19(b) of the Exchange Act.574 CAT LLC also noted that the Commission is entitled to request additional budget or cost information it views as necessary to better evaluate those fees.⁵⁷⁵ CAT LLC also stated that it already provides significant cost transparency through the public disclosure of its quarterly budget information and its financials, and that it is already actively engaged in cost discipline efforts, including through a designated cost-management working group.⁵⁷⁶ CAT LLC further explained that Participants are subject to regulatory requirements to implement CAT and oversee their members and cannot have their compliance subject to

a third party without such restrictions.⁵⁷⁷ CAT LLC added that the Commission itself could have its ability to oversee the securities markets undermined if CAT is subject to review by a third party without regulatory restrictions.⁵⁷⁸ In response, one commenter stated that the CAT LLC Response Letter did not meaningfully address its concerns about the lack of a cost control mechanism.⁵⁷⁹

CAT LLC provided a further response to commenters that recommended the adoption of an independent cost review mechanism for CAT costs,⁵⁸⁰ stating that a review process is not necessary or appropriate.581 CAT LLC explained that it is already actively involved in cost discipline efforts, such as through a designated cost management working group, and already provides "significant cost transparency" by publishing its quarterly budget information and financial information.⁵⁸² CAT LLC also stated that such a review process would go beyond the requirements of Rule 613 and would be unnecessary because changes to the funding model would be filed as a plan amendment under Rule 608 of Regulation NMS and CAT fees for Industry Members would be filed pursuant to Section 19(b) of the Exchange Act, and both processes would permit the public to comment on such proposals.⁵⁸³ CAT LLC further stated that providing a third-party that does not have regulatory obligations control over the annual budget could "impermissibly restrict the Participants from discharging their regulatory obligations" and undermine the Commission's ability to oversee the securities markets.⁵⁸⁴ CAT LLC also responded to the commenter that urged the Commission to annually approve the CAT budget 585 by stating that such an approval process would not be necessary or appropriate as CAT LLC is a private entity subject to the requirements of the Exchange Act, not a governmental entity, and CAT fees would be filed with the Commission under Rule 608 of Regulation NMS and Section 19(b) of the Exchange Act and subject to the Commission's review for consistency with the Exchange Act.⁵⁸⁶

577 Id

⁵⁵⁶ Id. at 26.

⁵⁵⁷ See Citadel July Letter at 33-35.

 $^{^{558}}$ Id. at 3, 32–33. One other commenter echoed some of these same considerations. See MMI July Letter at 4

⁵⁵⁹ See Citadel July Letter at 3, 33.

⁵⁶⁰ *Id*.

⁵⁶¹ *Id*.

 $^{^{562}}$ See FIA Letter at 3. See also Citadel August Letter at 2.

⁵⁶³ FIA Letter at 5.

⁵⁶⁴ See Citadel July Letter at 3, 34.

 $^{^{565}\,}See$ CAT LLC July 2023 Response Letter at 26. $^{566}\,Id.$

⁵⁶⁷ See Citadel July Letter at 32.

 $^{^{568}\,}See$ CAT LLC July 2023 Response Letter at 12.

⁵⁶⁹ *Id*.

⁵⁷⁰ Id. ⁵⁷¹ Id.

⁵⁷² *Id*.

⁵⁷³ See SIFMA May 2023 Letter at 3, 8–10. See also SIFMA October 2022 Letter at 5–6; SIFMA January 2023 Letter at 2, 5–6; SIFMA June 2023 Letter at 2, n.10, 4; Citadel July Letter at 3, 33; FIA Letter at 5.

⁵⁷⁴ See CAT LLC May 2023 Response Letter at 10.

⁵⁷⁵ *Id*.

⁵⁷⁶ Id.

⁵⁷⁸ Id.
579 See SIFMA June 2023 Letter at 2.
580 See Citadel July Letter at 33; FIA Letter at 5;
MMI July Letter at 2; SIFMA June 2023 Letter at 2;
id. at n.10; Virtu Letter at 4.
581 See CAT LLC July 2023 Response Letter at 19.
582 Id. at 20.
583 Id. at 19–20.
584 Id. at 20.

⁵⁸⁵ See Citadel July Letter at 33. ⁵⁸⁶ See CAT LLC July 2023 Response Letter at 20– 21

Furthermore, CAT LLC stated that the Commission can request budget and financial information from CAT LLC if necessary for the evaluation of CAT fee filings.⁵⁸⁷

In response to the commenter that asked whether the Participants would have an incentive to manage costs because they proposed to allocate most costs to Industry Members,⁵⁸⁸ CAT LLC stated that it "strongly disagrees with the suggestion that the Participants would not be incentivized to control CAT costs if they are only responsible for one-third of the CAT costs going forward." 589 CAT LLC stated that the Participants have been focused on cost management when paying 100% of CAT costs and will continue this focus since they will be paying one-third of CAT costs, a "significant incentive to keep costs at an appropriate level." 590

In response to comments expressing concern about increasing CAT operating costs,591 CAT LLC described its commitment to cost management,592 stating that cost management is a top priority and that it works to reduce costs in a number of ways, including through the Cost Management Working Group comprised of senior members of the Participants that works to find and address cost management needs. 593 CAT LLC also noted that Rule 613 and the CAT NMS Plan "impose significant regulatory obligations on the Participants regarding how to design, build and operate the CAT System" and that the Commission could compel the Participants to comply with Rule 613 or the CAT NMS Plan through enforcement actions if CAT LLC and the Participants ever fail to do so.594 CAT LLC stated that its largest cost driver is the processing and storage of CAT data in the cloud, representing 75% of all CAT costs.595 CAT LLC stated that CAT NMS Plan requirements "do not allow for any material flexibility in cloud architecture design choices, processing timelines (e.g., the use of non-peak processing windows), or lower-cost storage costs," limiting CAT LLC's cost management efforts, and provided examples where CAT LLC and the Plan Processor worked to optimize cloud cost savings

despite regulatory constraints. 596 CAT LLC described other steps it has taken to save costs, such as through requests to the Commission for exemptive relief and litigation challenging the Commission's interpretation of specific requirements of the CAT NMS Plan, 597 as well as identification of other changes that could substantially lower costs but would require exemptive relief or the filing of a Plan amendment. 598

In response to one commenter's recommendation that CAT LLC work with the Commission to identify technical requirements that could be modified to reduce costs without sacrificing the key benefits of the CAT system,⁵⁹⁹ CAT LLC stated that both it and the Plan Processor work to identify and raise with Commission staff potential fundamental changes to the CAT NMS Plan that would limit costs without compromising on regulatory goals, and provided examples of such changes.⁶⁰⁰

The Commission acknowledges the comments expressing concern about increases to the CAT operating budget, particularly why it is now five times the amount estimated in the CAT NMS Plan Approval Order, 601 and the comments urging the need for a cost review mechanism,602 but believes the Participants have reasonably explained why they chose not to include an independent cost review mechanism for budgeted CAT costs for the reasons stated above and in the Notice. Given the transparency of the budget and Rule 19b-4 process, the one-third allocation of costs to Participants, which provides them with at least some incentive to control costs, and the pre-existing requirement for an independent audit of all fees, costs and expenses incurred by the Participants prior to filing this

amendment,603 it is reasonable not to have an additional independent costreview mechanism for the reasons set forth above. The Commission believes that the incentive to control costs still exists even if the Participants passthrough to Industry Members some or most of the costs of the CAT. This is because, in order to pass-through CAT costs, the Participants would have to submit rule filings under the Section 19(b) fee filing process. To the extent the Participants fail to control costs, their ability to demonstrate that a proposed fee is reasonable and consistent with the Exchange Act may be compromised. While the above obligations and controls are sufficient, other cost discipline mechanisms proposed by CAT LLC would provide beneficial cost transparency, which would help keep fees and costs reasonable. 604 For example, (1) Section 9.2(a) of the CAT NMS Plan requires CAT LLC to make public an audited balance sheet, income statement, statement of cash flows and statement of changes in equity, and requires the Operating Committee to maintain a system of accounting established and administered in accordance with GAAP and to prepare financial statements or information supplied to the Participants in accordance with GAAP; 605 (2) CAT LLC publicly provides the annual operating budget and updates to the budget on the CAT NMS Plan website and also has held webinars about CAT costs and alternative funding models; (3) involvement by CAT LLC and FINRA CAT in efforts to reduce CAT costs through CAT working groups and review of options to lower costly needs and obtain services in a cost-effective manner; and (4) Commission oversight of CAT funding through attendance at Operating Committee, Subcommittee and working group meetings and review of the Proposed Amendment and any associated CAT fees.⁶⁰⁶ Additionally, the specification of the items required to be included in the operating budget is

⁵⁸⁷ *Id.* at 21.

⁵⁸⁸ See FIA Letter at 4–5.

 $^{^{589}\,}See$ CAT LLC July 2023 Response Letter at 26. $^{590}\,Id.$

 $^{^{591}}$ See Citadel July Letter at 7–9, MMI July Letter at 1, 4, SIFMA June 2023 Letter at 4; Virtu Letter at 4.

 $^{^{592}\,}See$ CAT LLC July 2023 Response Letter at 22–25.

⁵⁹³ *Id.* at 22.

⁵⁹⁴ *Id*.

⁵⁹⁵ Id.

⁵⁹⁶ *Id.* at 23.

⁵⁹⁷ *Id.* at 24.

 $^{^{598}}$ See CAT LLC July 2023 Response Letter at 25. 599 See Citadel July Letter at 33.

⁶⁰⁰ See CAT LLC July 2023 Response Letter at 25–

⁶⁰¹ See, e.g., Citadel August Letter at 8; Citadel July Letter at 2, 5. The Commission acknowledges a commenter's suggestion that the Commission perform its own analysis of the budget increases. Under the Proposed Amendment, the Participants must submit Rule 19b–4 filings that include a discussion of the budget that was used to calculate the Fee Rate. At such time the Commission, Industry Members and the public will have an opportunity analyze the budget. This Order, which approves the Funding Model, does not weigh-in on the budgets or the resulting Fee Rates.

⁶⁰² See SIFMA May 2023 Letter at 3, 8–10; Citadel July Letter at 8, 26, 27; FIF and SIFMA Letter at 2, 5–9; SIFMA AMG Letter at 3. See also SIFMA October 2022 Letter at 5–6; SIFMA January 2023 Letter at 2, 5–6; SIFMA June 2023 Letter at 2, n.10, 4; Virtu Letter at 4; MMI July Letter at 3–4; FIA Letter at 3, 5.

⁶⁰³ See CAT NMS Plan, supra note 2 at Section 6.2(a)(v)(B).

⁶⁰⁴ See Notice, supra note 7, 88 FR at 17117. 605 See CAT NMS Plan, supra note 2, at Section 9.2(a). Section 9.2(a) states that unaudited statements shall be subject to year-end adjustments

and may not include footnotes.

606 See Notice, supra note 7, 88 FR at 17117. CAT
LLC also lists the following as cost-control
mechanisms: (1) CAT LLC must operate on a breakeven basis, in which fees would be used to recover
costs and a reserve, and a surplus would be treated
as an operational reserve to offset future fees (see
CAT NMS Plan, supra note 2, at Section 11.1(c));
(2) CAT LLC qualifies as a Section 501(c)(6)
business league, which means it is not organized for
profit and no part of its net earnings can inure to
the benefit of any private shareholder or individual
(26 U.S.C. 501(c)(6)).

appropriate in that it will help the Commission, Industry Members and others evaluate CAT costs for purposes of commenting on CAT fees when they are proposed under Section 19(b) of the Exchange Act. 607 This additional detail should provide sufficient information about the budget for the Commission to determine whether such proposed fees are reasonable, and obviate the need for a separate Commission approval of the CAT budget, as suggested by commenters. 608 Additionally, the Commission understands that technology costs account for more than 90% of the CAT budget 609 and thus believes that it is appropriate for the CAT NMS Plan to require the Participants to separate such costs into costs for cloud hosting services, operating fees, CAIS operating fees, change request fees and capitalized developed technology costs.610

One commenter requested further information to be provided on technology costs. 611 The Participants would be required to describe each line item (including such technology costs) in the fee filings for Industry Member CAT Fees and the Historical CAT Assessment, including the reasons for changes in each line item from the prior CAT fee filing, and that this information would be provided with sufficient detail to demonstrate the budget or Historical CAT Costs (as applicable) is reasonable and appropriate. 612 Because the Participants are also assessed CAT fees, they have at least some incentive similar to that of the Industry Members to keep costs down. As discussed above, the Commission believes that this incentive still exists even if the Participants passthrough to Industry Members some or most of the costs of the CAT, because any effort to pass on costs would require Participants to submit filings under the Section 19(b)(2) rule filing process. Moreover, to the extent the Industry Members have concerns about the amounts allocated for each category in a particular budget, those concerns can be raised when the fee filings are submitted for Prospective CAT fees. The Section 19(b)(2) rule filing process provides an opportunity for public comments and will allow commenters

to raise concerns if they believe fees, including CAT Fees, are not reasonable and equitably allocated, would result in unfair discrimination, or would impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act. While a commenter stated that the Commission is a conflicted party due to its use of the CAT and its responsibility to review CAT fee filings,613 the Commission is not a party to the Plan.⁶¹⁴ Moreover, as regulator of the Participants, the Commission oversees and enforces compliance with the Plan, as well as consistency of any fees with statutory and regulatory standards.615

Additionally, one commenter recommended the inclusion of the Commission's line item costs associated with its usage and design of the CAT in the budget.⁶¹⁶ In response,⁶¹⁷ CAT LLC responded that, because all costs related to CAT are a result of the Commission's adoption of Rule 613 and the total costs are reflected in the budget, it would be impractical to break out Commissionspecific costs and would not be useful as a practical matter. 618 The Commission agrees that it would be impractical to add a Commissionspecific line item in the budget, in part because it would be difficult to separate costs associated with Commission use of the CAT system from costs associated with Participant use of the CAT system. 619 Moreover, the implementation of the CAT—while mandated by the Commission through Rule 613—has been managed by the Participants and the Plan Processor; the Commission does not believe that any changes to its design have been made that are inconsistent with the CAT NMS Plan as approved in 2016, such that the inclusion of a line item in the budget attributing certain design costs to the Commission would be inaccurate and misleading.620

The Commission acknowledges the enhancements a commenter suggested to reduce CAT operating costs by modifying the technical specifications (e.g., by moving certain timelines to T+2 from T+1) and streamlining the reporting submission process (e.g.,

implementing further data validation),621 but such suggestions are better addressed in the context of a separate plan amendment. The commenter also suggested that the CAT Operating Committee and the Commission stop making any changes to the CAT and noted that there are several changes that are currently subject to exemptive relief that are slated for development.⁶²² The Commission disagrees that the changes cited by the commenter are new CAT NMS Plan requirements; indeed the relevant Commission orders granting exemptive relief discuss the various requirements under the CAT NMS Plan that form the basis of the relief granted.623 Furthermore, any amendments to the requirements in the CAT NMS Plan must be filed with the Commission and published for notice and comment and generally shall not become effective unless approved by the Commission.624 Regarding the suggested enhancements to improve CAT transparency,625 the CAT NMS Plan and Rules 608 and 613 of Regulation NMS provide for sufficient advance notice of material changes to the CAT system and related costs. As discussed above, changes to the CAT NMS Plan must be filed with the Commission as an NMS plan amendment pursuant to Rule 608 of Regulation NMS and therefore be subject to notice and comment, and the Commission shall consider, in determining to approve the amendment, the impact of the amendment on efficiency, competition and capital formation. 626 Additionally, Section 6.9 of the CAT NMS Plan requires a Supermajority Vote of the CAT Operating Committee in order to make Material Amendments 627 to the Technical Specifications. Section 6.9, however, does not provide unfettered discretion to the CAT Operating

⁶⁰⁷ 15 U.S.C. 78s(b).

⁶⁰⁸ See proposed Section 11.1(a)(i); proposed Section 11.3(a)(iii)(B) (requiring the information to be provided in the Industry Member CAT Fee filings submitted by the Participants to be of sufficient detail to demonstrate that the budget for the upcoming year, or part of year as applicable, is reasonable and appropriate).

⁶⁰⁹ See Notice, supra note 7, 88 FR at 17090.

⁶¹⁰ *Id.* at 17117.

 $^{^{611}\,}See\,supra$ note 522.

⁶¹² See proposed Section 11.3(a)(iii)(B); proposed Section 11.3(b)(iii)(B)(II).

⁶¹³ See SIFMA May 2023 Letter at 9–10.

 $^{^{614}\,}See$ 17 CFR 242.608(a)(1) (stating that NMS plans are filed by two or more SROs).

 $^{^{615}\,} See$ 17 CFR 242.608(b)(2), (c), (d); 17 CFR 242.613(h).

 $^{^{616}\,}See$ SIFMA May 2023 Letter at 10. CAT LLC May 2023 Response Letter at 11.

⁶¹⁷ See SIFMA May 2023 Letter at 10.

 $^{^{618}}$ See CAT LLC May 2023 Response Letter at 11. 619 All Participants are required to use the CAT in their surveillance programs. See CAT NMS Plan, supra note 2, at Section 6.10.

 $^{^{620}\,\}mathrm{For}$ further discussion, see infra Section III.A.9.c.–d.

 $^{^{621}\,}See$ Citadel July Letter at 33–35.

⁶²² Id.

⁶²³ See Securities Exchange Act Release No.
97350 (May 18, 2023), 88 FR 33655 (May 24, 2023);
Securities Exchange Act Release No. 90689 (Dec.16, 2020), 85 FR 83667 (Dec. 22, 2020);
Securities Exchange Act Release No. 90688 (Dec. 16, 2020), 85 FR 83634 (Dec. 22, 2020).

⁶²⁴ See Rule 608(b)(1); 17 CFR 242.608(b)(1). However, a plan amendment can be put into effect upon filing with the Commission if it is designated as solely administrative, technical or ministerial. See Rule 608(b)(3).

⁶²⁵ See supra notes 530-532.

⁶²⁶ Rule 613(a)(5). 17 CFR 242.613(a)(5).

⁶²⁷ The CAT NMS Plan defines a "Material Amendment" as an amendment to the Technical Specifications that "would require a Participant or an Industry Member to engage in significant changes to the coding necessary to submit information to the Central Repository pursuant to this Agreement or if it is required to safeguard the security or confidentiality of the CAT Data." See CAT NMS Plan, supra note 2, at Section 6.9(c).

Committee to make changes to the CAT system; any amendments to the CAT Technical Specifications must be consistent with the CAT NMS Plan. If the CAT Operating Committee or the Commission wish to impose additional requirements that are not contemplated by the CAT NMS Plan, such requirements must be proposed through an amendment to the CAT NMS Plan, filed under Rule 608 of Regulation NMS, which must be published for notice and comment.628 The Commission agrees with the commenter that all CAT operating budgets should remain published on the CAT NMS Plan website, as they have been since 2022, and understands that CAT LLC will continue to do so in the future.629 Therefore, the Commission does not believe it is necessary to add an explicit requirement to this effect.

The use of budgeted CAT costs is appropriate to determine the Fee Rate because it ties the Fee Rate to the costs that the CAT will likely incur during the relevant period which are also the Prospective CAT Costs that will need to be apportioned among the Participants and CAT Executing Brokers. 630 Should the use of budgeted costs result in a budget surplus, that surplus would translate to lower fees in the coming year because there would be a lower requirement for reserves. 631 Also, using budgeted costs to determine the Fee Rate facilitates financial stability, allowing CAT LLC to collect fees before bills become payable. 632

The requirements that the Operating Committee approve a "reasonable" operating budget for CAT LLC, 633 that fees, costs and expenses be "reasonable" and that they be "reasonably budgeted to be incurred by or for the Company in connection with the development, implementation and operation of the CAT as set forth in the annual operating budget approved by the Operating Committee" 634 is appropriate in the public interest. 635 The existing CAT NMS Plan did not include such language, potentially providing the Participants full discretion to pass along

⁶²⁸ See Rule 608(b)(1). 17 CFR 242.608(b)(1). ⁶²⁹ See CAT LLC May 2023 Response Letter at 10– to Industry Members costs that are not reasonable. Such costs could have included costs that were incurred due to Participant mismanagement, costs that were inflated or costs that should reasonably be allocated to only the Participants. Requiring these costs to be reasonable and reasonably budgeted imposes discipline on CAT spending, and the Commission, Industry Members and others will be able to review budget information during the rule filing process under Section 19(b) of the Exchange Act.

c. Reserve

CAT LLC proposed to add a requirement to Section 11.1(a)(i) of the CAT NMS Plan that the budget shall include "a reserve and such other cost categories as reasonably determined by the Operating Committee to be included in the budget." 636 CAT LLC also proposed to add paragraph (ii) to Section 11.1(a) of the CAT NMS Plan to state that "[f]or the reserve referenced in paragraph (a)(i) of this Section, the budget will include an amount reasonably necessary to allow the Company to maintain a reserve of not more than 25% of the annual budget." 637 Moreover, CAT LLC would calculate the reserve based on the amount of the budget other than the reserve. 638 In addition, proposed subparagraph (ii) of Section 11.1(a) of the CAT NMS Plan would state that "[t]o the extent collected CAT fees exceed CAT costs, including the reserve of 25% of the annual budget, such surplus will be used to offset future fees." 639 Proposed Section 11.1(a)(ii) of the CAT NMS Plan provides that "[f]or the avoidance of doubt, the Company will only include an amount for the reserve in the annual budget if the Company does not have a sufficient reserve (which shall be up to but not more than 25% of the annual budget)." 640

One commenter stated that the proposed reserve of not more than 25% of the CAT budget is excessive. 641 The commenter noted that the support provided for the proposed change was the Participants' difficulty in forecasting

CAT costs, which the commenter stated demonstrates a need for an independent cost review mechanism.⁶⁴²

The Proposed Amendment providing that the annual operating budget include a reserve of not more than 25% of the annual budget is reasonable.643 Because the CAT is a critical regulatory tool/system, the CAT needs to have a stable funding source to build financial stability to support the Company as a going concern.644 Funding for the CAT, as noted in Section 11.1(b), is the responsibility of the Participants and the industry. 645 Because CAT fees are charged based on the budget, which is based on anticipated volume, it is reasonable to have a reserve on hand to prevent a shortfall in the event there is an unexpectedly high volume in a given vear. A reserve would help to assure that the CAT has sufficient resources to cover costs should there be unanticipated costs or costs that are higher than expected. CAT LLC explained that the proposed reserve amount of not more than 25% of the annual budget is based on a comparison of actual CAT costs and budgeted costs from 2020 through the first nine months of 2022 that demonstrated that actual CAT costs exceeded budgeted costs by 20% during this time period. 646 CAT LLC also noted difficulty in predicting variable CAT costs in concluding to cap the reserve at 25%.647 Additionally, CAT LLC explained that CAT fees will be collected approximately three months after trading activity on which a CAT fee is based, or 25% of the vear.648 CAT LLC stated that the reserve would be available to address funding needs related to this three-month delay.649 No commenter stated that they thought anything higher than a 25% reserve was necessary and no commenter provided an alternative solution to make sure that CAT remains funded and able to pay its bills. The Commission therefore believes that a reserve of no more than 25% is reasonable based on the factors listed by CAT LLC.

In addition, the Commission recognizes that if CAT fees exceed CAT costs, including the reserve, the surplus will be used to offset future fees, and that a reserve will only be included in the annual budget on which the fees are based if CAT LLC does not have a

⁶³⁰ See Notice, supra note 7, 88 FR at 17114.

⁶³¹ See infra Section III.A.5.c. (Reserve).

⁶³² See id.

⁶³³ See proposed Section 11.1(a).

⁶³⁴ Proposed Section 11.3(a)(i)(C).

⁶³⁵ One commenter complained that Participants were not providing the public with an opportunity to review the budget until after it was finalized. See SIFMA May 2023 Letter at 8–10. As CAT LLC explained, this appears to be based on a misunderstanding, as CAT LLC provides the annual budget and quarterly updates to the public. See CAT LLC May 2023 Response Letter at 11.

⁶³⁶ Proposed Section 11.1(a)(i).

⁶³⁷ Proposed Section 11.1(a)(ii).

⁶³⁸ Specifically, proposed Section 11.1(a)(ii) of the CAT NMS Plan would state that "[f]or the avoidance of doubt, the calculation of the amount of the reserve would exclude the amount of the reserve from the budget."

⁶³⁹ Id.

⁶⁴⁰ Id.

⁶⁴¹ See SIFMA January 2023 Letter at 6, n.15. See also Citadel July Letter at 26 (objecting to the requirement that Industry Members "fund an additional 25% reserve over budgeted amounts each year.").

⁶⁴² See SIFMA January 2023 Letter at 6, n.15.

⁶⁴³ See Notice, supra note 6, 88 FR at 17090.

⁶⁴⁴ See CAT NMS Plan, supra note 2, at Section 11.2(f).

⁶⁴⁵ *Id.* at Section 11.1(b).

 $^{^{646}\,}See$ Notice, supra note 7, 88 FR at 17090.

⁶⁴⁷ Id.

⁶⁴⁸ *Id.* at 17091.

⁶⁴⁹ Id.

sufficient reserve, which would be limited to 25% of the annual budget.650 The Commission also recognizes that the Company must operate on a breakeven basis and that any surpluses would be treated as an operational reserve to offset future fees and not be distributed to Participants as profits.651 The Commission further recognizes that proposed Section 11.1(a)(ii) states that CAT LLC will only include an amount for the reserve in the annual budget if the Company does not have a sufficient reserve; therefore, the Participants would not be collecting additional fees if CAT LLC already has a reserve of 25% of the annual budget.652 Furthermore, the reserve would be calculated by CAT LLC based on the amount of the budget other than the reserve because the reserve is meant to fund CAT LLC to pay its bills if necessary. 653 These requirements should obviate the need for a refund mechanism.

To date, CAT has been solely funded by the Participants.⁶⁵⁴ The CAT NMS Plan, however, requires funding for the CAT come from both Participants and Industry Members.⁶⁵⁵ It is the Commission's view that establishing a reserve is a reasonable way to ensure that future funding is secured from all intended parties, rather than relying on Participants alone.

d. Fee Filings Under Section 19(b) of the Exchange Act for Industry Member CAT Fees

CAT LLC described the information that Participants would be required to include in their fee filings to be made pursuant to Section 19(b) of the Exchange Act and Rule 19b–4 thereunder for Industry Member CAT Fees in proposed paragraph (B) of proposed Section 11.3(a)(iii) of the CAT NMS Plan.⁶⁵⁶ Specifically, such filings

would be required to include with regard to the CAT Fee: (A) the Fee Rate: (B) the budget for the upcoming year (or remainder of the year, as applicable), including a brief description of each line item in the budget, including (1) technology line items of cloud hosting services, operating fees, CAIS operating fees, change request fees and capitalized developed technology costs, (2) legal, (3) consulting, (4) insurance, (5) professional and administration, and (6) public relations costs, a reserve and/or such other categories as reasonably determined by the Operating Committee to be included in the budget and the reason for changes in each such line item from the prior CAT Fee filing; 657 (C) a discussion of how the budget is reconciled to the collected fees; and (D) the projected total executed equivalent share volume of all transactions in Eligible Securities for the year (or remainder of the year, as applicable), and a description of the calculation of the projection. This detail would describe how the Fee Rate is calculated and explain how the budget used in the calculation is reconciled to the collected fees.658 In addition, CAT LLC proposed to state that the budgeted CAT costs described in the fee filings must provide sufficient detail to demonstrate that the CAT budget used in calculating the CAT Fees is reasonable and appropriate. 659

The collection of CAT Fees from Industry Members is subject to Section 11.6 of the CAT NMS Plan regarding the Financial Accountability Milestones. 660 Accordingly, CAT LLC proposed to state that Participants will not make fee filings pursuant to Section 19(b) of the Exchange Act 661 regarding CAT Fees until the Financial Accountability Milestone related to Period 4 described

thereunder. CAT LLC further stated that in accordance with Section 19(b)(3)(A) of the Exchange Act and Rule 19b–4(f)(2) thereunder, such fee filings would be effective upon filing. See Notice, supra note 7, 88 FR at 17095, n.38. Pursuant to Section 19(b)(3)(A) and Rule 19b–4(f)(2), a proposed rule change can take effect upon filing with the Commission if designated by the SRO as establishing or changing a due, fee, or other charge imposed by the SRO. 15 U.S.C. 78s(b), 15 U.S.C. 78s(b)(3)(A), 17 CFR 240.19b–4(f)(2).

in Section 11.6 of the CAT NMS Plan has been satisfied.⁶⁶²

As discussed above, one commenter stated that the budget line-item categories, which would be included in the Section 19(b) fee filings, are too high level. 663 The commenter urged the inclusion of much greater detail and specificity on the budget spending choices, especially in technology, to allow Industry Members and the public to understand and evaluate CAT spending decisions. 664

The proposed process for implementing CAT Fees related to Prospective CAT Costs for Industry Members is reasonable. Under the Executed Share Model, the Participants would be required to submit fee filings pursuant to Section 19(b) of the Exchange Act to change the Fee Rates for Industry Members twice a year, once at the beginning and once during the year. 665 It is appropriate to accompany each Fee Rate change with a Section 19(b) fee filing because it would provide notice to Industry Members and the public of the Fee Rate change and permit such entities to provide comment on the change.

In addition to the budget information already provided by the Participants on the CAT website, the detail provided in the fee filings for the budget would provide transparency into the budget as it would describe the line items of the budget and any changes to the budget and allow the public the ability to comment on the budget.666 The fee filings must discuss \bar{h} ow the budget is reconciled to collected fees, which would provide the public an opportunity to comment on the effectiveness of the reconciliation.667 The Executed Share Model establishes the framework for Industry Member CAT fees; details of the Budgeted CAT Costs will be provided in the Section 19(b) fee filings submitted by the Participants.

One commenter objected to how the Proposed Amendment addressed the Financial Accountability Amendments Period 4 ⁶⁶⁸ expenses. ⁶⁶⁹ The commenter stated that if full implementation does not occur by September 27, 2023, the Operating Committee cannot recover from Industry

⁶⁵⁰ Id. See also proposed Section 11.1(a)(ii). 651 The CAT NMS Plan requires that a surplus of the Company's revenues over its expenses be treated as an operational reserve to offset future fees. See CAT NMS Plan, supra note 2, at Section 11.1(c).

⁶⁵² See Notice, supra note 7, 88 FR at 17091. See also proposed Section 11.1(a)(ii).

 $^{^{653}}$ See Notice, supra note 7, 88 FR at 17090. See also proposed Section 11.1(a)(ii).

est One commenter objected to CAT LLC's reference to the financial viability of the CAT as an attempt to "coerce the Commission into prematurely opining on a funding proposal that does not meet basic Exchange Act requirements." See Citadel August Letter at 1. For the reasons explained in this order, the Funding Model meets the applicable standard for approval.

 $^{^{655}}See$ CAT NMS Plan, supra note 2, at Section 11.1(b), 11.3(a) and (b).

⁶⁵⁶CAT LLC stated that it expected the fee filings required to be made by the Participants pursuant to Section 19(b) of the Exchange Act with regard to CAT Fees to be filed pursuant to Section 19(b)(3)(A) of the Exchange Act and Rule 19b–4(f)(2)

other categories as reasonably determined by the Operation Committee. Accordingly, this provision refers to "such other categories as reasonably determined by the Operating Committee to be included in the budget." Notice, *supra* note 7, 88 FR at 17095, n.39.

⁶⁵⁸ As a practical matter, the fee filing would provide the exact fee per executed equivalent share to be paid for the CAT Fees, by multiplying the Fee Rate by one-third and describing the relevant number of decimal places for the fee. *See* Notice, *supra* note 7, 88 FR at 17095, n.40.

⁶⁵⁹ See proposed Section 11.3(a)(iii)(B).

⁶⁶⁰ See CAT NMS Plan, supra note 2, at Section 11.6; see also supra note 18.

^{661 15} U.S.C. 78s(b).

⁶⁶² See proposed Section 11.3(a)(iii)(C); see also CAT NMS Plan, supra note 2, at Section 11.6(a)(i)(D).

 $^{^{663}\,}See\,supra$ note 521.

⁶⁶⁴ *Id*.

 $^{^{665}\,}See$ proposed Section 11.3(a)(i)(A)(I) and (II).

⁶⁶⁶ See proposed Section 11.3(a)(iii)(B).

⁶⁶⁷ Id.

 $^{^{668}\,}See$ CAT NMS Plan, supra note 2, at Section 11.6.

⁶⁶⁹ See Citadel July Letter at 24.

Members any expenses related to Period 4.670 The commenter explained that the Proposed Amendment states that costs incurred during Period 4 may be allocated to Industry Members and that the Operating Committee had requested exemptive relief to extend the deadline for full implementation until August 31, 2024, which would allow the Participants to recover all Period 4 expenses from Industry Members. 671 The commenter stated that the expenses related to Period 4 would likely total more than \$400 million, and expressed the belief that this amount may be allocated in its entirety to Industry Members if the terms of the CAT NMS Plan are not enforced. 672

The commenter stated that this issue is "highly relevant to the Commission's analysis of the 2023 Funding Proposal" 673 and recommended three alternatives for the Commission to address the matter: (1) to state that relevant financial accountability provisions will be enforced as written and permit the Operating Committee to allocate Period 4 expenses only to the extent permitted by the CAT NMS Plan (reduced by 75%, and by 100% if full implementation does not occur by September 27, 2023); 674 (2) defer judgment and provide that Period 4 expenses cannot be allocated to Industry Members; 675 or (3) defer judgment and permit the Operating Committee to allocate Period 4 expenses to Industry Members and analyze the potential impact of allocating all Period 4 costs to Industry Members on market efficiency, competition and capital formation.⁶⁷⁶ The commenter urged the Commission to conduct this analysis before waiting for a subsequent filing, stating that once the Commission approves an allocation methodology, "the CAT Operating Committee would simply apply that approved methodology to the costs incurred during a specific time period." 677

In response to the commenter's criticism that the Proposed Amendment does not adequately address the Period 4 expenses,⁶⁷⁸ CAT LLC stated that it recognizes the applicability of the Financial Accountability Milestones on

⁶⁷⁰ Id.

the collection of CAT Fees and Historical CAT Assessments. 679 CAT LLC stated that the Participants will not file CAT fee filings until they believe any applicable Financial Accountability Milestone has been satisfied, and noted that the Commission has not made a determination regarding the Participants' satisfaction of the Financial Accountability Milestones. 680

As stated by the Participants, the Proposed Amendment acknowledges that the Participants are prohibited from submitting Exchange Act filings regarding Prospective CAT Fees until the Financial Accountability Milestone related to Period 4 described in Section 11.6 of the CAT NMS Plan has been satisfied.⁶⁸¹ This is a reasonable approach for addressing how fee filings will be handled in conjunction with a determination of the Participants' compliance with the Financial Accountability Milestones. Under existing Section 11.6, the Participants will not be able to recover the full costs of the CAT for a period if the relevant Financial Accountability Milestone has not been satisfied.682 Because the amount the Participants cannot recover from Industry Members is not known until the Financial Accountability Milestone has been satisfied, it would not be appropriate for the Participants to require Industry Members to pay CAT costs in advance, as the amount of such costs could be reduced.⁶⁸³ The Commission acknowledges the concerns raised and suggestions offered by the commenter but the Commission is not making a finding on the satisfaction of the Period 4 Financial Accountability Milestone in this Order nor is such a finding required. This filing merely establishes the framework under which costs will be allocated, not the amount to be allocated. The Participants will not be able to submit filings to recover Prospective CAT Fees or Historical CAT Assessments to recover Period 4 expenses until the Period 4 Milestone has been satisfied. When they do submit such filings, the question of compliance will impact how much can be recovered under the applicable framework; this model will then be used to determine how to allocate that amount.

e. Participant CAT Fees for Prospective CAT Costs

CAT LLC proposed to describe the Participant CAT Fees related to

Prospective CAT Costs in proposed Section 11.3(a)(ii) of the CAT NMS Plan. Specifically, under proposed Section 11.3(a)(ii)(A) of the CAT NMS Plan, each Participant that is a national securities exchange will be required to pay the CAT Fee for each transaction in Eligible Securities executed on the exchange in the prior month based on CAT Data. Each Participant that is a national securities association will be required to pay the CAT Fee for each transaction in Eligible Securities executed otherwise than on an exchange in the prior month based on CAT Data.⁶⁸⁴ The CAT Fee for each transaction in Eligible Securities will be calculated by multiplying the number of executed equivalent shares in the transaction by one-third and by the Fee Rate determined pursuant to proposed Section 11.3(a)(i).685

CAT LLC also proposed Section 11.3(a)(ii)(B) of the CAT NMS Plan to provide that Participants would only be required to pay CAT Fees when Industry Members are required to pay CAT Fees. CAT Fees charged to Industry Members become effective in accordance with the requirements of Section 19(b) of the Exchange Act.⁶⁸⁶ In contrast, CAT Fees charged to Participants are implemented via an approval of the CAT Fees by the Operating Committee in accordance with the requirements of the CAT NMS Plan. 687 Specifically, to implement the Participant CAT fees, CAT LLC proposed to add the Proposed Participant Fee Schedule, entitled "Consolidated Audit Trail Funding Fees," to Appendix B of the CAT NMS Plan. Proposed Paragraph (a) stated that "[e]ach Participant shall pay the CAT Fee set forth in Section 11.3(a) of the CAT NMS Plan to Consolidated Audit Trail, LLC in the manner prescribed by Consolidated Audit Trail, LLC on a monthly basis based on the Participant's transactions in Eligible Securities in the prior month." 688 Because each Participant would be required to pay a CAT Fee once a Fee Rate has been established by the Operating Committee, and because of the time and burden required, CAT LLC stated that it would not submit an amendment to the CAT NMS Plan every time the Fee Rate is established or adjusted.689

It is reasonable to require that each Participant pay a CAT Fee related to

⁶⁷¹ Id. at 24–25. The commenter further explained that the Commission has reserved judgment on whether the terms of the Financial Accountability Amendments in Section 11.6 of the CAT NMS Plan would be enforced.

⁶⁷² Id. at 25.

⁶⁷³ Id.

⁶⁷⁴ See Citadel July Letter at 25.

⁶⁷⁵ Id.

⁶⁷⁶ Id.

⁶⁷⁷ Id. at 26.

⁶⁷⁸ Id. at 24.

 $^{^{679}\,}See$ CAT LLC July 2023 Response Letter at 30. $^{680}\,Id.$

⁶⁸¹ See proposed Section 11.3(a)(iii)(C).

⁶⁸² See CAT NMS Plan, supra note 2, at Section

⁶⁸³ See infra note 807.

 $^{^{684}\,}See$ proposed Section 11.3(a)(ii)(A). $^{685}\,Id.$

⁶⁸⁶ See proposed Section 11.3(a)(i)(A)(I) and (II); see also 15 U.S.C. 78s(b).

⁶⁸⁷ See Notice, supra note 7, 88 FR at 17094.

⁶⁸⁸ Paragraph (a) of the Proposed Participant Fee Schedule.

⁶⁸⁹ See Notice, supra note 7, 88 FR at 17108-09.

Prospective CAT Costs for each transaction in the prior month based on CAT Data. 690 The CAT NMS Plan requires the Participants to contribute to the funding of the CAT. 691 Additionally, as CAT LLC explained, the Executed Share Model recognizes the Participants (as market regulators) as one of the three parties who have primary roles in a transaction, 692 so it is appropriate for a transaction-based funding model to assess a CAT Fee upon the Participants.

The Commission also believes it is reasonable that proposed Section 11.3(a)(ii)(B) provides that the Participants would be required to pay CAT Fees only when Industry Members are required to pay CAT Fees. The CAT Fees charged to Participants would be implemented through an approval of the CAT Fees by the Operating Committee and not through a plan amendment submitted each time the Fee Rate changes,693 while CAT Fees charged to Industry Members may only become effective in accordance with the requirements of Section 19(b) of the Exchange Act. 694 However, both Participants and Industry Members would be subject to the same Fee Rate 695 so it is appropriate to provide that Participants would be required to pay the Participant CAT Fee once CAT Fees based on the Fee Rate are effective for Industry Members.

The Proposed Participant Fee Schedule is reasonable. As the Proposed Participant Fee Schedule requires each Participant to pay the CAT Fee detailed in Section 11.3(a) of the CAT NMS Plan on a monthly basis, based on the Participant's transactions in Eligible Securities in the prior month, in the manner prescribed by CAT LLC,696 the proposed fee schedule is appropriate because it imposes the Executed Share Model's Participant CAT Fee obligation on the Participants by specifically requiring the Participants to pay a CAT Fee in accordance with the Executed Share Model. The requirement in the Proposed Participant Fee Schedule clearly sets forth how the Participants will calculate their monthly CAT Fee obligation, and therefore does not believe that it is necessary for the Participants to submit an amendment to the CAT NMS Plan each time the Fee Rate changes; the formula for

calculating fees will be constant although the Fee Rate that would be applied, which is objectively determined, will change only following a Participant fee filing under section 19(b) of the Exchange Act.⁶⁹⁷ This approach is reasonable in this circumstance because the CAT NMS Plan sets forth the Executed Share Model, the Participants are required to pay CAT Fees pursuant to the CAT NMS Plan and the same Fee Rate that would apply to Industry Members would apply to Participants.⁶⁹⁸

6. Historical CAT Assessment

a. Calculation of Historical CAT Assessment

Under the Executed Share Model, Past CAT Costs will be recovered from CEBBs and CEBSs through Historical CAT Assessments. 699 Pursuant to proposed Section 11.3(b) of the CAT NMS Plan the Operating Committee will establish one or more Historical CAT Assessments depending upon the timing of any approval of the Proposed Amendment and the completion of the Financial Accountability Milestones. 700 In establishing a Historical CAT Assessment, the Operating Committee will determine a "Historical Recovery Period" 701 and calculate a "Historical Fee Rate" 702 for that Historical Recovery Period. Then, for each month in which a Historical CAT Assessment is in effect, each CEBB and each CEBS will pay a fee (the Historical CAT Assessment) for each transaction in Eligible Securities executed by the CEBB or CEBS from the prior month as set forth in CAT Data, where the Historical CAT Assessment for each transaction will be calculated by multiplying the number of executed equivalent shares in the transaction by one-third and by the Historical Fee Rate

reasonably determined pursuant to proposed Section 11.3(b)(i).⁷⁰³

The actual amount of Past CAT Costs to be recovered through the Historical CAT Assessments would be reduced by an amount of "Excluded Costs." 704 The resulting amount would be defined as "Historical CAT Costs" in proposed Section 11.3(b)(i)(C) of the CAT NMS Plan. Proposed Section 11.3(b)(i)(C) states that "[t]he Operating Committee will reasonably determine the Historical CAT Costs sought to be recovered by each Historical CAT Assessment, where the Historical CAT Costs will be Past CAT Costs minus Past CAT Costs reasonably excluded from Historical CAT Costs by the Operating Committee." 705 The Historical CAT Costs would not include an amount of "Excluded Costs" so that Industry Members would not be assessed a Historical CAT Assessment to recover such Excluded Costs.706

Certain commenters objected to the method of calculating the Historical CAT Assessment using current transaction activity. 707 One commenter disagreed with the proposed method "due to difficulty of using current volumes and trading activity by individual Industry Members as a mechanism for assessing costs in the past where the trading volumes and individual Industry Member trading activity likely were different." 708 The commenter also stated that the proposed assessment of Past CAT Costs on current Industry Members based on their current trading activity is not fair or reasonable because new Industry Members would be assessed a share of Past CAT Costs even if they were not in operation when those costs were incurred, and that such costs would be attributable to Industry Members that are no longer in business.⁷⁰⁹ The

⁶⁹⁰ See proposed Section 11.3(a)(ii).

 $^{^{691}}$ See CAT NMS Plan, supra note 2, at Section 11.1(b), Section 11.3(a).

 $^{^{692}}$ See Notice, supra note 7, 88 FR at 17104. 693 Id. at 17108–09.

⁶⁹⁴ See proposed Section 11.3(a)(i)(A). See also 15 U.S.C. 78s(b).

⁶⁹⁵ See proposed Section 11.3(a)(ii)(A) and (B).

⁶⁹⁶ See paragraph (a) of the Proposed Participant Fee Schedule.

⁶⁹⁷ See Notice, supra note 7, 88 FR at 17109.

⁶⁹⁸ See proposed Section 11.3(a)(ii)(A) and (B). ⁶⁹⁹ See Notice, supra note 7, 88 FR at 17086; see

⁶⁹⁹ See Notice, supra note 7, 88 FR at 17086; se also proposed Section 11.3(b); supra notes 32–33 and accompanying text (defining Historical CAT Assessments).

⁷⁰⁰ See proposed Section 11.3(b)(iii). See Notice, supra note 7, 88 FR at 17096, n.43; see also supra note 18 and CAT NMS Plan, supra note 2, at Section 11.6.

⁷⁰¹ The Historical Recovery Period would be used to calculate the Historical Fee Rate for a Historical CAT Assessment. Proposed Section 11.3(b)(i)(D) of the CAT NMS Plan provides the Operating Committee with the discretion to reasonably establish the length of the Historical Recovery Period as long as no such period is less than 24 months and more than five years. See infra Section III A 6 b

 $^{^{702}\,\}rm The$ Historical Fee Rate is the fee rate used to calculate the Historical CAT Assessment. See infra Section III.A.6.c.

⁷⁰³ See proposed Section 11.3(b)(iii)(A).

⁷⁰⁴ The Excluded Costs would be \$48,874,937 in CAT costs incurred from November 15, 2017 through November 15, 2018, and \$14,749,362 in costs related to the termination of the initial Plan Processor. *See* CAT LLC July 2023 Response Letter at 10.

⁷⁰⁵ Proposed Section 11.3(b)(i)(C).

⁷⁰⁶ See Notice, supra note 7, 88 FR at 17111. According to the Proposed Amendment, "[e]ach Historical CAT Assessment will seek to recover from CAT Executing Brokers two-thirds of Historical CAT Costs incurred during the period covered by the Historical CAT Assessment." Proposed Section 11.3(b)(i)(C). The Historical CAT Costs would be Past CAT Costs minus the Excluded Costs. *Id*.

⁷⁰⁷ See SIFMA June 2023 Letter at 4; SIFMA January 2023 Letter at 7; SIFMA October 2022 Letter at 5; Citadel July Letter at 24, 32; MMI July Letter at 4; Virtu Letter at 4.

 $^{^{708}\,}SIFMA$ October 2022 Letter at 5.

 $^{^{709}}$ See SIFMA January 2023 Letter at 7. See also FIA Letter at 4 (stating that it is "patently unfair" to allocate all historical costs to current Industry

commenter added that the Proposed Amendment has not explained how allocating "approximately \$350 million in historical costs . . . to a small group of executing broker firms based on current market volumes" is consistent with the Exchange Act or how it would impact liquidity and competition.710 The commenter stated that since the proposed allocation would be based on current market share and unrelated to the firms or activity that contributed to historical costs, there would be little ability for executing brokers to pass on such costs.711 Another commenter stated that the Proposed Amendment lacked a clear mechanism for Industry Members to pass-on historical costs to other market participants.⁷¹² The commenter stated, "[i]t appears challenging for the CAT Operating Committee to allocate historical costs in a way that is directly tied to historical activity, which makes it more difficult for Industry Members to pass-on these costs to other market participants." 713 Another commenter suggested a "review of current market percentage share dictating cost structure—e.g., industry fluctuations—how current market share [sic] not reflective of past/future market shares- need for adjustments." 714

One commenter recommended a reevaluation of the use of transaction fees to assess Past CAT Costs,715 and suggested an alternative approach in which Past CAT Costs would be assigned to Industry Members "based on the lesser of (i) the CAT Fees that would be assessed on an Industry Member under the Participants' proposed approach of using current trading activity or (ii) the CAT Fees that would be assessed on such member based on their prior trading activity in the years since 2016 when the CAT was being built and then operationalized . . . $^{"716}$ The commenter stated that the share of Past CAT Costs belonging to Industry Members that are no longer in business could be calculated using this approach and then divided equally among the

Members based on their current market activity because current "Industry Members had no control over the stops and starts incurred in the development of CAT.").

current Industry Members, while Industry Members that entered into business after certain Past CAT Costs were incurred would be assessed Past CAT Costs starting in the year after which they started operating based on the above approach.⁷¹⁷ The commenter acknowledged that, while this approach would require more effort by the Participants, it would be "significantly closer to the fair and reasonable standard in the Exchange Act than the approach set forth by the Participants in the Executed Share Model." ⁷¹⁸

Additionally, commenters objected to the allocation of Past CAT Costs to Industry Members.⁷¹⁹ One commenter stated that the Participants have failed to justify the allocation of Past CAT Costs to Industry Members during the period when only Participants were reporting to the CAT.⁷²⁰ Certain commenters stated that Industry Members should not be assessed any fees related to the decision to employ Thesys Technologies, LLC as the Plan Processor or legal or consulting fees incurred by the Participants in the creation of the CAT NMS Plan.⁷²¹ One commenter stated that the Proposed Amendment fails to provide how much of the allocation to Industry Members is related to Thesys Technologies, LLC, and, therefore, the Participants have not demonstrated how the Executed Share Model is consistent with the Exchange Act. 722

Another commenter stated that it would be inappropriate to allocate any costs related to Thesys Technologies, LLC's role as the plan processor, including the costs of transitioning to a new plan processor, or the Operating Committee's costs of litigation against the Commission.⁷²³ The commenter expressed concern about a lack of transparency into Historical CAT Costs and the size of such costs, stating that the historical costs are excessive and inconsistent with the CAT NMS Plan.⁷²⁴ The commenter stated that a lack of transparency into historical costs raises questions about whether Industry Members would be allocated costs for the period when Thesys Technologies, LLC was the plan processor, noting that

the Proposed Amendment only

intended to exclude \$64 million in costs

related to the "failed engagement of

One commenter stated that Industry Members were not subject to CAT obligations before the CAT NMS Plan's approval, had no input into the selection of the service providers, and that "it is difficult to envision how the Participants could demonstrate that such an allocation provides for the equitable allocation of reasonable fees due to the fact that the CAT NMS Plan

⁷¹⁰ SIFMA June 2023 Letter at 4. This statement was echoed by another commenter. See Virtu Letter

⁷¹¹ SIFMA June 2023 Letter at 4. The commenter also stated that the assessment of "retroactive liability for monies spent that private parties had no control over" for public purposes would violate the Fifth Amendment Takings Clause. See infra Section

⁷¹² See Citadel July Letter at 24.

⁷¹³ Id. at 32.

⁷¹⁴ See MMI July Letter at 4.

⁷¹⁵ See SIFMA October 2022 Letter at 5.

⁷¹⁶ SIFMA January 2023 Letter at 7.

⁷¹⁷ Id.

⁷¹⁸ *Id*.

⁷¹⁹ See SIFMA January 2023 Letter at 6–7; SIFMA October 2022 Letter at 7; SIFMA June 2022 Letter at 7; Citadel July Letter at 3, 24, 31, 32; FIA Letter at 4; MMI July Letter at 4 (suggesting accountability for historic costs).

⁷²⁰ See SIFMA October 2022 Letter at 7.

⁷²¹ See SIFMA June 2022 Letter at 7; SIFMA January 2023 Letter at 6–7; FIA Letter at 4.

⁷²² See SIFMA June 2022 Letter at 7.

 $^{^{723}\,}See$ Citadel July Letter at 31.

⁷²⁴ Id. at 23. See also Citadel August Letter at 6–

Thesys," when the costs were much higher; 725 whether Industry Members would be allocated costs related to litigation between the Operating Committee and the Commission; 726 and whether Industry Members would be allocated costs related to repeated filing of prior funding models.727 The commenter stated that, without knowing the total amount of Historical CAT Costs, or basic information about such costs, the Commission cannot determine whether Historical CAT Costs are reasonable and cannot assess the impact of the proposed allocation on market liquidity, efficiency and competition.⁷²⁸ For example, the commenter stated that the CAT Operating Committee has not assessed "whether trading activity may decline or bid-offer spreads may widen." 729 The commenter stated that the CAT Operating Committee "recklessly argues" that the proposed allocation of Historical CAT Costs is not concerning due to the existence of higher transaction-based fees.⁷³⁰ In addition, the commenter stated that Industry Members have borne nearly all of the total CAT-related costs due to "a near-constant barrage" of changes to technical specifications.⁷³¹ The commenter recommended not allocating any historical costs to Industry Members.732 One commenter stated that Industry Members were not subject to CAT

⁷²⁵ See Citadel July Letter at 23. See also id. at 23, n.100; id. at 8 (stating that "missteps" by the Operating Committee related to the hiring of the initial plan processor and the hiring of FINRA CAT to replace the initial plan processor resulted in "wasted expenditures" of more than \$100 million). See also Citadel August Letter at 7.

⁷²⁶ See Citadel July Letter at 23. See also Citadel August Letter at 7.

 $^{^{727}}$ See Citadel July Letter at 24. See also Citadel August Letter at 7.

⁷²⁸ See Citadel August Letter at 7.

⁷²⁹ *Id*.

⁷³⁰ *Id*.

 $^{^{731}\,}See$ Citadel July Letter at 31. The commenter noted that in 2016, the Commission estimated that broker-dealers would incur 90% of total CAT-related costs, even if not allocated any costs for building and operating the CAT. The commenter stated that updates to these estimates would show that this figure would underestimate their cost burdens. See id.

⁷³² *Id.* at 3, 31, 32.

did not exist during the period prior to its approval." 733

The commenter also stated that the Participants have not analyzed different alternatives to collecting Past CAT Costs and the costs associated with such alternatives or the costs associated with the proposed approach.734 The commenter urged collaboration between the Participants and Industry Members on the allocation of Past CAT Costs.⁷³⁵

With respect to one commenter's criticisms of the calculation and assessment of the Historical CAT Assessment,736 CAT LLC stated that the commenter had a "persistent misunderstanding" of the Historical CAT Assessment, explaining that, contrary to the commenter's assertions in its comment letters, the Historical CAT Assessment would be assessed based on current market activity, not past market activity.737 While the fee rate would be calculated based on Historical CAT Costs, the fee rate would be applied to current market transactions.738 CAT LLC stated that the process of assessing fees for the Historical CAT Assessment would be exactly the same as with CAT Fees related to Prospective CAT Costs, and would be passed through in the same manner if a CEBB or CEBS so chooses.739 CAT LLC also stated that it would provide CAT Executing Brokers with details of their CAT fees to facilitate this process.740

In response, the commenter stated that the CAT LLC Response Letter did not meaningfully address the concerns it raised about "the inability of firms defined as 'executing brokers' to transfer fees to those who may be more appropriate to bear certain historical CAT costs in the first place." 741 CAT LLC reiterated that the Historical CAT Assessment would be assessed in the same manner as CAT Fees for Prospective CAT Costs, and could likewise be passed-through by the CEBB or CEBS,742 and that CAT LLC would provide the relevant data to help CAT

733 See SIFMA June 2022 Letter at 7.

Executing Brokers pass-through the fees.743

In response to a commenter that stated that a small group of brokerdealers would shoulder the Historical CAT Costs and asked whether allocating these costs to a small group of executing brokers based on current market volume is consistent with the Exchange Act,744 CAT LLC stated that "almost 700 of the 1100 Industry Members would have an obligation to contribute to Historical CAT Costs. . . not just a few CAT Executing Brokers" 745 and since "the fees vary in accordance with the market activity of the CAT Executing Brokers, certain CAT Executing Brokers will have large bills for very significant market activity." 746 CAT LLC also reiterated that the Section 11.2(b) of the CAT NMS Plan contemplates that Industry Members would contribute to funding the costs of the CAT and that CAT Executing Brokers may pass on their CAT fees so they would not have any obligation to pay CAT fees.⁷⁴⁷ CAT LLC also clarified that Industry Members would be allocated Historical CAT Costs over a period of time that would be no less than 24 months and no more than five years, not in a single lump sum,⁷⁴⁸ and stated that "it would potentially be appropriate to spread the Historical CAT Costs over a time period of a little less than three years, a time period which is within the two to five vear range for the Historical Recovery Period."749

In response to the commenter that stated that Industry Members are bearing almost all of the CAT-related costs,750 CAT LLC stated that the commenter was conflating the Industry Members' internal costs to comply with CAT reporting requirements with the direct costs of the CAT.751 CAT LLC stated that the Proposed Amendment is intended to address the funding of the direct costs of the CAT and not Participants and Industry Members' compliance costs.752

CAT LLC provided a comparison of Historical CAT Costs to Prospective CAT Costs, demonstrating that the \$233

million 2023 CAT budget is approximately 45% of the \$518 million in Historical CAT Costs (through 2022).⁷⁵³ CAT LLC stated that it expects to propose a fee rate for the Historical CAT Assessment that would be similar to or smaller than other transactionbased fees, and provided examples in which CEBBs and CEBSs would be assessed less than 1/1000 of a penny per executed equivalent share.⁷⁵⁴ CAT LLC noted that broker-dealers are currently charged other transaction-based fees that are higher than the proposed CAT fees.755

In response to commenters that objected to the allocation to Industry Members of Historical CAT Costs related to the initial Plan Processor, 756 CAT LLC stated that the Historical CAT Costs to be allocated to Industry Members would not include two categories of costs related to the initial Plan Processor: \$48,874,937 in CAT costs incurred from November 15, 2017 through November 15, 2018, and \$14,749,362 in costs related to the termination of the initial Plan Processor.757 CAT LLC stated that the Participants would remain responsible for these costs.758

In the Commission's view, the proposed recovery of Past CAT Costs via the Historical CAT Assessment is reasonable, and it is reasonable to require that each CEBB and CEBS pay a Historical CAT Assessment for each transaction in the prior month based on CAT Data.⁷⁵⁹ First, current Industry Members are actively reporting to the CAT 760 and therefore receive the benefits from the CAT. The CAT provides more effective oversight of market activity, which could increase investor confidence, resulting in expanded investment opportunities and increased trading activity. 761 Second, it would be difficult to impose fees on Industry Members for their activity in the past because some Industry Members may no longer be in business and such Industry Members would not have taken into consideration the Historical CAT Assessment when entering into the past transactions.⁷⁶² In this case, the Commission understands,

⁷³⁴ See SIFMA October 2022 Letter at 5.

⁷³⁵ Id. See also SIFMA October 2022 Letter at 2 ("[w]e also reiterate our call for the Participants to work with SIFMA and the industry in a collaborative manner to establish a viable CAT funding model.").

⁷³⁶ See SIFMA May 2023 Letter at 8; SIFMA October 2022 Letter at 4-5; supra notes 708-713 and accompanying text.

⁷³⁷ See CAT LLC May 2023 Response Letter at 9.

⁷³⁸ Id. 739 Id

⁷⁴⁰ Id

⁷⁴¹ See SIFMA June 2023 Letter at 2.

⁷⁴² See CAT LLC July 2023 Response Letter at 16.

 $^{^{744}\,}See$ SIFMA June 2023 Letter at 4. See also Virtu Letter at 4.

⁷⁴⁵ See CAT LLC July 2023 Response Letter at 15.

⁷⁴⁶ *Id*.

⁷⁴⁷ Id.

⁷⁴⁸ Id.

⁷⁴⁹ See CAT LLC July 2023 Response Letter at 17. CAT LLC also provided a comparison of Historical CAT Costs to Prospective CAT Costs, demonstrating that the \$233 million 2023 CAT budget is approximately 45% of the \$518 million in Historical CAT Costs (through 2022). Id.

⁷⁵⁰ See Citadel July Letter at 31.

⁷⁵¹ See CAT LLC July 2023 Response Letter at 16. 752 Id.

⁷⁵³ Id. at 17.

⁷⁵⁴ Id. at 18.

⁷⁵⁵ Id. at 18-19.

⁷⁵⁶ See FIA Letter at 4; Citadel July Letter at 23,

⁷⁵⁷ See CAT LLC July 2023 Response Letter at 19. ⁷⁵⁸ *Id*.

⁷⁵⁹ See proposed Section 11.3(a)(ii)(A) and (iii)(A).

⁷⁶⁰ See Notice, supra note 7, 88 FR at 17113. $^{761}\mathrm{CAT}$ NMS Plan Approval Order, at 81 FR at

^{84993.} ⁷⁶² See Notice, supra note 7, 88 FR at 17113.

from CAT LLC's analysis of Industry Members, that there is "substantial continuity" among the largest Industry Members, going back to 2020,⁷⁶³ and thus it is likely that the Industry Members responsible for substantial transaction activity in 2020 (and perhaps earlier, beyond the scope of CAT LLC's analysis) would also be responsible for substantial transaction activity in 2023, mitigating concerns that current Industry Members would be responsible for CAT fees for the past transaction activity of non-operational Industry Members.

Additionally, requiring CAT Executing Brokers to pay Historical CAT Assessments is appropriate because the Participants have thus far paid all Past CAT Costs and the CAT NMS Plan contemplates that both Industry Members and Participants would fund the Company.⁷⁶⁴ Furthermore, it is reasonable, in the Commission's view, for the Participants to exclude certain costs from the Past CAT Costs to be recovered from Industry Members; for example, such excluded costs would encompass costs incurred when Industry Members as a group were not reporting to the CAT, and costs associated with the conclusion of the relationship with the Initial Plan Processor. 765 CAT LLC also proposes to require the Operating Committee, in determining fees on Participants and Industry Members, to take into account fees, costs and expenses (including legal and consulting fees) reasonably incurred by the Participants on behalf of the Company prior to the Effective Date in connection with the creation and implementation of the CAT.⁷⁶⁶

In the Commission's view, requiring the Operating Committee to take into account fees, costs and expenses (including legal and consulting fees) reasonably incurred by the Participants on behalf of the Company prior to the Effective Date in connection with the creation and implementation of the CAT, when determining fees for Participants and Industry Members will constrain the Operating Committee from assessing fees based on costs and expenses that are not reasonable. Further, the proposed exclusion of the "Excluded Costs" from Past CAT Costs is reasonable in the Commission's view

because it would not require all costs incurred by the Participants to be recovered from Industry Members through the Historical CAT Assessment, specifically excluding those costs related to the delay in the start of reporting to the CAT and costs related to the conclusion of the relationship with the Initial Plan Processor.⁷⁶⁷

Finally, the Proposed Amendment sets forth a process that the Commission believes will offer an appropriate level of transparency into Historical CAT Costs. In response to a commenter that objected to the level of transparency provided about the total amount of Historical CAT Costs, and basic information about such costs, and stated that, as a result, the Commission cannot determine whether Historical CAT Costs are reasonable and cannot assess the impact of the proposed allocation on market liquidity, efficiency and competition,⁷⁶⁸ as discussed in Section III.A.6.e. herein, the Section 19(b) fee filings to be filed with the Commission by the Participants to impose the Historical CAT Assessment on Industry Members must include detailed information on the Historical CAT Costs, including the amount and type of Historical CAT Costs, and will allow the public the ability to comment on the Historical CAT Costs.⁷⁶⁹ In addition to addressing all relevant statutory requirements, including the requirements that the fees are reasonable, equitably allocated, not unfairly discriminatory, and do not unduly burden competition,770 these proposed Section 19(b) fee filings must contain "sufficient detail to demonstrate that such costs are reasonable and appropriate," 771 which would provide the public and the Commission the detail needed to evaluate the Historical CAT Assessments. Once the proposed Section 19(b) fee filings are filed by the Participants, the Commission will review them for consistency with the Exchange Act and the CAT NMS Plan.

In response to the comment that stated that the CAT Operating Committee has not assessed "whether trading activity may decline or bid-offer spreads may widen," 772 and in response to the comment that the CAT Operating Committee "recklessly argues" that the proposed allocation of Historical CAT Costs is not concerning due to the existence of higher

transaction-based fees,773 as stated above, the Proposed Amendment does not approve per se the amount of the Historical CAT Costs; it sets forth the model but leaves the amount and description of the Historical CAT Costs for the Section 19(b) fee filings. The Commission recognizes, however, that the Participants have disclosed the amount of the Historical CAT Costs in the Proposed Amendment.⁷⁷⁴ While such Historical CAT Costs are not being approved by the Commission at this time, the Commission understands that such amounts provide an indication of what might be charged. In this regard, the Commission notes the Participants have included in Exhibit C to the Proposed Amendment a chart setting forth an example Historical CAT Assessment, for illustrative purposes only, that each CAT Executing Broker would pay based on its transactions in Eligible Securities in December 2022 related to CAT costs from prior to 2022. The chart indicated that the Historical Fee Rate for the assumed December 2022 period was \$0.0000417950 per executed equivalent share. The Commission believes that potential Historical CAT Assessments are likely to be significantly lower than fees assessed pursuant to Section 31.775 Accordingly, the Commission believes that any potential impact on trading activity or bid-ask spreads would likely be limited.

b. Historical Recovery Period

The "Historical Recovery Period" would be used to calculate the Historical Fee Rate for a Historical CAT Assessment.⁷⁷⁶ Proposed Section 11.3(b)(i)(D) of the CAT NMS Plan provides the Operating Committee with the discretion to reasonably establish the length of the Historical Recovery Period as long as no such period is less than 24 months and more than five years. CAT LLC analyzed potential recovery periods and determined that the Historical Fee Rate calculated using

⁷⁶³ *Id.* at 17113, n.116 (stating that there has been substantial continuity in the largest Industry Members over time and providing statistics about the continuity).

⁷⁶⁴ See, e.g., CAT NMS Plan, supra note 2, at Section 11.1(b), Section 11.1(c), Section 11.2(b), Section 11.3.

 $^{^{765}\,}See$ Notice, supra note 7, 88 FR at 17111.

⁷⁶⁶ See proposed Section 11.1(c) (emphasis added).

 $^{^{767}\,}See$ Notice, supra note 7, 88 FR at 17111.

⁷⁶⁸ See Citadel August Letter at 7.

⁷⁶⁹ See proposed Section 11.3(b)(iii)(B)(II). ⁷⁷⁰ 15 U.S.C. 78f(b)(4), 15 U.S.C. 78o–3(b)(5); 15 U.S.C. 78f(b)(5), 15 U.S.C. 78o–3(b)(6); 15 U.S.C. 78f(b)(8), 15 U.S.C. 78o–3(b)(9).

⁷⁷¹ See proposed Section 11.3(b)(iii)(B)(II).

⁷⁷² See Citadel August Letter at 7.

⁷⁷³ Id.

⁷⁷⁴ See Notice, supra note 7, 88 FR at 17110–11 (providing Historical CAT Costs prior to 2022). CAT LLC also provided updated Historical CAT Costs through 2022. See CAT LLC July 2023 Response Letter at 17

⁷⁷⁵ See infra notes 1099–1102 and accompanying text (stating that a comparison to recent Section 31 fees of \$0.0009 per share to \$0.0004 per share indicates that the anticipated Historical Fee Rate and Fee Rate, assuming the Fee Rate is of a similar magnitude as the Historical Fee Rate, are expected to be relatively small). See also infra note 1102 (discussing another example Historical Fee Rate that was provided in the CAT LLC July 2023 Response Letter at 18–19 that was close to the Historical Fee Rate in Exhibit C of the Proposed Amendment).

⁷⁷⁶ See proposed Section 11.3(b)(i)(D)(I).

the proposed Historical Recovery Period of two to five years would be reasonable for Industry Members even if they had to pay both the ongoing CAT Fee and the Historical Fee Assessment simultaneously.777 Additionally, in determining the range for the Historical Recovery Period, CAT LLC "sought to weigh the need for a reasonable Historical Fee Rate that spreads the Historical CAT Costs over an appropriate amount of time and the need to repay the loan notes to the Participants in a timely fashion." 778 In the Commission's view, it is reasonable for the Operating Committee to establish the length of the Historical Recovery Period to be no less than 24 months and no more than five years. According to the Participants, "[t]he length of the Historical Recovery Period used in calculating each Historical Fee Rate will be reasonably established by the Operating Committee based on the amount of the Historical CAT Costs to be recovered by the Historical CAT Assessment." 779 The Operating Committee is authorized by the CAT NMS Plan to establish the funding of CAT LLC, including the fees to be paid by Participants and Industry Members. 780 Because the Historical Recovery Period is used in the calculation of Historical CAT Assessments to recover costs incurred to fund the CAT, the Commission views it as appropriate for the Operating Committee to determine a reasonable length of time for the Historical Recovery Period since the Operating Committee has authority over CAT funding pursuant to the Plan.

c. Historical Fee Rate

The Historical Fee Rate would be used to calculate Historical CAT Assessments. The Operating Committee will calculate the Historical Fee Rate for each Historical CAT Assessment by dividing the Historical CAT Costs for each Historical CAT Assessment by the reasonably projected total executed equivalent share volume of all transactions in Eligible Securities for the Historical Recovery Period.⁷⁸¹

Additionally, proposed Section 11.3(b)(i)(A) states that once the Operating Committee has approved a Historical Fee Rate, the Participants will be required to file with the Commission, pursuant to Section 19(b) of the Exchange Act,⁷⁸² the Historical CAT Assessment to be charged to Industry Members using the Historical Fee Rate.⁷⁸³ Industry Members would be required to pay such Historical CAT Assessment using such Historical Fee Rate once such Historical CAT Assessment is in effect in accordance with Section 19(b) of the Exchange Act.⁷⁸⁴

Proposed Section 11.3(b)(i)(E) of the CAT NMS Plan provides that "[t]he Operating Committee shall reasonably determine the projected total executed equivalent share volume of all transactions in Eligible Securities for each Historical Recovery Period based on the executed equivalent share volume of all transactions in Eligible Securities for the prior twelve months." 785 CAT LLC would allow the Operating Committee to base its projected total executed equivalent share volume on the prior twelve months, but to use its discretion to analyze the likely volume for the upcoming year. 786 Participants would be required to describe the calculation of the projection in their fee filings submitted to the Commission, pursuant to Section 19(b) of the Exchange Act, to implement the Historical CAT Assessments on Industry Members.⁷⁸⁷

The calculation of the Historical Fee Rate by dividing Historical CAT Costs by the projected total executed equivalent share volume of all transactions in Eligible Securities for the Historical Recovery Period ⁷⁸⁸ is reasonable. First, it is appropriate for the Historical Fee Rate to be based on Historical CAT Costs. The Proposed Amendment defines Historical CAT Costs as Past CAT Costs minus the Past CAT Costs reasonably excluded from Historical CAT Costs by the Operating Committee 789 (e.g., the Excluded Costs).⁷⁹⁰ It is appropriate to use the Historical CAT Costs related to a

calculate CAT Fees related to Prospective CAT Costs.

Historical CAT Assessment to calculate the Historical Fee Rate used to calculate the Historical CAT Assessment because the Participants are seeking to recover the Historical CAT Costs through the Historical CAT Assessment.⁷⁹¹ The use of Historical CAT Costs is appropriate to determine the Historical Fee Rate because it ties the Historical Fee Rate to the costs that the CAT has incurred and will be apportioned among the CAT Executing Brokers for recovery. Second, it is appropriate to use the projected total executed equivalent share volume of all transactions in Eligible Securities for the Historical Recovery Period to calculate the Historical Fee Rate because this would provide the likely volume for the Historical Recovery Period to be used as the denominator, similar to the manner in which the Fee Rate for Prospective CAT Fees would be calculated. This proposed projection of total executed equivalent share volume based on the prior twelve months is appropriate because it balances the use of data that is sufficiently long to avoid short term fluctuations while providing data close in time to the calculation of the Fee Rate or Historical Fee Rate. 792 Additionally, it is appropriate for CAT LLC to permit the Operating Committee to use its discretion to analyze the likely volume for the upcoming year.⁷⁹³ This would allow the Operating Committee to use its judgment when estimating projected total executed equivalent share volume if the volume over the prior twelve months was unusual or otherwise unfit to serve as the basis of a future volume estimate. Furthermore, since the Participants would be required to describe the calculation of the projected total executed equivalent share volume in the fee filings submitted to the Commission, pursuant to Section 19(b) of the Exchange Act, to implement the Historical CAT Assessments on Industry Members, the public will have an opportunity to review the projection and provide comment.794

d. Length of Time Historical CAT Assessment Would Be in Effect

Proposed Section 11.3(b)(i)(D)(II) of the CAT NMS Plan would describe the length of time that a Historical CAT Assessment would be in effect. This period of time may be longer or shorter than the Historical Recovery Period used to calculate the Historical Fee Rate for a Historical CAT Assessment. Each Historical CAT Assessment calculated

⁷⁷⁷ See Notice, supra note 7, 88 FR at 17096–97. CAT LLC acknowledged that the Historical CAT Assessment would need to be calculated using upto-date Historical CAT Costs and executed equivalent share volume. *Id.* at 17097.

⁷⁷⁸ *Id.* at 17096.

⁷⁷⁹ *Id.* at 17097.

 $^{^{780}}$ See CAT NMS Plan, supra note 2, at Section 11.1(b).

⁷⁸¹ See proposed Section 11.3(b)(i)(A). Proposed Section 11.3(b)(i)(B) provides that the executed equivalent shares used to calculate the Historical CAT Assessment would be counted in the same manner as executed equivalent shares used to

^{782 15} U.S.C. 78s(b).

⁷⁸³ See proposed Section 11.3(b)(i)(A).

⁷⁸⁴ *Id.*; see also 15 U.S.C. 78s(b); see infra Section III.A.6.e. (Historical CAT Assessment—Fee Filings under Section 19(b) of the Exchange Act for Industry Member CAT Fees) for a discussion of Section 19(b) filing requirements.

⁷⁸⁵ Proposed Section 11.3(b)(i)(E).

⁷⁸⁶ See Notice, supra note 7, 88 FR at 17097.

⁷⁸⁷ See proposed Section 11.3(b)(iii)(B)(II).

⁷⁸⁸ See proposed Section 11.3(b)(i)(A).

⁷⁸⁹ See proposed Section 11.3(b)(i)(C).

⁷⁹⁰ See Notice, supra note 7, 88 FR at 17111.

⁷⁹¹ See proposed Section 11.3(b)(i)(C).

⁷⁹² See Notice, supra note 7, 88 FR at 17116-17.

⁷⁹³ Id. at 17097.

⁷⁹⁴ See proposed Section 11.3(b)(iii)(B)(II).

using the Historical Fee Rate would remain in effect until all Historical CAT Costs for that Historical CAT Assessment are collected.⁷⁹⁵ CAT LLC stated that "[a]ny Historical CAT Assessment would remain in effect until the relevant Historical CAT Costs are collected, whether that time is shorter or longer than the Historical Recovery Period used in calculating the Historical Fee Rate." 796 The length of time that the Historical CAT Assessment would be in effect would depend "on the amount of the Historical CAT Assessments collected based on the actual volume during the time that the Historical CAT Assessment is in effect." 797

In the Commission's view, it is reasonable for Industry Members to be charged a Historical CAT Assessment until all Historical CAT Costs for the Historical CAT Assessment are collected. The Commission understands that the amount of Historical CAT Costs collected will vary depending on how the actual volume compares to the estimated volume. To the extent the actual volume exceeds the estimated volume, a Historical CAT Assessment would be collected faster and thus would be in effect for a shorter period. Similarly, to the extent the actual volume is less than the estimated volume, the Historical CAT Assessment would be collected slower and thus would be in effect for a longer period.

e. Fee Filings Under Section 19(b) of the Exchange Act for Industry Member CAT Fees

Once the Operating Committee has approved a Historical Fee Rate, the Participants shall be required to file with the Commission, pursuant to Section 19(b) of the Exchange Act,798 such Historical CAT Assessment to be charged Industry Members calculated using such Historical Fee Rate. 799 CAT LLC proposes to provide additional details regarding the fee filings to be filed by the Participants regarding each Historical CAT Assessment pursuant to Section 19(b) of the Exchange Act in proposed Section 11.3(b)(iii)(B) of the CAT NMS Plan. Specifically, this provision would describe that fee filings would be required for each Historical CAT Assessment, the content of such fee filings, and the effect of the Financial Accountability Milestones described in Section 11.6 of the CAT NMS Plan on the fee filings.800

Proposed Section 11.3(b)(iii)(B)(I) of the CAT NMS Plan would state that "Participants will be required to file with the SEC pursuant to Section 19(b) of the Exchange Act a filing for each Historical CAT Assessment." 801 CAT LLC proposes to provide additional detail about the information that Participants would be required to include in the filings for the Historical CAT Assessments in proposed Section 11.3(b)(iii)(B)(II). The proposed paragraph sets forth the information about the Historical CAT Assessments that should be included in the fee filings required to be made by the Participants pursuant to Section 19(b) of the Exchange Act. 802 Specifically, such filings would be required to include: (A) the Historical Fee Rate; (B) a brief description of the amount and type of Historical CAT Costs, including (1) the technology line items of cloud hosting services, operating fees, CAIS operating fees, change request fees and capitalized developed technology costs, (2) legal, (3) consulting, (4) insurance, (5) professional and administration, and (6) public relations costs; (C) the Historical Recovery Period and the reasons for its length; and (D) the projected total executed equivalent share volume of all transactions in Eligible Securities for the Historical Recovery Period, and a description of the calculation of the projection.803

In addition, CAT LLC proposes to clarify that the Historical CAT Costs described in the fee filings must provide sufficient detail to demonstrate that such costs are reasonable and appropriate. Therefore, CAT LLC proposes to add the following sentence to proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan: "The information provided in this Section would be provided with sufficient detail to demonstrate that the Historical CAT Costs are reasonable and appropriate." 805

Proposed Section 11.3(b)(iii)(B)(III) provides that the Participants will not make CAT fee filings pursuant to Section 19(b) of the Exchange Act 806 regarding a Historical CAT Assessment until any applicable Financial Accountability Milestone has been satisfied. This provision is appropriate as it takes into account existing requirements set forth in Section 11.6 of the CAT NMS Plan that prevent the Participants from recovering fees related

to any given Financial Accountability Milestone until that Financial Accountability Milestone has been achieved.⁸⁰⁷

The Commission emphasizes that the fee filings filed with the Commission, pursuant to Section 19(b) of the Exchange Act,808 to implement each Historical CAT Assessment on Industry Members will need to provide sufficient information to enable the Commission to make a determination on whether and when the Participants have satisfied each of the Financial Accountability Milestones—questions that the Commission is not deciding herein. This Order only approves the establishment of the framework by which the Participants will propose Historical CAT Assessments to be charged to Industry Members.809

In the Commission's view, the proposed requirement for the Participants to file fee filings with the Commission, pursuant to Section 19(b) of the Exchange Act,810 to implement each Historical Fee Assessment on Industry Members is appropriate. The detail provided in the fee filings for the Historical CAT Assessment would provide transparency into the Past CAT Costs as it would describe the amount and type of Historical CAT Costs and allow the public the ability to comment on the Historical CAT Costs.811 The fee filings must contain sufficient detail to demonstrate that the fees are consistent with the Exchange Act, including that such costs are reasonable and

⁷⁹⁵ See proposed Section 11.3(b)(i)(D)(II).

⁷⁹⁶ Notice, *supra* note 7, 88 FR at 17097.

⁷⁹⁷ Id.

⁷⁹⁸ 15 U.S.C. 78s(b).

 $^{^{799}}$ See proposed Section 11.3(b)(i)(A).

⁸⁰⁰ See proposed Section 11.3(b)(iii)(B)(I), (II),

 $^{^{801}\}operatorname{Proposed}$ Section 11.3(b)(iii)(B)(II).

^{802 15} U.S.C. 78s(b).

⁸⁰³ See proposed Section 11.3(b)(iii)(B)(II).

⁸⁰⁴ *Id*.

⁸⁰⁵ Id.

^{806 15} U.S.C. 78s(b).

 $^{^{807}}$ See, e.g., Section 11.6(a)(iv) ("The Participants will only be permitted to collect Post-Amendment Industry Member Fees for Period 1, Period 2, Period 3, or Period 4 at the end of each respective Period."). Section 11.6 of the CAT NMS Plan is designed to reduce the amount of fees, costs, and expenses that the Participants may recover from Industry Members if the Participants miss the target deadlines established by that Section. To the extent that the Participants miss a target deadline established by Section 11.6, the Participants would be responsible for paying a larger amount of CATrelated fees, costs, and expenses on their own. The Commission expects that the portion of these fees, costs, and expenses that is attributable to for-profit national securities exchanges would likely be paid out of their existing profits, whereas the portion of these fees, costs, and expenses that is attributable to non-profit national securities associations like FINRA would likely be paid out of past revenue or new and/or existing fees. The Commission would evaluate any such new or existing fees in accordance with Section 6(b)(4) and Section 15A(b)(5) of the Exchange Act. 15 U.S.C. 78f(b)(4); 15 U.S.C. 780-3(b)(5).

⁸⁰⁸ 15 U.S.C. 78s(b).

⁸⁰⁹ The Commission does not believe it could determine whether the Historical CAT Costs associated with a Financial Accountability Milestone are "reasonable or appropriate" under Section 11.3(b)(iii)(B)(II) without such information.

^{810 15} U.S.C. 78s(b).

⁸¹¹ See proposed Section 11.3(b)(iii)(B)(II).

appropriate,⁸¹² and provide the public with the detail needed to evaluate the Historical CAT Assessments for comment.

The Proposed Amendment offers an appropriate level of transparency into the Past CAT Costs used for the Historical CAT Assessment so that the industry and the public will be able to understand and assess the Past CAT Costs and the Historical Fee Rate. The Proposed Amendment requires the Section 19(b) fee filings to be submitted to the Commission by the Participants to establish the Historical CAT Assessments for Industry Members to contain the following information: "(A) the Historical Fee Rate; (B) a brief description of the amount and type of Historical CAT Costs, including (1) the technology line items of cloud hosting services, operating fees, CAIS operating fees, change request fees and capitalized developed technology costs, (2) legal, (3) consulting, (4) insurance, (5) professional and administration, and (6) public relations costs; (C) the Historical Recovery Period and the reasons for its length; and (D) the projected total executed equivalent share volume of all transactions in Eligible Securities for the Historical Recovery Period, and a description of the calculation of the projection." 813 CAT LLC explained that this information "would provide Industry Members and other interested parties with a clear understanding of the calculation of each Historical CAT Assessment and its relationship to Historical CAT Costs." 814 In the Commission's view, the detail provided in the fee filings for the Historical CAT Assessment would provide transparency into the Past CAT Costs as the filings would describe the amount and type of Historical CAT Costs and allow the public the ability to comment on the Historical CAT Costs.815 Additionally, pursuant to the Proposed Amendment being approved, the fee filings will also need to contain "sufficient detail to demonstrate that such costs are reasonable and appropriate," 816 which would provide the public and the Commission the detail needed to evaluate the Historical CAT Assessments for consistency with the Exchange Act and the CAT NMS Plan.

f. Past CAT Costs and Participants

Proposed Section 11.3(b)(ii) of the CAT NMS Plan would clarify that the Participants would not be required to

pay the Historical CAT Assessment as the Participants previously have paid all Past CAT Costs. It would state that, "[b]ecause Participants previously have paid Past CAT Costs via loans to the Company, Participants would not be required to pay any Historical CAT Assessment." 817 In addition, proposed Section 11.3(b)(ii) of the CAT NMS Plan would state that the Historical CAT fees collected from Industry Members would be allocated to Participants for repayment of the outstanding loan notes of the Participants to the Company on a pro rata basis; such fees would not be allocated to Participants based on the executed equivalent share volume of transactions in Eligible Securities.818 Specifically, proposed Section 11.3(b)(ii) of the CAT NMS Plan would state that "[i]n lieu of a Historical CAT Assessment, the Participants' one-third share of Historical CAT Costs and such other additional Past CAT Costs as reasonably determined by the Operating Committee will be paid by the cancellation of loans made to the Company on a pro rata basis based on the outstanding loan amounts due under the loans." 819 Furthermore, proposed Section 11.3(b)(ii) of the CAT NMS Plan would emphasize that "[t]he Historical CAT Assessment is designed to recover two-thirds of the Historical CAT Costs." 820

The proposed allocation of the Historical CAT Assessment solely to CEBSs and CEBBs, and ultimately Industry Members, is reasonable. The Historical CAT Assessment will still be divided into thirds.821 CAT LLC stated that the Participants' one-third share of Historical CAT Costs and such other additional Past CAT Costs as reasonably determined by the Operating Committee "will be paid by the cancellation of loans made to the Company on a pro rata basis based on the outstanding loan amounts due under the loans" and that the Participants will also be 100% responsible for the Excluded Costs.822 CAT LLC explained that the terms of the loan agreements between CAT LLC and the Participants dictate that repayment of the notes will be on a pro rata basis.823 The pro rata basis for cancelling the loans is appropriate because repayment of the loans made by the Participants is required pro rata per the loan agreements between the

Participants and CAT LLC. 824 The CAT NMS Plan permits the Participants to seek recovery of CAT costs from Industry Members, which includes Past CAT Costs. 825 However, similar to cancelling the loans, the Executed Share Model would require the Participants to pay CAT fees related to Prospective CAT Costs. 826

7. Calculation Information; Billing and Collection of CAT Fees

CAT LLC proposed to provide Participants and CAT Executing Brokers with details regarding the calculation of their CAT Fees upon request.827 Specifically, CAT LLC proposed to add Section 11.3(a)(iv)(A) to the CAT NMS Plan to provide that "[d]etails regarding the calculation of a Participant or CAT Executing Brokers' CAT Fees will be provided upon request to such Participant or CAT Executing Broker." 828 Similarly, for the Historical CAT Assessment, under proposed Section 11.3(b)(iv)(A), "at minimum, such details would include each CAT Executing Broker's executed equivalent share volume and corresponding fee.'' 829 In both cases, the new sections require that these details be separated by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buyside transactions and sell-side transactions.830 Additionally, for each CAT Fee and Historical CAT Assessment, at a minimum, CAT LLC will make publicly available the aggregate executed equivalent share volume and corresponding aggregate fee also by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buyside transactions and sell-side transactions.831 The Commission understands that the publicly available aggregate statistics will be made available by CAT LLC on a monthly basis with each invoice.

CAT LLC stated that consistent with Section 11.1(d) of the CAT NMS Plan, it will adopt policies, procedures and practices regarding the billing and

⁸¹² Id.

⁸¹³ Proposed Section 11.3(b)(iii)(B)(II).

⁸¹⁴ Notice, *supra* note 7, 88 FR at 17098.

⁸¹⁵ See proposed Section 11.3(b)(iii)(B)(II).

⁸¹⁶ *Id*.

⁸¹⁷ Proposed Section 11.3(b)(ii).

⁸¹⁸ See Notice, supra note 7, 88 FR at 17112.

⁸¹⁹ Proposed Section 11.3(b)(ii).

⁸²⁰ Id.

⁸²¹ *Id*.

 $^{^{822}}$ Notice, supra note 7, 88 FR at 17097, n.48. 823 Id. at 17112.

⁸²⁴ Id

⁸²⁵ See CAT NMS Plan, supra note 2, at Section 11.1(b), Section 11.3(b).

⁸²⁶ See proposed Section 11.3(a)(ii).

⁸²⁷ See Notice, supra note 7, 88 FR at 17086.

⁸²⁸ Proposed Section 11.3(a)(iv)(A).

⁸²⁹ Proposed Section 11.3(b)(iv)(A).

⁸³⁰ See proposed Section 11.3(a)(iv)(A); proposed Section 11.3(b)(iv)(A)

⁸³¹ See proposed Section 11.3(a)(iv)(B); proposed Section 11.3(b)(iv)(B).

collection of fees Section 11.4 of the CAT NMS Plan.832 In addition, pursuant to Section 11.4 of the CAT NMS Plan, CAT LLC will establish a system for the collection of CAT fees from Participants and Industry Members.833 Under Section 11.4 of the CAT NMS Plan, the Participants must require each Industry Member to pay all applicable fees authorized under this Article XI within thirty (30) days after receipt of an invoice or other notice indicating payment is due (unless a longer payment period is otherwise indicated). If an Industry Member fails to pay any such fee when due, such Industry Member shall pay interest on the outstanding balance from such due date until such fee is paid at a per annum rate equal to the lesser of: (a) the Prime Rate plus 300 basis points; or (b) the maximum rate permitted by applicable law.834

Similarly, as set forth in Section 3.7(b) of the CAT NMS Plan, each Participant must pay all fees or other amounts required to be paid under the Plan within thirty (30) days after receipt of an invoice or other notice indicating payment is due (unless a longer payment period is otherwise indicated) ("'Payment Date''). The Participant shall pay interest on the outstanding balance from the Payment Date until such fee or amount is paid at a per annum rate equal to the lesser of: (i) the Prime Rate plus 300 basis points; or (ii) the maximum rate permitted by applicable law.835 The Commission did not receive any objections to nor any comments regarding the calculation of this interest rate.

The proposed provision to Participants and CAT Executing Brokers with details regarding the calculation of their CAT Fees upon request is reasonable. In the Commission's view, providing CAT Execution Brokers information regarding the calculation of their CAT Fees will aid in transparency and permit CAT Execution Brokers to confirm the accuracy of their invoices for CAT Fees. The publication of the aggregate executed equivalent share volume and aggregate fee is appropriate because it would allow Participants and CAT Executing Brokers a high-level validation of executed volume and fees.

8. Additional Changes From Original Funding Model

CAT LLC proposed to delete the term "Execution Venue" and its definition from Section 1.1 of the CAT NMS Plan, explaining that this term is not relevant in the Executed Share Model.836 Section 1.1 of the existing CAT NMS Plan defined "Execution Venue" to mean "a Participant or an alternative trading system ('ATS') (as defined in Rule 300 of Regulation ATS) that operates pursuant to Rule 301 of Regulation ATS (excluding any such ATS that does not execute orders)." The Original Funding Model would have imposed fees based on market share to CAT Reporters that are Execution Venues, including ATSs, and fees based on message traffic for Industry Members' non-ATS activities.837 In contrast, the Executed Share Model does not use the term "Execution Venue," as the Executed Share Model imposes fees based on the executed equivalent shares of transactions in Eligible Securities for three categories of CAT Reporters: Participants, CEBBs and CEBSs.838

CAT LLC also proposed to amend Section 11.2(c) and Section 11.3(a) and (b) of the CAT NMS Plan to require Participants and CAT Executing Brokers to pay CAT fees based on the number of executed equivalent shares in a transaction in Eligible Securities instead of based on market share and message traffic.⁸³⁹

First, CAT LLC proposed to delete subparagraphs (i) and (ii) of Section 11.2(c) and replace these subparagraphs with the requirement that the fee structure in which the fees charged to "Participants and Industry Members are based upon the executed equivalent share volume of transactions in Eligible Securities." 840 The deleted provisions would have required the Operating Committee, in establishing the funding of the Company, to seek to establish a tiered fee structure in which the fees charged to: (i) CAT Reporters that are Execution Venues, including ATSs, are based upon the level of market share and (ii) Industry Members' non-ATS activities are based upon message

Second, CAT LLC proposed to amend Sections 11.3(a) and 11.3(b) of the CAT NMS Plan to remove detail regarding fixed fees and fee tiers for market share and message traffic by Participants and Execution Venue ATSs under the Original Funding Model.841 Section 11.3(a) currently describes the fixed CAT fees to be paid by Participants and Execution Venue ATSs based on market share and Section 11.3(b) currently describes the fixed CAT fees to be paid by Industry Members (other than Execution Venue ATSs) based on message traffic.842 The text in these sections would be replaced with proposed Sections 11.3(a) and (b), which, as discussed above, would describe the calculation and application of the CAT Fees related to Prospective CAT Costs and the Historical CAT Assessments. These proposed changes to Sections 11.3(a) and (b) would also replace references to "fixed fees" with "fees" instead. CAT LLC explained that the concept of fixed fees is not relevant in the Executed Share Model.843

CAT LLC also proposed to amend Sections 11.1(d), 11.2(c), 11.3(a) and 11.3(b) of the CAT NMS Plan to eliminate tiered fees and related concepts because the Executed Share Model does not utilize tiering.844 First, CAT LLC proposed to remove a reference to the "assignment of tiers" from Section 11.1(d). CAT LLC also proposed to remove two sentences from Section 11.1(d) permitting the Operating Committee to change the tier assigned to any Person. Second, CAT LLC proposed to amend Section 11.2(c) to delete a reference to a tiered fee structure (specifically, deleting the word "tiered") so that CAT fees would not be tiered under the Executed Share Model. Third, CAT LLC proposed to delete subparagraph (iii) of Section 11.2(c), which required the Operating Committee, in establishing the funding of the Company, to seek to establish a fee structure in which the fees charged to CAT Reporters with the most CATrelated activity (measured by market share and/or message traffic, as applicable) are generally comparable (where, for these comparability purposes, the tiered fee structure takes into consideration affiliates between or among CAT Reporters, whether Execution Venues and/or Industry Members).845 CAT LLC explained that this comparability provision was a factor used to determine the tiers for Industry Members and Execution Venues under the Original Funding Model, but that it is no longer necessary since the proposed Executed Share

⁸³² See Notice, supra note 6, 88 FR at 17089. ⁸³³ Id. at 17101.

 $^{^{834}}$ See CAT NMS Plan, supra note 2, at Section 11.4.

⁸³⁵ *Id.* at Section 3.7(b). If any such remaining outstanding balance is not paid within thirty (30) days after the Payment Date, the Participants shall file an amendment to this Agreement requesting the termination of the participation in the Company of such Participant, and its right to any Company Interest, with the Commission.

⁸³⁶ See Notice, supra note 7, 88 FR at 17099.

⁸³⁷ See CAT NMS Plan, supra note 2, at Section 11.3(a)(i) and (ii); Section 11.3(b).

⁸³⁸ See proposed Section 11.3(a)(ii) and (iii); proposed Section 11.3(b)(iii).

⁸³⁹ See Notice, supra note 7, 88 FR at 17099. ⁸⁴⁰ Proposed Section 11.2(c).

⁸⁴¹ See Notice, supra note 7, 88 FR at 17100–01. ⁸⁴² See CAT NMS Plan, supra note 2, at Section 11.3(a) and (b).

⁸⁴³ See Notice, supra note 7, 88 FR at 17101.

⁸⁴⁴ Id. at 17100-01.

⁸⁴⁵ *Id.* at 17100.

Model would not use a tiered fee structure. 846 Finally, as discussed above, CAT LLC proposed to amend Sections 11.3(a) and (b) to replace the language with proposed Sections 11.3(a) and (b), which would describe the calculation and application of the CAT Fees related to Prospective CAT Costs and the Historical CAT Assessments. CAT LLC states that such proposed changes would remove the references to tiers in Sections 11.3(a)(i) and (ii) and 11.3(b).847

In addition, CAT LLC proposed to amend the CAT funding principles to clarify that CAT Fees and the Historical CAT Assessments are intended to be cost-based fees.848 Specifically, CAT LLC proposed to amend the funding principle set forth in Section 11.2(c) by making a specific reference to "the costs of the CAT." Proposed Section 11.2(c) would state, "[i]n establishing the funding of the Company, the Operating Committee shall seek . . . to establish a fee structure in which the fees charged to Participants and Industry Members are based upon the executed equivalent share volume of transactions in Eligible Securities, and the costs of the CAT (emphasis added)." 849

In the Commission's view, the proposed deletion of the term
"Execution Venue" from the CAT NMS
Plan is reasonable because the term is no longer relevant to the CAT NMS
Plan. The proposed Executed Share
Model does not impose fees on
Execution Venues and would instead impose fees on Participants and CAT
Executing Brokers (and, ultimately, Industry Members) and therefore it is appropriate to delete the term.

Additionally, it is reasonable to amend Section 11.2(c) and Section 11.3(a) and (b) of the CAT NMS Plan to reflect the proposed use of the number of executed equivalent shares in transactions in Eligible Securities in calculating CAT fees. These changes are appropriate because, unlike the Original Funding Model, the proposed Executed Share Model would not use message traffic, or a tiered fee structure.

Further, the proposed elimination of tiered fees and related concepts from the CAT NMS Plan and the proposed replacement of "fixed fees" with references to "fees" in the CAT NMS Plan are reasonable. The Original Funding Model would use a tiered fee structure of fixed fees; however, the proposed Executed Share Model would require each Participant and CAT

Executing Broker to pay a CAT fee based on its transactions in Eligible Securities.850 CAT LLC explained that "[t]he proposed non-tiering approach is simpler and more objective to administer than the tiering approach" 851 and that removing tiers "eliminates a variety of subjective analyses and judgments from the model and simplifies the determination of CAT fees." 852 Additionally, the Proposed Amendment would replace the concept of "fixed fees" with "fees" because CAT fees will vary in accordance with the number of executed equivalent shares in a transaction. 853 The proposed elimination of tiered fees and related concepts from the CAT NMS Plan and the proposed replacement of "fixed fees" with references to "fees" in the CAT NMS Plan are reasonable because these changes conform the CAT NMS Plan funding model to the proposed Executed Share Model.

Additionally, the Proposed Amendment would amend Section 11.2(c) to make clear that the fee structure established by the Operating Committee to charge fees to Participants and Industry Members would also be based on the costs of the CAT.854 CAT LLC explained that the change clarifies that the CAT fees are cost-based fees designed to recover the cost of the creation, implementation and operation of the CAT.855 These proposed changes are appropriate because they would update language in the Original Funding Model to reflect the operation of the proposed Executed Share Model.

9. Other Comments

a. Lack of Industry Input

A number of commenters stated that the Proposed Amendment lacks input from the industry.⁸⁵⁶ One commenter stated that the Participants did not meaningfully solicit input from the industry when developing the Executed Share Model.⁸⁵⁷ Another commenter stated that the Proposed Amendment reflects a lack of representation by executing brokers and offered its participation in future discussions and advisory committees on the topic of CAT funding.⁸⁵⁸ One commenter stated that "[t]he impact of CAT on the brokerage community must be taken seriously by the SRO committee, and brokers need their voice heard on the committee's recommendations. To date. we have seen little evidence of either." 859 This commenter also suggested the allocation of human resources to hire industry experts in industry workflows and public-private engagement to assist with building the CAT.860

In response, CAT LLC stated that it has engaged with the industry on the funding model over the past seven years, explaining that it has discussed funding model issues with the CAT Advisory Committee, which includes representation from the industry, as well as with industry associations such as SIFMA and the Financial Information Forum, and with individual Industry Members; analyzed and responded to comment letters on the prior proposals; and hosted webinars for the industry on funding issues.861 CAT LLC stated that it welcomes industry input on the funding model but believes a decision on the model is overdue.862

In response, one commenter stated that Industry Members are willing to work with the Commission and the Participants to develop a CAT funding model. ⁸⁶³ The commenter urged collaboration and dialogue between the Participants and the Industry Members before the filing of a formal proposal with the Commission. ⁸⁶⁴ The commenter also stated that limiting industry input to the notice and comment process for NMS plan amendments is an inefficient process

⁸⁴⁶ Id.

⁸⁴⁷ Id. at 17100-01.

⁸⁴⁸ Id. at 17099.

⁸⁴⁹ Proposed Section 11.2(c).

 $^{^{850}\,}See$ proposed Section 11.3(a)(ii)(A), (a)(iii)(A), (b)(iii)(A).

 $^{^{851}\,\}mathrm{Notice},\,supra$ note 7, 88 FR at 17100.

⁸⁵² *Id*.

 $^{^{853}}$ *Id.* at 17101.

⁸⁵⁴ See proposed Section 11.2(c) (". . . fees charged to Participants and Industry Members are based upon the executed equivalent share volume of transactions in Eligible Securities, and the costs of the CAT." (emphasis added)).

⁸⁵⁵ See Notice, supra note 7, 88 FR at 17099.

asse DASH April 2023 Letter at 2; DASH January 2023 Letter at 3; SIFMA June 2023 Letter at 4; SIFMA May 2023 Letter at 2; SIFMA June 2022 Letter at 2; SIFMA January 2023 Letter at 2; Citadel July Letter at 9–10. See also FINRA June 2022 Letter at 8, 9 (advocating for a more inclusive development process that would include input from the industry); MMI July Letter at 2, 4; Virtu Letter at 6 (stating that they would like to have a meaningful dialogue with the Participants and that the best way forward is for the interested parties to meet and devise an equitable solution); FIA Letter at 4 (stating that they have "raised concerns over the lack of industry participation in the development, operation and cost allocation

processes of the CAT" and they "believe that at a minimum, the CAT Operating Committee should be reconfigured, with Industry Members comprising the percentage of the Committee equivalent to whatever cost allocation percentage is eventually allocated to them.").

⁸⁵⁷ See SIFMA May 2023 Letter at 2. See also SIFMA June 2023 Letter at 4, 5; SIFMA June 2022 Letter at 2; SIFMA January 2023 Letter at 2.

⁸⁵⁸ See DASH April 2023 Letter at 2; DASH January 2023 Letter at 3.

⁸⁵⁹ MMI July Letter at 4.

⁸⁶⁰ Id.

 $^{^{861}\,}See$ CAT LLC May 2023 Response Letter at 12. $^{862}\,Id$

 $^{^{863}}$ See SIFMA June 2023 Letter at 4.

⁸⁶⁴ Id.

resulting in significant delays.865 Another commenter stated that the Operating Committee refuses to engage the industry in constructive dialogue, instead choosing to file funding proposals that are inconsistent with the Exchange Act. 866 The commenter also stated that the CAT Advisory Committee has been completely ignored by the Operating Committee and that its recommendations are non-binding.867

CAT LLC further responded to two commenters that stated that CAT LLC refused to collaborate with the industry in the development of the Proposed Amendment. 868 CAT LLC stated that it has engaged with the industry over the last seven years, discussing funding model issues with the CAT Advisory Committee, holding industry-wide webinars on funding issues, and meeting with industry associations and individual Industry Members to discuss funding model issues.869 CAT LLC stated that it has "repeatedly sought the views of SIFMA and other industry participants on specific aspects of the model." ⁸⁷⁰ CAT LLC listed ideas suggested by the industry that it adopted in revised versions of the funding model 871 and stated "the current model results from years of modifications that have been made in significant part in response to industry comments to earlier versions." 872

The Commission understands that Industry Members and other market participants have been able to provide input into CAT funding through meetings with CAT LLC, participation in webinars held by CAT LLC on CAT costs and potential alternative funding models,873 and through the provision of comments on the current and prior proposed funding models.874 The Commission encourages frequent and constructive collaboration between the industry and CAT LLC.

b. Implementation

One commenter suggested that upon approval of any CAT funding model,

Industry Members should be given at least a year "to implement any necessary changes to systems and processes for them to be able to capture their portion of CAT costs." 875 CAT LLC responded that it was unlikely to take Industry Members a year to implement any needed changes, particularly given the relatively small fees likely to be incurred by most small Industry Members that would not require extensive new processes to pay.876

The Commission acknowledges this comment but highlights, as did CAT LLC,877 that the Participants have entirely funded the CAT to date; in the Commission's view, it is imperative that CAT funding be established in a timely manner after approval of the Executed Share Model.

c. Rule 613 and the CAT NMS Plan

Certain commenters stated that the CAT as it is structured today is not what was contemplated by Rule 613 of Regulation NMS.878 One commenter recommended that the Commission come up with a new structure for the CAT.879 The commenter stated that Rule 613 and the 2016 CAT NMS Plan do not support CAT as it is currently structured 880 and provided examples where it believes that subsequent changes to the CAT requested by the Commission have caused the CAT to become inconsistent with the requirements of Rule 613 and the 2016 CAT NMS Plan.881 According to the commenter: (1) Rule 613 requires the reporting of certain events and that the events must be linked to their originating order, but the Commission has required the reporting of events that are not CAT-reportable and are not linked to particular orders (for example, Rule 613 requires the reporting of the cancellation of an order, but the Commission has also required the reporting of messages acknowledging the receipt of a cancellation request); 882 (2) the Commission expanded the CAT to include OTC equities and requestsfor-quotes; 883 (3) the CAT NMS Plan contemplates that data will be available to the Commission on a T+5 basis, but the Commission and staff have insisted that certain data be available to the

Commission for use before T+5; 884 (4) Rule 613 requires the reporting of every material term of an order, but the Commission has also required the reporting of the port-level settings applicable to all orders sent to a port on an exchange.885 The commenter stated that these changes to CAT resulted from discussions between the Commission and the Participants, that such changes "significantly increased CAT costs," and that Industry Members with "no voice and little transparency" into the building of the CAT system would be allocated most of the increased CAT costs.886 The commenter stated that the Commission approval of a funding proposal for a system that is not consistent with Rule 613 and the CAT NMS Plan would be arbitrary and capricious action.887

Another commenter stated that some of the drivers of CAT costs are the addition of various new system features and reporting requirements that were established as the result of discussion between Commission staff and the CAT Operating Committee.888 The commenter stated that some of these requirements have been driven by "informal reinterpretations" of the Plan and have resulted in material changes to the CAT without proper weighing of costs and benefits associated with such changes.889 The commenter further stated that the Participants should confirm that the existing CAT system meets the requirements of the Plan, before the funding proposal is $\rm finalized.^{890}$

One commenter believes that the Commission should require an amendment to the CAT NMS Plan for new reporting requirements or enhancements for which costs and benefits were never considered by Commission in the economic analysis for the approval of the CAT NMS Plan.⁸⁹¹ This commenter believes that the Commission is imposing CAT processing requirements that are not required by Rule 613 and the CAT NMS Plan.⁸⁹² The commenter further believes these "changes" should be subject to greater review by the Industry Members and the public at large, and therefore

⁸⁶⁵ Id. at 4-5.

 $^{^{866}\,}See$ Citadel July Letter at 9–10.

⁸⁶⁷ Id. at 6.

⁸⁶⁸ See MMI July Letter at 2; SIFMA June 2023 Letter at 4.

⁸⁶⁹ See CAT LLC July 2023 Response Letter at 26-

⁸⁷⁰ Id. at 28.

⁸⁷¹ Id. at 27-28.

⁸⁷³ See CAT Industry Webinar: CAT Costs (Sept. 21, 2021), available at https://catnmsplan.com/ sites/default/files/2021-09/09.21.21-CAT-Costs 0.pdf; CAT Industry Webinar: Fee Models (Sept. 22, 2021), available at https://catnmsplan.com/sites/ default/files/2021-09/09.22.21-CAT-Fee-Model.pdf.

⁸⁷⁴ See, e.g., supra note 58; see also https:// www.sec.gov/comments/4-698/4-698-a.htm.

 $^{^{875}\,\}mathrm{SIFMA}$ May 2023 Letter at 2.

⁸⁷⁶ See CAT LLC May 2023 Response Letter at 12. 877 Id.

⁸⁷⁸ See SIFMA June 2023 Letter at 2, 6-7; Citadel July Letter at 5; FIA Letter at 5; FIF and SIFMA Letter at 4, 5, 8–23

⁸⁷⁹ See SIFMA Letter June 2023 at 6.

⁸⁸⁰ Id. at 6-7.

⁸⁸¹ Id. at 6.

⁸⁸² Id. at 6-7.

⁸⁸³ Id. at 7.

⁸⁸⁴ See SIFMA June 2023 Letter at 6.

⁸⁸⁵ Id. See also Citadel July Letter at 32-33.

⁸⁸⁶ See SIFMA June 2023 Letter at 7.

⁸⁸⁷ Id.

⁸⁸⁸ See FIA Letter at 5.

⁸⁸⁹ Id.

⁸⁹⁰ Id.

⁸⁹¹ See FIF and SIFMA Letter at 4, 5.

 $^{^{892}}$ Id. at 9–12 (discussing various "processing changes" the commenter believes the Commission intends to impose, as well as summarizing the objections made by the Participants to these ''cĥanges'').

should be filed as amendments to the CAT NMS Plan, thereby requiring a cost-benefit analysis to be conducted by the Commission and public disclosure.893 The commenter stated that the Commission has mandated additional reporting requirements for CAT that the commenter does not believe to be within the scope of Rule 613 and the CAT NMS Plan, and that these additional reporting requirements should be subject to an appropriate costbenefit analysis.894 The commenter stated their concern that these reporting requirements would be very costly to implement and questioned whether the surveillance value of these additional reporting requirements justified the additional costs that will be imposed on market participants (and potentially passed through to customers).895 The commenter further stated that, to the extent that these additional reporting requirements are found to be within the scope of Rule 613 and the CAT NMS Plan, the Commission should grant exemptive relief with respect to these requirements because of the additional costs.896 The commenter also stated that if the Commission does not grant exemptive relief, then the Commission should require an amendment to the CAT NMS Plan, that sets forth the costs and benefits, for each of these additional reporting requirements because the commenter believes that these reporting requirements were not considered as part of the cost estimates in the CAT NMS Plan.897

Another commenter stated that changes and cost overruns have changed the structure of the CAT from what was contemplated by Rule 613.⁸⁹⁸ The

commenter believes that the Operating Committee and the Commission have engaged in ad-hoc discussions to interpret what the Plan requires "without adequate notice to Industry Members or due consideration of the costs and benefits associated with such interpretations." 899 The commenter stated that the Commission has not regularly assessed whether costs resulting from a specific interpretation of Rule 613 and the CAT NMS Plan outweigh benefits.900 The commenter requested that the Commission revisit its assumptions from the CAT NMS Plan Approval Order 901 due to inaccurate cost estimates, a failure to retire duplicative systems, impracticality of technology requirements, a lack of effective governance, and a lack of processes to consider requests to add more data.902

The commenter also stated that the Commission must update the economic analysis from the CAT NMS Plan Approval Order 903 to revise its estimates of costs to build and operate CAT using actual costs incurred, 904 to project average annual increases in the CAT operating budget,905 and to update its analysis of CAT-related costs to be borne by Industry Members.906 The commenter stated that the 2016 CAT NMS Plan lacked a funding model, so the Commission did not consider the implications of allocating costs to Industry Members to build and operate the CAT.907 The commenter stated that the Proposed Amendment would allocate at least 78% and up to 100% of costs to Industry Members and a small group of Industry Members will pay the majority of these costs (and potentially both historical and ongoing costs simultaneously).908 The commenter stated that the proposed allocation would have "dramatic effects" on market efficiency, competition and capital formation,909 stating that "[t]he allocation methodology will have a direct and negative impact on market efficiency, competition, and capital

formation, and the Commission must comprehensively assess those impacts before approving this filing." 910

Additionally, the commenter stated that Rule 613 requires the Participants to provide an estimate of the costs associated with creating, implementing and maintaining the CAT, the costs, benefits and rationale for the choices made in developing the CAT NMS Plan, and their own analysis of the plan's impact on competition, efficiency and capital formation.911 The commenter requested the Commission to require the members of the Operating Committee to update the analysis required by Rule 613 in light of a "massive increase" in costs since 2016.912 Another commenter similarly suggested that additional oversight and public review of the actual costs and purpose of the CAT is called for, and also requested additional transparency on the status of legacy reporting systems, since their retirement could offset some of the CAT fees.913

In response to one commenter that stated that Rule 613 and the CAT NMS Plan no longer reflect the operation of the CAT, 914 CAT LLC stated that the CAT was implemented in accordance with Rule 613 and the CAT NMS Plan and that the CAT NMS Plan permits the recovery of costs incurred in the creation, implementation and maintenance of the CAT. 915

CAT LLC also responded to comments that raised concerns about the Commission's interpretations of CAT NMS Plan requirements that were not related to the funding model and the costs and benefits of those interpretations.916 CAT LLC stated that the Proposed Amendment is not the appropriate forum to resolve interpretive questions. 917 CAT LLC also stated that, for proposed changes to the CAT NMS Plan, the Participants are following the process in Rule 608 for plan amendments and noted that material changes to the CAT system would require an amendment to the CAT NMS Plan,⁹¹⁸ but not a material change to a technology contract as the CAT NMS Plan permits the Operating

⁸⁹³ *Id.* at 10–11. This commenter also stated that there were several "processing requirements" that could reduce CAT operating costs and that the Commission should direct the Participants to analyze these "processing requirements" and make that analysis available to the public for discussion. *Id.* at 12–13.

⁸⁹⁴ See FIF and SIFMA Letter at 13-23 (discussing various reporting requirements that the commenter does not consider to be within the scope of Rule 613 and the CAT NMS Plan or believes that exemptive relief should be granted because of the costs for implementing these requirements, including: requiring CAT reporting of verbal (unstructured) activity; requiring CAT reporting of non-executable RFQ responses; requiring CAT reporting of request messages; requiring that an order recipient report rejections to CAT; requiring an order sender to report venue (order recipient) port settings; requiring CAT reporting of linkage of representative to customer orders and linkage of order fulfillments to representative and principal orders; various requirements with respect to CAIS reporting; and other CAT reporting requirements relating to quoting activity on the OTC Link ATS operated by OTC Markets).

⁸⁹⁵ *Id.* at 14.

⁸⁹⁶ Id.

⁸⁹⁷ Id

⁸⁹⁸ See Citadel July Letter at 7.

 $^{^{899}}$ Id. at 6.

⁹⁰⁰ Id.

 $^{^{901}\,}See\,supra$ note 2.

 $^{^{902}\,}See$ Citadel July Letter at 5; see also FIF and SIFMA Letter at 24–26.

 $^{^{903}}$ See CAT NMS Plan Approval Order, supranote 2.

⁹⁰⁴ See Citadel July Letter at 12. The commenter stated that 2016 figures underestimated such implementation costs for larger broker-dealers by assuming cost savings would be realized through retirement of other reporting systems which haven't been retired yet. *Id.* at 12–13.

⁹⁰⁵ *Id.* at 13.

⁹⁰⁶ Id. at 12.

⁹⁰⁷ Id.

 $^{^{908}}$ See Citadel July Letter at 12; id. at 12, n.57. 909 Id. at 12.

⁹¹⁰ *Id.* at 15.

 $^{^{911}}$ Id. at 14–15; see also FIF and SIFMA Letter at 24–25

⁹¹² See Citadel July Letter at 15.

⁹¹³ See MMI July Letter at 6. This commenter did not specifically request that the Operating Committee update the Rule 613 analysis.

⁹¹⁴ See SIFMA June 2023 Letter at 7.

 $^{^{915}}$ See CAT LLC July 2023 Response Letter at 28. 916 See Citadel July Letter at 32–34; FIA Letter at

^{3, 4;} MMI July Letter at 4.

917 See CAT LLC July 2023 Response Letter at 29.

918 Id.

Committee to enter into, modify or terminate a material contract.919

The CAT NMS Plan is consistent with Rule 613 and we do not believe that any changes have been made that are inconsistent with the Plan as approved in 2016, as amended in 2020.⁹²⁰ The examples provided by commenters of changes to the CAT requested by the Commission,⁹²¹ in the Commission's view, were included in the CAT NMS Plan approved by the Commission in 2016.922 Rule 608 and Rule 613 of Regulation NMS provide advance notice of material changes to the CAT system and related costs by requiring changes to the CAT NMS Plan to be filed with the Commission as an NMS plan amendment pursuant to Rule 608 of Regulation NMS and thereby be subject to notice and comment, and require that the Commission consider, in determining to approve the amendment, the impact of the amendment on efficiency, competition and capital formation.923 Section 6.9 of the CAT NMS Plan does not provide unfettered discretion to the CAT Operating Committee to make Material Amendments to the CAT system. If the CAT Operating Committee or the Commission wish to impose additional requirements to the CAT NMS Plan, such requirements must be proposed through an amendment to the CAT NMS Plan, filed under Rule 608 of Regulation NMS. Such amendments must be published for notice and comment.924 Additionally, Rule 613(a)(5) of Regulation NMS 925 requires the Commission to consider, in determining whether to approve an amendment to the CAT NMS Plan, the impact of the

amendment on efficiency, competition and capital formation; therefore, this Order contains an analysis of the Proposed Amendment's impact on efficiency, competition, and capital formation.

d. Funding in the Appropriation Process

Certain commenters believe that funding for the CAT should be accomplished through Congressional appropriations. 926 These commenters characterized the CAT as a Commission tool for law enforcement.927 One commenter stated that the Proposed Amendment would "evade" 928 the separation of powers established by the Constitution, arguing that since the CAT is a "Commission system used for enforcement" 929 and that law enforcement "is an executive prerogative," ⁹³⁰ Congress must approve public funds to build the CAT through the appropriations process.931 The commenter stated "[t]he Constitution does not permit the Commission to fund its own enforcement apparatus through the backdoor—to require the SROs to raise and spend hundreds of millions of dollars to build a new law enforcement tool for the Commission." 932 The commenter also stated that the assessment of "retroactive liability for monies spent that private parties had no control over" for public purposes would violate the Fifth Amendment Takings Clause.933

Another commenter stated that the Proposed Amendment is unconstitutional because it would require Industry Members to provide the Operating Committee with a blank check to fund 100% of costs in perpetuity for a law enforcement tool designed for the Commission that has not been authorized by Congress.934 The commenter also stated that requiring the Participants to build "a multi-billion

dollar enforcement tool" is beyond the scope of Section 11A's authorization to the Commission to require SROs to act jointly or facilitate the development of a national market system.⁹³⁵ Ānother commenter stated that the Commission has directed the development of CAT to supplement the government's surveillance program while the Funding Proposal effectively places all or most of the costs of the CAT on the Industry Members, who have no voice in its control or development.936 The commenter states that these costs are essentially a tax on the industry from an agency and should require Congressional oversight.937 Additionally, one commenter suggested the treatment of the CAT budget in terms of accounting and transparency as a Commission system, and a cap on the budget for CAT which, if exceeded, would trigger Congressional budget oversight.938

In response to recent comments expressing concern that the Industry Member allocation would raise constitutional issues,939 CAT LLC stated that the first commenter to raise this issue had never once before challenged the constitutionality of Rule 613 or the CAT NMS Plan. 940 CAT LLC stated "SIFMA's strategic decision to inundate the Commission with these argumentswhich directly contradict its prior statements that industry contributions are 'justifiable under the Exchange Act'—just two days before a scheduled SEC Open Meeting to consider the Funding Proposal suggests their ultimate strategy is to delay the Commission's review and approval of any funding model that would require the industry to contribute to the funding of the CAT." 941 CAT LLC urged the Commission to not let the commenter further delay a decision on the Proposed Amendment by filing comments that it could have submitted years before.942 CAT LLC also noted that, despite the commenter's argument that requiring Industry Members to contribute to CAT costs was a constitutional takings problem, the commenter had suggested a funding model for the CAT based on a 50%-50% allocation of costs divided among Participants and Industry

⁹¹⁹ Id. at 30 (citing to Section 4.3 of the CAT NMS Plan).

 $^{^{920}\,}See$ Securities Exchange Act Release No. 89387 (July 24, 2020), 85 FR 45941 (July 30, 2020); Financial Accountability Amendments, supra note

⁹²¹ See SIFMA June 2023 Letter at 6, 7, supra notes 881–885 and accompanying text; Citadel July Letter at 33-35; FIF and SIFMA Letter at 8-23. The issues raised by those commenters are either being adjudicated in a separate forum or addressed through a request for exemptive relief. See Petition for Review, USCA Case No. 22-1234; Request for Exemption from Certain Provisions of the CAT NMS Plan Related to Reporting of Certain Verbal Activity, Floor and Upstairs Activity, available at https://catnmsplan.com/sites/default/files/2023-03/ 03.31.23-CAT-Exemption-Request-Verbal-Floorand-Upstairs-Activity.pdf. 22-1234; Request for Exemption from Certain Provisions of the CAT NMS Plan Related to Reporting of Certain Verbal Activity, Floor and Upstairs Activity, available at https://catnmsplan.com/sites/default/files/2023-03/ 03.31.23-CAT-Exemption-Request-Verbal-Floorand-Upstairs-Activity.pdf.

⁹²² See Securities Exchange Act Release No. 95234 (July 8, 2022), 87 FR 42247 (July 14, 2022).

⁹²³ Rule 613(a)(5). 17 CFR 242.613(a)(5). 924 See Rule 608(a)(1). 17 CFR 242.608(a)(1).

^{925 17} CFR 242.613(a)(5).

⁹²⁶ See SIFMA June 2023 Letter at 8: Citadel July Letter at 28-29; FIA Letter at 3; MMI July Letter at 2-4. See also MMI July Letter at 1-2. This commenter suggested evaluating whether the CAT is truly an NMS plan, or if it is better viewed as a Commission system whose budget should be subject to Congressional approval and oversight. In response, CAT LLC stated that this comment is outside the scope of the Proposed Amendment. See CAT LLC July 2023 Response Letter at 31, n.144.

⁹²⁷ See SIFMA June 2023 Letter at 8; FIA Letter at 3; Citadel July Letter at 28, 29. See also MMI July Letter at 2-4 (categorizing the CAT as a Commission system, required by and dictated by the Commission that should be funded in the same way as other Commission functions).

⁹²⁸ See SIFMA June 2023 Letter at 8.

⁹²⁹ Id. See also FIA Letter at 3.

 $^{^{930}\,}See$ SIFMA June 2023 Letter at 8.

⁹³¹ Id

⁹³² Id. See also Citadel July Letter at 28, 29.

⁹³³ See SIFMA June 2023 Letter at 8.

⁹³⁴ See Citadel July Letter at 29.

⁹³⁵ Id. at 28.

⁹³⁶ See FIA Letter at 3.

⁹³⁷ Id

⁹³⁸ See MMI July Letter at 2, 4.

 $^{^{939}\,}See$ SIFMA June 2023 Letter at 7–9; Citadel July Letter at 28-29; FIA Letter at 3; Virtu Letter at

⁹⁴⁰ See CAT LLC July 2023 Response Letter at 31.

⁹⁴¹ Id. at 32.

⁹⁴² Id. at 33.

Members. 943 CAT LLC stated that regardless of how this issue is resolved, the Participants should be able to recover their investment in CAT because Rule 613 and the CAT NMS Plan contemplate Industry Member contributions to CAT funding. 944

In characterizing CAT as solely a "Commission tool used for enforcement," these comments misunderstand its purposes.945 CAT serves multiple regulatory purposes for both SROs and the Commission. SROs have long had audit trail systems and the SROs themselves, as well as the Commission, have long used the market data from those systems to oversee the securities markets and fulfill their responsibilities under federal securities laws.946 In directing the SROs to file an NMS plan establishing the CAT, the Commission sought to address shortcomings in those existing systems and create an audit trail system that would provide both the SROs and the Commission with timely access to a comprehensive set of trading data sufficient to oversee modern markets. And in approving the CAT NMS Plan, the Commission determined that the Plan would substantially improve the ability of both the SROs and the Commission to perform these regulatory activities to the benefit of investors and markets.947

In this respect, the CAT's regulatory and enforcement utility to the SROs as well as the Commission is similar to many of the SROs' other self-regulatory functions that are funded in part by Industry Members. And this dual purpose is consistent with the long history of SRO and Commission oversight of the securities markets. Selfregulation in the securities industry predates the securities laws and, in enacting the Exchange Act in 1934, Congress formalized this structure, purposefully determining to rely on selfregulation as a fundamental component of U.S. market and broker-dealer regulation.948 Among other things, Congress determined that effectively

regulating the inner-workings of the securities industry at the federal level was cost prohibitive and inefficient.949 And industry participants preferred the less invasive regulation by their peers to direct government regulation.950 Congress and the Commission have repeatedly reaffirmed that decision in the years since.951 And Courts have repeatedly affirmed the constitutionality of this system of self-regulation.952 As contemplated by Congress, the SROs have also long funded their frontline responsibility to supervise their members' compliance with their own rules and the federal securities laws, subject to Commission oversight, through fees on those members.953 The participation of Industry Members in the funding of CAT is no different.

The assertion by commenters that the funding of the CAT violates the Appropriations Clause or other constitutional limitations thus lacks merit. The funding of an initiative, such as CAT, that has utility to both the SROs and the Commission does not implicate the Appropriations Clause in the manner that has been questioned in courts. 954 As the Supreme Court has

stated, that clause "means simply that no money can be paid out of the Treasury unless it has been appropriated by an act of Congress." ⁹⁵⁵ The use of SRO and Industry Member funding for a self-regulatory initiative—which, as discussed below, falls within the authority provided by Congress—does not transgress that principle.

Nor does Industry Members[†] participation in CAT funding implicate the Takings Clause. In choosing to participate in the securities industry, Industry Members could not have had any "distinct investment-backed expectations" ⁹⁵⁶ that they would not have to share in funding regulatory initiatives such as development and maintenance of a consolidated audit trail for tracking securities trading, the purpose of which is to "strengthen the integrity and efficiency of the markets" and thus "enhance investor protection and increase capital formation." ⁹⁵⁷

Finally, the creation of CAT falls within the Commission's authority under the Exchange Act.⁹⁵⁸ Pursuant to that Act, each national securities exchange and national securities association must be organized and have the capacity to comply, and enforce compliance by its members, with its rules, and with the federal securities laws, rules, and regulations.959 And, among other things, the Commission has a responsibility to oversee those organizations and to enforce compliance by the members of exchanges and associations with the respective exchange's or association's rules, and the federal securities laws and regulations.960 Congress has also charged the Commission with "insur[ing] the maintenance of fair and

 $^{^{943}\,}Id.$ at 31. See also SIFMA May 2023 Letter at 2; supra note 101 and accompanying text.

⁹⁴⁴ See CAT LLC July 2023 Response Letter at 33.
⁹⁴⁵ See SIFMA June 2023 Letter at 8; FIA Letter at 3; Citadel July Letter at 28, 29. See also MMI July Letter at 2–4 (categorizing the CAT as a Commission system, required by and dictated by the Commission that should be funded in the same way

as other Commission functions).

946 See Securities Exchange Act Release No.
67457 (July 18, 2012), 77 FR 45722 (Aug. 1, 2012)
("CAT Adopting Release") at 45727.

⁹⁴⁷ See CAT NMS Plan Approval Order, supra note 2, 81 FR at 84727, 84800.

 ⁹⁴⁸ See Securities Exchange Act Release No.
 50700 (Nov. 18, 2004), 69 FR 71255 (Dec. 8, 2004)
 ("Concept Release Concerning Self-Regulation").

 $^{^{949}}$ Id.,citing S. Rep. No. 1455, 73d Cong., 2d Sess. (1934); H.R. Doc. No. 1383, 73d Cong., 2d Sess. (1934); S. Rep. No. 1455, 73d Cong., 2d Sess. (1934); see also S. Rep. No. 94–75, 94th Cong., 1st Sess. 7, II (1975) (stating that a principal reason for retaining a self-regulatory regime was the "sheer ineffectiveness of attempting to assure [regulation] directly through the government on a wide scale")

 $^{^{950}}$ See Concept Release on Self-Regulation, supra note 948, 69 FR at 71256–57.

⁹⁵¹ See e.g., Exchange Act Amendments of 1975, Pubic Law 29, 89 Stat. 97 (1975); 1961–1963 Special Study of Securities Markets. Securities and Exchange Commission, Report of Special Study of Securities Markets, ("Special Study"), H.R. Doc. No. 95, 88th Cong., 1st Sess. (1963) and Market 2000: An Examination of Current Equity Market Developments, Division of Market Regulation, U.S. Securities and Exchange Commission (January 1994) ("Market 2000 Report").

⁹⁵² See Todd & Co. v. SEC, 557 F.2d 1008, 1012—13 (3d Cir. 1977); First Jersey Sec., Inc. v. Bergen, 605 F.2d 690, 697 (3d Cir. 1979); Sorrell v. SEC, 679 F.2d 1323, 1325—26 (9th Cir. 1982); R.H. Johnson & Co. v. SEC, 198 F.2d 690, 695 (2d Cir. 1952); see generally Oklahoma v. United States, 62 F.4th 221, 229 (6th Cir. 2023).

⁹⁵³ See Concept Release Concerning Self-Regulation, supra note 948, 69 FR at 71268–69, citing Exchange Act Section 6(b)(4), 15 U.S.C. 78f(b)(4); Exchange Act Section 15A(b)(5), 15 U.S.C. 78o–3(b)(5); Exchange Act Section 15A(b)(2) and 6(b)(1) 15 U.S.C. 78o–3(b)(2) and 78f(b)(1).

⁹⁵⁴ For these reasons, we disagree with the assertion of commenters that the Fifth Circuit's reasoning in Cmty. Fin. Servs. Ass'n of Am., Ltd. v. CFPB, 51 F.4th 616, 642 (5th Cir. 2022), cert. granted sub nom. CFPB v. Com. Fin. Servs. Ass'n, U.S. (Feb. 27, 2023), casts doubt on the constitutionality of CAT. The holding in that case rested on the court's view that the CFPB's "perpetual self-directed, double-insulated funding structure" was "unprecedented" for an agency that "wields vast rulemaking, enforcement, and adjudicatory authority." See also CFPB v. Law Offices of Crystal Maroney, 63 F.4th174, 181–83

⁽²d. Cir. 2023) (disagreeing with Fifth Circuit's reasoning and rejecting challenge to CFPB's funding structure).

⁹⁵⁵ See Cincinnati Soap Co. v. United States, 301 U.S. 308, 321 (1937); see also Off. Of Pers. Mgmt. v. Richmond, 496 U.S. 414, 424 (1990) (The Appropriations Clause requires that "the payment of money from the Treasury must be authorized by a statute")

⁹⁵⁶ See Penn Central Transp. Co. v. New York City, 438 U.S. 104, 124 (1978).

 $^{^{957}}$ See CAT NMS Plan Approval Order, supra note 2, 81 FR at 84727.

⁹⁵⁸ See 15 U.S.C. 78b, 78c(b), 78e, 78f, 78k-1, 78o, 78o-3; cf. Nasdaq Stock Mkt. LLC v. SEC, 38 F.4th 1126, 1131 (D.C. Cir. 2022) (explaining that Congress granted the Commission "'broad, discretionary powers' to ensure 'maximum flexibility' in 'oversee[ing] the development of a national market system' and 'implement[ing] its specific components in accordance with the findings and . . . objectives' of the legislation," quoting S. Rep. 94–75, at 7 (1975)).

 $^{^{959}}$ See, e.g., Sections 6(b)(1), 19(g)(1) and 15A(b)(2) of the Exchange Act, 15 U.S.C. 78f(b)(1), 78s(g)(1), and 78o–3(b)(2).

⁹⁶⁰ See, e.g., Sections 2, 6(b), 15A(b), and 19(h)(1) of the Exchange Act, 15 U.S.C. 78b, 15 U.S.C. 78f(b), 15 U.S.C. 78o–3(b), and 15 U.S.C. 78s(h)(1).

honest markets," removing "impediments to" and perfecting "the mechanisms of a national market system for securities" and "provid[ing] for regulation and control of" transactions on securities exchanges and the overthe-counter market. 16 In furtherance of these responsibilities, Congress authorized the Commission to "impose requirements necessary to make such regulation and control reasonably complete and effective" 162 as well as to make such rules and regulations "as may be necessary or appropriate to implement the provisions" of the Exchange Act. 163

More recently, Congress also directed the Commission to facilitate the establishment of a national market system in accordance with specified findings and objectives.964 The initial Congressional findings were that the securities markets are an important national asset that must be preserved and strengthened, and that new data processing and communications techniques create the opportunity for more efficient and effective market operations.965 Congress then proceeded to mandate a national market system composed of multiple competing markets that are linked through technology, directing the Commission to 'use its authority under [the Exchange Act to facilitate the establishment of a national market system," including "by rule" "to authorize or require selfregulatory organizations to act jointly with respect to matters as to which they share authority under [the Exchange Act] in planning, developing, operating, or regulation a national market system." 966

The creation of the CAT was an appropriate exercise of this authority. The Commission's task pursuant to the mandate in Section 11A has been to facilitate an appropriately balanced market structure that promotes competition among markets, while minimizing the potentially adverse effects of fragmentation. An appropriately balanced market structure also must provide for strong investor protection. He Commission explained in adopting Rule 613, the creation of a consolidated audit trail with the ability to surveil cross-market

activity had become key to the ability of both the SROs and the Commission to perform many of their core regulatory functions in the modern iteration of the national market system.968 While the SROs and the Commission relied on existing audit trails and data in fulfilling their regulatory responsibilities prior to CAT, each of those systems had its own flaws and drawbacks, and there was a significant disparity in the audit trail requirements among the exchanges and FINRA. At the same time, the rapid change to fast, electronic markets on which trading was dispersed across market centers gave rise to an increasing need to a more uniform audit trail with cross-market compatibility. 969 The establishment of the CAT thus enabled the SROs and the Commission to more efficiently and effectively perform their respective regulatory responsibilities, including to analyze and reconstruct market events, monitor market behavior, conduct market analysis to support regulatory decisions, and perform surveillance, investigation, and enforcement activities.970

Contrary to one commenter's suggestion, the Supreme Court's major questions doctrine is not implicated here. In directing the SROs to act jointly to create an accurate, complete, accessible and timely audit trail to replace these existing audit trails, the Commission did not claim an "[e]xtraordinary grant[] of regulatory authority" based on "vague," "cryptic," "ancillary," or "modest" statutory language. 971 Nor did it assert authority that falls outside its "particular"

domain." 972 And, while CAT is undoubtedly a large database, that is a function of the size of the "complex, dispersed, and highly automated national market system" 973 Congress expressly charged the SROs and the Commission with overseeing. As detailed above, the collection of securities transaction data by the SROs and the Commission is an important factor in enabling both to fulfill their statutory responsibilities and has a long history. There is no reason to question that Congress would have intended for the Commission to address the serious shortcomings and regulatory obstacles associated with the lack of a consolidated audit trail. And there is therefore no basis for dispensing with ordinary principles of statutory construction to require express authorization for CAT by Congress.974

e. Rule 608 and Rule 19b-4

Certain commenters believe the assessment of CAT fees on Industry Members through filings submitted by each exchange under Rule 19b-4 is likely inconsistent with Rule 608.975One commenter stated that the Commission amended Rule 608 in 2020 to remove the effective-upon-filing procedure for NMS plan fees by requiring that NMS plan fees be subject to notice and comment and Commission approval prior to becoming effective. 976 The commenter also stated that the 2020 amendment specifically contemplates that CAT fees would be subject to Rule 608,977 however the Commission was considering approving a process for CAT fees that would not permit a meaningful review opportunity, contrary to the Rule 608 amendment.978 The commenter acknowledged that the CAT NMS Plan provides for Section 19(b) fee filings but also stated that (1) the CAT NMS Plan was approved prior to the amendment of Rule 608 in 2020 and (2) the CAT NMS Plan is silent about whether Section 19(b) fee filings would need to be made after the Operating Committee receives approval to assess the fees under Rule 608.979 The commenter suggested that due to the "infirmities with the process for establishing and assessing CAT Fees

 $^{^{961}\,} See$ Section 2 of the Exchange Act, 15 U.S.C. 78b.

⁹⁶² Id.

 ⁹⁶³ Section 23(a)(1) of the Exchange Act.
 964 Section 11A of the Exchange Act, 15 U.S.C.
 78k-1.

^{965 15} U.S.C. 78k-1(a)(1).

^{966 15} U.S.C. 78k-1(a)(3)(B).

⁹⁶⁷ See Securities Exchange Act Release No. 61358 (Jan. 14, 2010), 75 FR 3594 (Jan. 21, 2010) at 3597

⁹⁶⁸ See CAT Adopting Release, supra note 946. Indeed, many SROs, in commenting on that rule, recognized the essential nature of the project. Id. at 45736, quoting Letter from Marcia E. Asquith, Senior Vice President and Corporate Secretary, FINRA, and Janet McGinness Kissane, Senior Vice President and Corporate Secretary, NYSE Euronext, to Elizabeth M. Murphy, Secretary, Commission, dated August 9, 2010 ("the evolution of the U.S. equity markets and the technological advancements that have recently taken place have created an environment where a consolidated audit trail is now essential to ensuring the proper surveillance of the securities markets and maintaining the confidence of investors in those markets.").

⁹⁶⁹ See Securities Exchange Act Release No. 62174 (May 26, 2010), 75 FR 32556 (June 8, 2010) ("CAT Proposing Release"). Even prior to proposing the creation of the CAT in 2010, the Commission had twice requested comment regarding how best to enhance the capability of SROs and the Commission to effectively and efficiently conduct cross-market supervision of trading activity. See Securities Exchange Act Release No. 47849 (May 14, 2003), 68 FR 27722 (May 20, 2003) (File No. S7–11–03) ("Intermarket Trading Concept Release") and Concept Release Concerning Self-Regulation.

⁹⁷⁰ See CAT Adopting Release, supra note 946, 77 FR at 45727; see also CAT NMS Plan Approval Order, supra note 2, 81 FR at 84727, 84738, 84800.

⁹⁷¹ West Virginia v. EPA, 142 S. Ct. 2587, 2608–10 (2022) (quotation omitted).

 $^{^{972}}$ Alabama Ass'n of Realtors v. HHS, 141 S. Ct. 2485, 2489 (2021) (per curiam).

 $^{^{973}\,}See$ CAT Adopting Release, supra note 946, 77 FR at 45723.

⁹⁷⁴ Contra Biden v. Nebraska, 143 S. Ct. 2355, 2372, 2375 (2023), 143 S.Ct. 2355, 2372, 2375 (2023).

 $^{^{975}\,}See$ SIFMA June 2023 Letter at 4, 9; Citadel July Letter at 15.

⁹⁷⁶ See SIFMA June 2023 Letter at 9.

⁹⁷⁷ Id.

⁹⁷⁸ Id.

⁹⁷⁹ Id. at 9, n.45.

under the Funding Proposal," the Operating Committee must create a new funding process consistent with Rule 608 and stated that the Commission cannot find that the Proposed Amendment is consistent with the Exchange Act. 980 Another commenter stated that the proposed approach seems inconsistent with recent Commission rulemaking to ensure that fee filings related to an NMS plan can no longer be effective upon filing. 981

In response to one commenter that stated that the filing of Industry Member CAT fees under Rule 19b-4 likely violates Rule 608 of Regulation NMS,982 CAT LLC stated that it disagreed with the comment because the Proposed Amendment complies with Rule 608.983 CAT LLC stated that Section 11.1(b) of the CAT NMS Plan requires the Participants to file Industry Member CAT fees pursuant to Section 19(b) of the Exchange Act,984 and Section 19(b) permits fees to become effective upon filing.985 CAT LLC also noted that the funding methodology for Participant fees would be established through the Proposed Amendment, which was filed in accordance with Rule 608; therefore, Participant CAT fees would be adopted in accordance with Rule 608.986 CAT LLC stated that Industry Member CAT fees would be filed pursuant to Rule 19b-4 and those filings would be based on the Proposed Amendment, which would have to be approved pursuant to Rule 608, therefore "any Industry Member CAT fees will have been subject to the same extensive notice and comment process as Participant CAT fees and must satisfy the requirements of the Exchange Act." 987

The Commission disagrees with the commenters' position. The filing of Industry Member CAT fees under Rule 19b–4 is consistent with the structure of the CAT. The CAT NMS Plan functions as a joint agreement amongst the SROs who are parties to the CAT NMS Plan. But Industry Members are not parties to the Plan and the Plan itself does not bind Industry Members. Rather, Rule 608(c) of Regulation NMS requires each SRO to enforce compliance by its members with an effective NMS plan of which it is a sponsor or a participant. 988

Additionally, Rule 613(g) requires: (1) each SRO plan sponsor to file a proposed rule change to require its members to comply with Rule 613 and the CAT NMS Plan pursuant to Section 19(b)(2) of the Exchange Act and Rule 19b-4 thereunder; 989 (2) each member of an SRO plan sponsor to comply with the CAT NMS Plan; 990 (3) each SRO plan sponsor to agree to enforce compliance by its members with the CAT NMS Plan; 991 and (4) the CAT NMS Plan to include a mechanism to ensure compliance with the CAT NMS Plan. 992 Thus, Industry Members' CAT reporting requirements stem from rules the Participants put in place for their members pursuant to the Section 19(b)(2) rule filing process.993

The amendments to Rule 608 ("Rescission of Effective-Upon-Filing Procedure for NMS Plan Fee Amendments"), among other things, rescinded Rule 608(b)(3)(i),994 a provision that permitted fee changes assessed under NMS plans to become effective-upon-filing, and required NMS Plan fee amendments to be filed pursuant to Rule 608(b)(1) and (2), thus mandating an opportunity for public comment and Commission approval by order before the effectiveness of such fees.995 Vendors and subscribers of market data under the Market Data Plans are subject to vendor or subscribers' fees charged by the applicable NMS Plan and filed by the NMS Plan using Rule 608. As these vendors and subscribers are not parties to the NMS Plans, the mechanism by which fees are imposed on them is contractual. Specifically, in order to receive market data under the NMS Plans, vendors and subscribers must individually enter into a vendor and/or a subscription agreement under which they agree to pay fees.996 The rescission

impacted the way the Commission considers fees imposed on vendors and subscribers of market data under Market Data Plans since their fees are filed by the NMS Plans pursuant to Rule 608.

In contrast, all Industry Members who are CAT Reporters are members of at least one Participant. Industry Members are bound by the rules of the Participant(s) of which they are members. The process for adopting rules of a Participant that affect their members is through the Section 19(b) rule filing process, which includes the ability to adopt immediately-effective fees.997 Additionally, fees filed by the Section 19(b) rule filing process are still subject to public notice and comment, and the Commission may suspend and institute proceedings on these filings.998 For these reasons, the Commission does not believe that the Rescission of Effective-Upon-Filing Procedure for NMS Plan Fee Amendments impacts the CAT NMS Plan provisions relating to how Industry Member fees are filed with the Commission.

f. Governance

One commenter stated that the CAT governance structure is flawed because exchange groups with multiple affiliated exchanges have "significant influence" over the Operating Committee and can "dictate many CAT-related decisions" such as the allocation of CAT costs.999 The commenter further stated that Industry Members lack representation on the Operating Committee; therefore, they cannot vote on the design, implementation or funding of the CAT. 1000 The commenter stated that the governance structure results in the allocation of all CAT costs to Industry Members. 1001 Additionally, the commenter believes the governance structure permits the Operating Committee to provide minimal information on the costs to be allocated to Industry Members. 1002 stating that the financial information that has been provided by the Operating Committee through audited financial statements and an annual financial and operating budget is disclosed in broad categories and lacks detail about the key drivers of the costs, and that the annual financial and operating budget does not predict costs accurately. 1003 Based on this lack of detail, the commenter stated that market participants cannot assess

⁹⁸⁰ Id.

⁹⁸¹ See Citadel July Letter at 15.

⁹⁸² See SIFMA June 2023 Letter at 9.

⁹⁸³ See CAT LLC July 2023 Response Letter at 30.

⁹⁸⁴ Id.

⁹⁸⁵ Id.

⁹⁸⁶ *Id.* at 31.

⁹⁸⁷ Id.

 $^{^{988}}$ 17 CFR 242.608(c). See also CAT NMS Plan at Section 3.11 (requiring each Participant to comply with and enforce compliance, as required

by Rule 608(c), by its Industry Members with the provisions of Rule 613 and the CAT NMS Plan).

^{989 17} CFR 242.613(g)(1).

^{990 17} CFR 242.613(g)(2).

^{991 17} CFR 242.613(g)(3).

^{992 17} CFR 242.613(g)(4).

 ⁹⁹³ See Securities Exchange Act Release No.
 80256 (Mar. 15, 2017), 82 FR 14526 (Mar. 21, 2017).
 ⁹⁹⁴ 17 CFR 242.608(b)(3)(i).

 $^{^{995}}$ See Securities Exchange Act Release No. 89618 (Aug. 19, 2020), 85 FR 65470, 65471 (Oct. 15, 2020).

⁹⁹⁶ See, e.g., UTP Plan Subscriber Agreement, available at https://www.utpplan.com/DOC/subagreement.pdf; Second Restatement of the Plan Submitted to the Securities and Exchange Commission Pursuant to Rule 11Aa3–1 under the Securities Exchange Act of 1934, composite as of June 3, 2021, available at https://www.ctaplan.com/publicdocs/ctaplan/notifications/trader-update/110000358917/CTA%20Plan%20-%20Composite%20as%20of%20
June%203,%202021.pdf, at Exhibit C (Form of

^{%20}Composite %2008 %200] %20 June %203, %202021.pdf, at Exhibit C (Form of Vendor Contract); at Exhibit D (Form of Subscriber Contracts).

^{997 15} U.S.C. 78s(b)(3)(A).

 $^{^{998}}$ Id. See also 17 CFR 240.19b–4(f)(2). See also supra notes 192–196 and accompanying text.

⁹⁹⁹ See Citadel July Letter at 5, 6.

¹⁰⁰⁰ Id. at 6.

¹⁰⁰¹ See id.

¹⁰⁰² *Id*.

¹⁰⁰³ *Id.* at 6–7; *id.* at n.14.

whether total CAT costs are reasonable and cannot suggest cost-saving alternatives and must rely on the Operating Committee to contain the budget.1004 The commenter stated, "[i]t is clearly inequitable to compel Industry Members to provide a blank check to fund these spiraling costs in perpetuity, without any governance role or any plan to contain overall costs," 1005 and that allocating all CAT costs to firms without representation "marginalize[s] costrelated considerations." 1006 The commenter also stated that the governance structure does not require the Operating Committee or the Commission to assess whether the costs of a specific interpretation of the Plan outweigh any benefits.1007

The commenter recommended the following enhancements to improve CAT governance: (1) each exchange group and national securities association should have one vote on the Operating Committee, but will have a second vote if "the exchange group or national securities association has a market center or centers that trade more than 15 percent of consolidated equity and options market share;" 1008 (2) all actions related to funding by the Operating Committee should be authorized by supermajority vote; 1009 and (3) Industry Members should have voting representation on the Operating Committee commensurate with the costs allocated to them. 1010 The commenter stated that if industry representation cannot be achieved through an NMS plan, the plan is not an appropriate vehicle for CAT governance. 1011

In response to comments objecting to a lack of Industry Member voting

representation on the Operating Committee and suggesting their inclusion based on the proportion of costs allocated to them, 1012 CAT LLC stated that the addition of Industry Member voting representation is not consistent with the Exchange Act. 1013 CAT LLC stated that "allowing Industry Members to control CAT LLC as the commenters suggest could adversely affect the regulatory objectives of the CAT" 1014 as Industry Members "have no statutory obligation to protect investors or to act in the public interest, nor do they have any regulatory obligation to operate the CAT System in a manner that is consistent with the Rule 613 and the CAT NMS Plan." 1015 CAT LLC stated that Industry Members can provide input through Plan amendments and fee filings and the CAT Advisory Committee. 1016

In response to a comment suggesting changes to the allocation of Participant voting rights, ¹⁰¹⁷ CAT LLC stated that this issue is beyond the scope of the CAT funding model. CAT LLC also responded to the commenter's suggestion that all funding actions by the Operating Committee require a supermajority vote by stating that it disagreed with the suggestion because all Operating Committee actions relate in a way to CAT costs; therefore, imposing a supermajority requirement could undermine governance. ¹⁰¹⁸

Regarding SRO and Industry Member voting rights, the Commission does not believe that modification of the voting rights, which the Commission considered when it approved the CAT NMS Plan, is within the scope of the Proposed Amendment. ¹⁰¹⁹ Furthermore, in response to those comments suggesting the addition of Industry Members as voting members on the operating committee, we note that—in vacating the Order Approving the CT Plan—the D.C. Circuit concluded that the inclusion of non-SRO representation on the operating committee of the CT Plan was inconsistent with Section 11A of the Exchange Act. 1020 Industry Members do have an opportunity to attend meetings of the Operating Committee through the CAT Advisory

Committee. According to Section 4.13(d) of the CAT NMS Plan, "[m]embers of the Advisory Committee shall have the right to attend meetings of the Operating Committee or any Subcommittee, to receive information concerning the operation of the Central Repository (subject to Section 4.13(e)), and to submit their views to the Operating Committee or any Subcommittee on matters pursuant to [the CAT NMS Plan] prior to a decision by the Operating Committee on such matters. 1021

g. Miscellaneous

Certain commenters urged the Commission to address data security concerns associated with the CAT. ¹⁰²² One commenter suggested that the Commission prioritize finalizing the proposed amendments to the CAT NMS Plan to enhance data security. ¹⁰²³ Commenters also raised concerns that the Commission was considering the Proposed Amendment at the same time it is considering modifying certain Commission rules governing equity market structure. ¹⁰²⁴

One commenter expressed concern that the Commission would approve the Proposed Amendment prematurely without careful consideration. 1025 The commenter also stated that the Commission is "rushing forward to approve the latest proposal without taking advantage of the allotted time under the Exchange Act for careful consideration" and "prematurely moving forward" while simultaneously considering revisions of the rules governing equity and options market structure and proceeding with other proposals that will impose costs on Industry Members. 1026 The commenter stated that "[t]he unequitable distribution of CAT costs contemplated by the Funding Proposal will exacerbate these problems, harming the functioning of U.S. securities markets." 1027 The

 $^{^{1004}\,}See$ Citadel July Letter at 7.

¹⁰⁰⁵ Id. at 2. See also id. at 23 (stating Section 6(b)(4), Section 6(b)(5) and Section 6(b)(8) of the Exchange Act do not allow a private entity to require Industry Members to provide a blank check in perpetuity because this is not an equitable allocation of reasonable fees and would greatly harm market competition, efficiency and liquidity).

¹⁰⁰⁶ Id. at 7.

¹⁰⁰⁷ Id. See also MMI July Letter at 4 (suggesting "[i]ncentivization of cost-consciousness and accountability for SEC interpretations and mandates for CAT reporting specifications, interpretations, and usage of CAT.").

¹⁰⁰⁸ See Citadel July Letter at 34.

¹⁰⁰⁹ Id. at 3, 34.

¹⁰¹⁰ Id. See also MMI July Letter at 1, 2 (requesting the Commission require Industry Member representation on the Operating Committee before approving any funding proposal, with SIFMA acting as the broker representative); FIA Letter at 4 (stating that the CAT Operating Committee should be reconfigured, with Industry Members comprising the percentage of the Committee equivalent to whatever cost allocation percentage is eventually allocated to them).

¹⁰¹¹ See Citadel July Letter at 34. In response, CAT LLC stated that this comment is outside the scope of the Proposed Amendment. See CAT LLC July 2023 Response Letter at 31, n.144.

 $^{^{1012}\,}See$ FIA Letter at 4; Citadel July Letter at 34; MMI July Letter at 2.

 $^{^{1013}}$ See CAT LLC July 2023 Response Letter at 21.

¹⁰¹⁴ *Id*.

¹⁰¹⁵ *Id*.

¹⁰¹⁶ *Id.* ¹⁰¹⁷ *See* Citadel July Letter at 34.

 $^{^{1018}}$ See CAT LLC July 2023 Response Letter at 21–22.

 $^{^{1019}}$ See CAT NMS Plan Approval Order, supranote 2, 81 FR at 84728–30.

¹⁰²⁰ See The NASDAQ Stock Market LLC et al. v. SEC, Case No. 21–1167, D.C. Cir. (July 5, 2022). 15 U.S.C. 78k–1

¹⁰²¹ See CAT NMS Plan, supra note 2, at Section 4.13. See also 17 CFR 242.613(b)(7).

 $^{^{1022}}$ See Citadel July Letter at 3, 35; SIFMA June 2023 Letter at 2; Virtu Letter at 4.

 $^{^{1023}\,}See$ Citadel July Letter at 3, 35; see Securities Exchange Act Release No. 89632 (Aug. 21, 2020), 85 FR 65990 (Oct. 16, 2020). Two other commenters stated that the Commission has failed to address data security concerns associated with the CAT. See SIFMA June 2023 Letter at 2; Virtu Letter at 4.

¹⁰²⁴ See SIFMA June 2023 Letter at 3; Citadel July Letter at n.54 and 113; see Exchange Act Release Nos. 96496, 88 FR 5440 (Jan. 27, 2023) (Regulation Best Execution); 96495, 88 FR 128 (Jan. 3, 2023) (Order Competition Rule); 96494, 87 FR 80266 (Dec. 29, 2022) (Minimum Pricing Increments); 96493, 88 FR 3786 (Jan. 20, 2023) (Order Execution Information).

¹⁰²⁵ See SIFMA June 2023 Letter at 3.

¹⁰²⁶ Id. See also Virtu Letter at 4.

 $^{^{1027}\,}See$ SIFMA June 2023 Letter at 3.

commenter further stated that the Commission cannot determine whether the proposed allocation of costs is equitable without assessing the distribution of costs and benefits under the other pending proposals. 1028

In response to comments that urged the Commission to prioritize CAT data security concerns, 1029 CAT LLC stated that "CAT security is of paramount importance, and the CAT System is protected by a comprehensive information security program required by the CAT NMS Plan and overseen by a dedicated CISO, as well as via SEC oversight . . "1030 CAT LLC stated that security concerns should not be used to prevent appropriate funding of the CAT, noting that appropriate funding can help to ensure the security of CAT Data. 1031

CAT LLC also responded to comments that expressed concern that the Commission was considering the Proposed Amendment while also considering changes to Commission rules governing equity market structure. ¹⁰³² CAT LLC stated that the Commission's consideration of its market structure proposals should not impede its decision on the Proposed Amendment, which would ensure appropriate funding of the CAT as these are different decisions. ¹⁰³³

In response to the commenter that stated that the Commission would be rushing to approve the Proposed Amendment, 1034 CAT LLC stated that "the current model results from years of modifications that have been made in significant part in response to industry comments to earlier versions," 1035 and that because the current proposal "differs very little from the immediately preceding funding model," commenters had more than 400 days to comment on the substance of the Proposed Amendment. 1036

The CAT data security issues and the costs and benefits of unrelated pending equity market structure proposals 1037 are beyond the scope of the Proposed Amendment, which is limited to CAT funding. Further, the Commission's ability to consider the proposed amendments to the CAT NMS Plan to enhance data security is not impacted

by the Proposed Amendment, as it is a separate proposal and both are being considered in due course. 1038 Given the time between the Prior Funding Model Proposal and the OIP of the Proposed Amendment, the Commission has also had ample time for "careful consideration" of the Executed Share Model as the Proposed Amendment's proposed changes to the CAT NMS Plan are closely similar to the changes proposed in the Prior Funding Model Proposal, 1039 as modified by the two partial amendments that were filed, respectively, in November 2022 and February 2023. 1040 Additionally, the time spent for the Commission's review of the Proposed Amendment is consistent with the time permitted by Rule 608(b) for the Commission to approve or disapprove NMS plan amendments, 1041 for both the Prior Funding Model Proposal (for which the Commission extended to 300 days from the date of notice publication the date by which the Commission would conclude proceedings to determine whether to approve or disapprove the Prior Funding Model Proposal),1042 and this Proposed Amendment.

IV. Efficiency, Competition, and Capital Formation

In determining whether to approve a proposed amendment, and whether such amendment is in the public interest, Rule 613 requires the Commission to consider the potential effects of the proposed amendment on efficiency, competition, and capital formation. 1043 In its analysis, the Commission has reviewed the arguments about such effects put forth by the Participants and commenters and independently analyzed the likely effects of the Proposed Amendment on efficiency, competition, and capital formation. 1044 Several commenters stated that, because CAT costs incurred

to date are greater than those estimated at the time the CAT NMS Plan was approved, the Commission should update its economic analysis of that plan. Because that analysis was conducted in the process of deciding whether to approve the original plan and was appropriately based upon the information available to the Commission at the time it made that determination, we decline to do so. However, in analyzing the potential impacts of the Proposed Amendment on efficiency, competition, and capital formation—including our discussion of the economic baseline—the Commission has supplemented the analysis in the CAT NMS Plan Approval Order with additional information learned since the time of that Order. Therefore, for the purposes of this analysis, the effects are measured against a baseline that recognizes that the Proposed Amendment replaces certain provisions of the CAT NMS Plan and the Proposed Amendment also provides detail not previously included in the CAT NMS Plan. 1045 As a result, the Commission provides the baseline required to conduct a comprehensive analysis of the Proposed Amendment in light of issues raised in the Notice and public comments.

Based on its analysis, the Commission believes that the Proposed Amendment will involve efficiency gains along some dimensions but will likely also involve tradeoffs against other forms of efficiency, could negatively alter the competitive position of particular competitors, though the fees associated with the Proposed Amendment are unlikely to be large enough to affect overall competition, and will result in insignificant effects on capital formation. 1046 These effects are discussed below.

A. Efficiency

1. Baseline

In the CAT NMS Plan Approval Order, the Commission identified certain elements of the Original Funding Model that could have negative implications for efficiency and also stated that the significant uncertainty in the Original Funding Model could also have implications for efficiency. 1047 In

¹⁰²⁸ *Id*.

¹⁰²⁹ See Citadel July Letter at 35; SIFMA June 2023 Letter at 2; Virtu Letter at 4.

 $^{^{1030}}$ See CAT LLC July 2023 Response Letter at 33. 1031 Id.

 $^{^{1032}}$ See Citadel July Letter at 26, n.112; SIFMA June 2023 Letter at 3; Virtu Letter at 4.

 $^{^{1033}\,}See$ CAT LLC July 2023 Response Letter at 34.

¹⁰³⁴ See SIFMA June 2023 Letter at 3.

 $^{^{1035}\,}See$ CAT LLC July 2023 Response Letter at 28. $^{1036}\,Id.$

¹⁰³⁷ See supra note 1024.

¹⁰³⁸ See supra note 1023.

¹⁰³⁹ See supra note 409.

¹⁰⁴⁰ See supra note 410.

^{1041 17} CFR 242.608(b).

 $^{^{1042}\,}See$ Securities Exchange Act Release No. 96725 (Jan. 20, 2023), 88 FR 5059 (Jan. 26, 2023).

^{1043 17} CFR 242.613(a)(5).

¹⁰⁴⁴ Some commenters stated that the Participants' analysis of the effects of the Proposed Amendment on Efficiency, Competition, and Capital Formation was lacking analysis and/or information (see, e.g., SIFMA June Letter at 4; Citadel July Letter at 2, 11, 12–13, and 16) and several commenters made general statements that the Proposed Amendment would have negative effects on Efficiency, Competition, and Capital Formation (see, e.g., SIFMA June Letter at 3; Citadel July Letter at 12 and 15). The Commission has independently analyzed the Proposed Amendment using information from the Participants and commenters as well as additional information as indicated.

¹⁰⁴⁵ Some of the conclusions of the Proposed Amendment on Efficiency, Competition, and Capital Formation provided by the commenters and Participants are assessed relative to alternatives rather than the baseline the Commission used in the analysis herein.

¹⁰⁴⁶ See supra Section III for a discussion of why the Commission is approving the Proposed Amendment.

 $^{^{1047}\,}See$ CAT NMS Plan Approval Order, supra note 2, 81 FR at 84882.

consideration of the comment letters submitted in response to the Executed Share Model, the Commission recognizes that the Original Funding Model would have also resulted in additional inefficiencies. Overall, the Original Funding Model could have resulted in negative, but likely insignificant, reductions in operational efficiencies, skewed incentives for efficiency, and reductions in market efficiencies.

a. Operational Efficiency

The tiered structure of the Original Funding Model would also have led to uncertainties affecting operational efficiencies of Industry Members and Participants. In particular, Industry Members would not have known their per-message cost until the end of the month, though they would have charged their customers in real time, creating an inefficiency. In particular, the Original Funding Model would have charged flat fees to Industry Members and Participants in the same tiers ("Original CAT Fees"). Thus, Industry Members with message traffic near the top of the tier would pay lower fees per message than Industry Members in the same tier but with lower message traffic. Likewise, Participants with more market share in their tiers would pay lower fees per executed share. Even if Industry Members and Participants could predict which tier they would be in, passingthrough fees would involve Industry Members and Participants charging based on expected per-message or pershare Original CAT Fees rather than actual per-message or per-share Original CAT Fees, which could have been higher or lower than expected. This uncertainty creates an operational inefficiency in structuring the fee passthrough.

Also, charging Industry Members a flat fee that depends on their message traffic could result in Industry Members, who generally earn revenue only for executed orders,1048 getting charged for orders that do not transact. This could have resulted in certain Industry Members paying more in Original CAT Fees than they generated from transactions. Further, some Industry Members would have found passing through fees only to those whose orders transact operationally more efficient by increasing existing fees (or reducing incentives such as payment for order flow). These situations would have resulted in transacted orders subsidizing the burdens of message traffic (assuming message traffic is the only cost driver).

Complexities associated with creating tiers in the Original Funding Model would also have created operational inefficiencies. To ensure that the CAT NMS Plan covered its costs with the tiered fees, the creation of the fee schedule would have involved deciding on the number of tiers, estimating how many Industry Members would qualify for each tier, estimating how much to charge each tier, and then justifying each decision. The potential for disagreements resulting from the complexity and the challenges in drafting justifications for such complex decisions could have involved a cumbersome and inefficient fee setting experience.

b. Incentive Effects

The Original Funding Model also could have affected efficiency by skewing incentives. Because fees to be charged by CAT are based on cost recovery, aligning such fees with burdens on CAT could promote efficiency by creating incentives to limit costs. If message traffic is the only cost driver of CAT, the Original Funding Model created incentives for Industry Members to limit costs by limiting their unnecessary message traffic,1049 but the tiered structure of the Original Funding Model would have dampened these incentives, and message traffic is not the only cost driver of CAT. Further, the uncertainty in the allocations across equities or options and across Participants or Industry Members meant that the Original Funding Model would have created the risk that the inefficiencies of such allocations were less than perfectly aligned with costs. Finally, any pass-throughs to Participants' members or the customers of Industry Members could have further dampened the incentives for cost efficiency. As a result, the Original Funding Model would not have perfectly aligned fees with the costs imposed on CAT, limiting the incentives for cost efficiency.

While the Original Funding Model would have set fees for Industry Members based on their message traffic, the efficiency benefits were unlikely to have been significant. First, its tiered structure would have dampened the incentives to reduce the costs of CAT by reducing unnecessary message traffic. In particular, the Original Funding Model would have assigned Industry Members to tiers based on their message traffic. Within a tier, however, all Industry Members would have been charged the same flat fee. Thus, an additional

message would have been free in terms of CAT costs unless it put the Industry Member into a higher tier. So, only those Industry Members close to a cutoff would have had the incentive to reduce message traffic, and Industry Members who expected to be in the top tier would have had no incentive to reduce unnecessary message traffic. Further, Industry Members cannot reduce message traffic without altering how they handle customer orders, which could be counter to their duties, or reducing liquidity, which could reduce market efficiency. Therefore, absent evidence of significant unnecessary message traffic, the efficiency improvements of basing Original CAT Fees on message traffic are unlikely to have been significant.

In addition, since the approval of the CAT NMS Plan, additional information about the cost drivers have been made public and suggest that message traffic is not the only cost driver. 1050 In particular, a Šeptember 2021 report shows that 51% of CAT costs are from the "Linker," 17% from storage, and 15% from "Data, Processing, Collection, & ETL." In addition, the Participants in their response to commenters indicated that 75% of CAT costs are the processing and storage of CAT data in the cloud. 1051 The "Linker" costs are the costs to link order messages across a lifecycle. 1052 These costs involve looking across four days of data and are likely related to message traffic. While the report does not separate options messages from equities messages, it does indicate that Participant message traffic involved in linkage processing is much larger than Industry Member message traffic. However, the Commission understands that complexity of the order lifecycles is a cost driver within the linkage processing, and certain order handling practices of Industry Members, such as the use of riskless principal transactions, involve more complex linkages than other order handling practices. Indeed, while one commenter stated, "costs are a direct result of the total number of messages that CAT Reporters (both Participants and

¹⁰⁴⁹ See CAT NMS Plan Approval Order, supra note 2, 81 FR at 84881.

¹⁰⁵⁰ See CAT Industry Webinar: CAT Costs, supra note 873. The Participants stated in this presentation to Industry Members in Sept. 2021, that, "[t]he primary cost drivers for the CAT are compute costs (e.g., linker) and storage costs. These costs are volume based and have increased significantly each year beyond the volume estimate included in the Plan."

¹⁰⁵¹ CAT LLC July 2023 Response Letter at 22. For the first quarter of 2023, 72.9% of CAT costs are cloud costs (*See* CAT Financial and Operating Budget | CATNMSPLAN).

¹⁰⁵² *Id. See also*, CAT NMS Plan Approval Order, *supra* note 2, 81 FR at 85024–5 for a discussion of linkage requirements.

Industry Members) send to CAT, the costs of processing and linking such messages, and the costs to CAT of providing tools and mechanisms to the SEC and SROs to analyze the CAT data," 1053 the processing and linking and regulatory use costs are not perfectly aligned with message traffic.

The Original Funding Model did not indicate how Original CAT Fees would be allocated to equities versus options, but this allocation decision would have had an effect on efficiency. The options markets account for the vast majority of message traffic, but most of the options market message traffic is on-exchange message traffic (mostly market maker quotes).1054 However, option market maker quotes likely do not have complex order lifecycles that would drive the costs of the linkage processing. Further, the Commission understands that the linkage processing of equities orders is generally more complex than the linkage processing of options orders. As a result, it is unlikely that the Original Funding Model would have successfully matched Original CAT Fees with cost burdens without a complex algorithm to allocate costs across equities and options.

The Original Funding Model also had the potential to result in a lack of incentives for Participants to seek efficient ways to achieve the regulatory objectives of CAT. 1055 In particular, the Original Funding Model did not specify the allocation between Industry Members and Participants and it could have skewed heavily toward Industry Members. If the Original CAT Fees would have offset CAT costs without the Participants internalizing those CAT costs, Participants could lack the incentive to limit costs. Thus, a lower allocation to Participants could reduce Participants' incentives to limit CAT costs.

The ability for Participants and Industry Members to pass through fees could reduce incentive effects of the Original Funding Model, but the Commission believes that Participants and Industry Members would still have

had some incentives to limit costs. In the CAT Approval Order, the Commission recognized that FINRA could pass through its fees to its members. 1056 Other Participants could have also passed through their fees to their members, but such pass-throughs could take several forms. The Commission understands that Participants, including FINRA, have many revenue sources, such as transaction fees, data fees, connectivity fees, listing fees, regulatory fees. In fact, because the Original Funding Model charged Participants based on their market share, the most direct way for Participants to pass through the costs would have been to increase fees related to their market share—their transaction fees, which are based on a fee schedule set pre-trade. Because the per volume CAT fee would have been unknown at the time the Participants had to file the transaction fees for such volume, the Participants would have internalized the risk of the pass-through fees not covering their Original CAT Fees. Likewise, Industry Members who passthrough their Original CAT Fees would have had reduced incentives to limit CAT costs, but the inability to structure their pass through to perfectly align with Original CAT Fees would have forced some internalization of costs.

c. Market Efficiency

The Original Funding Model could have resulted in market inefficiencies, though these inefficiencies were unlikely to be significant. 1057 Several of these inefficiencies derive from the fact that the Original Funding Model would have charged Industry Members a flat fee according to a tiered fee schedule. An Industry Member's tier would have been determined by its message traffic. Because providing liquidity, including but not restricted to market making, involves more potential message traffic, the Original Funding Model could discourage liquidity provision. Discouraging liquidity provision could reduce liquidity, particularly in less liquid securities, potentially reducing market efficiency. The tiered nature of the Original Funding Model reduced the potential reduction in liquidity by flattening the fees, but this could create its own inefficiencies if Industry Members alter activity to avoid qualifying for a higher tier. The Commission concluded in the CAT NMS Plan Approval Order that any changes in behavior were unlikely except in those Industry Members near

a fee-tier cutoff point, and, therefore, these behavior changes would likely not have a significant effect on market quality or efficiency. 1058

2. Analysis of the Proposed Amendment

The Participants provided an analysis of efficiency in the Notice. In particular, the Participants state that, "By providing for the financial viability of the CAT, the [Executed Share Model] would allow the CAT to provide its intended benefits. For example, the CAT is intended to provide significant improvements in efficiency related to how regulatory data is collected and used. In addition, the CAT could result in improvements in market efficiency by deterring violative activity." 1059

The Commission considered whether the Executed Share Model promotes efficiency along several dimensions: operational efficiency, incentive alignment, and market efficiency. In this analysis, the Commission considered both how the Executed Share Model differs from the Original Funding Model and the additional details in the Executed Share Model not previously included in the CAT NMS Plan. In the analysis below, the Commission explains that the Executed Share Model itself will promote operational efficiency and market efficiency, trade off some efficiencies associated with aligning fees with CAT costs against others, and create some efficiencyimproving incentives at the expense of others. The analysis also recognizes below that some commenters stated that the Executed Share Model is less efficient than it could be.

a. Operational Efficiency

The Commission believes that the Executed Share Model presents some operational efficiency improvements over the Original Funding Model while recognizing that commenters point out that it may not be as efficient as other alternatives. The Executed Share Model could improve efficiency over the Original Funding Model by providing more certainty on potential costs for Industry Members and by reducing the complexity of the fees. However, it is not clear that the Executed Share Model presents an operational efficiency improvement over the Original Funding Model with respect to precision of estimates of expected total fees to be

Relative to the Original Funding Model, Industry Members and Participants will be better able to observe their fee per activity, in this

 $^{^{1053}\,\}mathrm{SIFMA}$ May 2023 Letter at 4.

¹⁰⁵⁴ Furthermore, because options market makers do not report many of their quotes to CAT, instead sending a quote-sent time stamp to options exchanges that is included in the exchanges' CAT data, additional option market maker quotes increase the message traffic of Participants rather than option market makers and are, thus, not counted in the message traffic of Industry Members in the Original Funding Model. Consequently, roughly 72% of CAT message traffic could only affect Participant fees, which are capped in the Original Funding Model, though the Plan does not define the exact cap. See CAT NMS Plan Approval Order, supra note 2, 81 FR at 84873.

¹⁰⁵⁵ See CAT NMS Plan Approval Order, supra note 2, 81 FR at 84891-2.

¹⁰⁵⁶ Id. at 84853.

 $^{^{1057}\,}See$ CAT NMS Plan Approval Order, supranote 2, 81 FR at 84879.

¹⁰⁵⁸ Id. at 84879.

¹⁰⁵⁹ See Notice, supra note 7, 88 FR at 17115.

case per share transacted, and can more easily pass all or a portion of those fees through to members or customers. Under the Executed Share Model, the CAT Fee and Historical CAT Assessments per Executed Equivalent Share are known before an order is submitted such that all market participants can estimate in advance the fees charged on each potential transaction rather than Industry Members only learning about their fees per message after the end of the month under the Original Funding Model. 1060 Having more precise information on fee rates helps Industry Members and Participants who choose to pass-through these fees to create fee schedules for their customers that better reflect their costs, resulting in operational efficiencies. In response to the commenter who said that Industry Members "are not set up to track and pass-through fees to the client [brokerdealers] that sent them the orders that resulted in executions" 1061 and other similar comments, 1062 the Commission understands that such Industry Members generally have arrangements with client broker-dealers for services based on executed shares and these arrangements could include charges to cover various fees. 1063 Further, CAT LLC argues that charging the executing brokers as specified in the Executed Share Model is an efficient way for CAT LLC to bill Participants and Industry Members as it is simple, straightforward, and in-line with existing fee and business models. 1064 They also acknowledge that certain Industry Members will have to develop processes to collect pass-through CAT fees from clients and describe that the Plan Processor plans to make available trade-by-trade data to CAT Executing Brokers for each CAT bill, which will

facilitate the passing-through of CAT fees. 1065

The Commission believes that the Executed Share Model reduces the complexities of the Original Funding Model, improving operational efficiency, but that the Executed Share Model may not increase the precision in estimating the fees to be collected, thus creating uncertainty in its impact on operational efficiency. The Executed Share Model will not involve designing a tiered structure that estimates how many Industry Members and Participants will qualify for each tier based on projections of each's message traffic or market share, coming up with cutoffs and flat fees in each tier to cover projected costs, and justifying each projection model, tier cutoff, and flat fee. Instead, the Executed Share Model involves estimating future volume, dividing budgeted costs by the estimated future volume, and justifying the estimated future volume model and budgeted costs. Thus, the Executed Share Model will be much less complex for Participants to implement. However, because the Executed Share Model involves estimating future volume and the Commission has observed significant fluctuations in volume, the fees actually collected in the Executed Share Model will not necessarily match the budgeted costs. Because the Original Funding Model had similar uncertainties, the Commission cannot determine if this inefficiency is more or less severe for the Executed Share Model.

The Commission recognizes the inefficiencies pointed out by some commenters associated with invoicing CEBBs and CEBSs directly rather than using clearing brokers to collect fees. 1066 Because the Original Funding Model allowed for but did not specify the use of clearing brokers, this inefficiency is not relative to the baseline but is relative to an alternative. The industry's current practice is to collect certain regulatory fees from the sell-side clearing broker-dealer. One commenter stated, "[c]learing Firms are best suited to process the collection of fees as it can occur at trade settlement and the cost is ultimately borne by the end beneficiary of each transaction. This seems prudent from a logistical and efficiency perspective and, in our opinion, also introduces the least financial risk to the industry today." 1067 This commenter also made similar statements in

subsequent comment letters. ¹⁰⁶⁸ However, as another commenter noted, collecting CAT fees from clearing broker-dealers could introduce inefficiencies as well. ¹⁰⁶⁹

b. Incentive Effects

The Commission recognizes the potential for the Executed Share Model to affect incentives and, therefore, either improve or harm efficiency. Aligning fees with costs promotes economic efficiency because Industry Members and Participants bear the costs they directly or indirectly impose on CAT NMS, creating the incentive to limit costs. Overall, the Executed Share Model will have inefficiencies related to not perfectly aligning with costs, but might not be any more inefficient than

 1068 See DASH April Letter at 1; DASH July Letter at 1. 1069 This could result in Industry Member CAT

fees being borne by clearing broker-dealers. The SIFMA May 2023 Letter said that allocating "CAT Fees to clearing brokers would have led to unfair burdens on them and could have resulted in them shouldering the burden of CAT costs in scenarios in which they could not determine which clearing client was responsible for the costs." This commenter, commenting on the prior funding proposal which originally proposed to assess CAT fees on clearing brokers instead of executing brokers, stated that clearing brokers would especially have difficulty passing on the Past CAT Costs to their clearing clients. See Letter from Ellen Greene, Managing Director, Equities & Options Market Structure, and Joseph Corcoran, Managing Director, Associate General Counsel, SIFMA, to Vanessa Countryman, Secretary, Commission (Oct. 7, 2022), at 4–5, available at https://www.sec.gov/ comments/4-698/4698-20145239-310561.pdf. This commenter also discussed the additional implementation and operational costs the prior funding model would impose on clearing brokerdealers. See Letter from Ellen Greene, Managing Director, Equities & Options Market Structure, and Joseph Corcoran, Managing Director, Associate General Counsel, SIFMA, to Vanessa Countryman, Secretary, Commission (June 22, 2022) ("SIFMA June 2022 Letter"), at 9, available at https:// www.sec.gov/comments/4-698/4698-20132695-303187.pdf. Also, the Proposed Amendment requires the collection of CAT fees from both the buy and sell side of the transaction. Commenters on the prior funding proposal stated that current industry practice does not involve clearing brokerdealers collecting fees from the buy-side of the transaction, and thus it might require costly implementation steps from clearing broker-dealers. See Letter from Kirsten Wegner, Chief Executive Officer, Modern Markets Initiative, to Vanessa Countryman, Secretary, Commission (June 21, 2022), at 3, available at https://www.sec.gov/ comments/4-698/4698-20132603-303126.pdf; SIFMA June 2022 Letter at 9; see https:// www.sec.gov/comments/4-698/4698-20132603-303126.pdf; SIFMA June 2022 Letter at 9. See also supra note 58. CAT LLC describes in their response to comments that charging clearing brokers would be less efficient than charging executing brokers because it would require linking executed shares to clearing brokers. They argue that charging executing brokers is simple, straightforward, and in-line with existing fee and business models. They also describe how CAT LLC is planning to make passthrough of costs easier, which would also increase operational efficiency for Participants and Industry Members. See CAT LLC July 2023 Response Letter at 3 and 5.

¹⁰⁶⁰ See supra Section IV.A.1.a for a discussion of how the per-message fees would have varied within the flat-fee tiers of the Original Funding Model. Also, one commenter stated that the Proposed Amendment would afford industry with a "straightforward rate to be applied across buyers and sellers." See DASH July Letter at 2.

¹⁰⁶¹ See SIFMA May 2023 Letter at 5.

¹⁰⁶² See, e.g., SIFMA June 2023 Letter at 2; MMI July Letter at 2; Citadel July Letter at 20 and 24; Citadel Letter August 2023 at 5–6; and Virtu Letter at 4–5. Citadel July Letter at 20 and 24 also focused specifically on the ability for IMs to pass through Historical CAT Assessments, but those fees would also have a fixed rate charged to future executed shares, so passing those fees through would still represent an efficiency improvement over the Original Funding Model.

¹⁰⁶³ See supra Section IV.A.1.a for information on current fee arrangements based on executed shares. See also CAT LLC July 2023 Response Letter at 9 and 34.

¹⁰⁶⁴ See CAT LLC July 2023 Response Letter at 3–

 $^{^{1065}\,}See$ CAT LLC July 2023 Response Letter at 9–10.

 $^{^{1066}\,}See$ DASH January 3 Letter at 1. $^{1067}\,Id.$

the Original Funding Model. In particular, basing Industry Member fees on share volume rather than message traffic could reduce efficiency relative to the Original Funding Model, but the efficiency benefits of the Original Funding Model would have been dampened by its tiered structure. The Commission recognizes that, based on the breadth of CAT costs, it is not feasible to calculate the cost burden on CAT of each CAT Reporter 1070 and the Executed Share Model could also have some efficiency improvements over the Original Funding Model. The Commission also recognizes the potential risks of the Proposed Amendments on not incentivizing Participants enough to consider cost efficiency. In addition, the Commission considered other incentives as well, but believes that the potential magnitude of CAT fees is unlikely to significantly affect these efficiencies.

Because CAT costs have some relation to message traffic, a fee schedule less dependent on message traffic such as the Executed Share Model will be less efficient on this dimension. As such, the Executed Share Model could create inefficiencies relative to the messagetraffic based Original Funding Model. Further, the Executed Share Model could result in Participants or Industry Members paying different fees across transactions despite potential similarities in cost. For example, Participants or Industry Members will be charged ten times the fee for a 1,000 share transaction than for a 100 share transaction. While 1,000 share transactions may, on average, have a higher burden on CAT than a 100 share transaction because such transactions are more likely to involve more messages and more complex lifecycles, the burden of a 1,000 share transaction on CAT versus a 100 share transaction is unlikely to be ten times higher. However, the incentive efficiencies of the message-traffic based fees in the Original Funding Model would have been dampened by several factors, 1071 including the tiered structure of the

Original Funding Model and by the fact that message traffic is not the only significant cost driver for CAT.¹⁰⁷²

One commenter raised other potential inefficiencies related to outsized allocations to transactions for retail investors associated with those retail investors trading low priced NMS stocks. 1073 The Commission recognizes that such an allocation could discourage brokers from servicing retail investors if they cannot pass through all CAT costs to investors and/or that retail investors could be paying for a large portion of CAT costs. In the Approval Order, the Commission recognized that retail investors were likely to bear costs for CAT and were beneficiaries of CAT. 1074

Further, if the Executed Share Model over-allocates fees to equity market transactions relative to options market or OTC equity transactions, it will create inefficiency by artificially inflating equity transaction costs while artificially decreasing options and OTC transaction costs. The Commission has mixed information on whether the Executed Share Model will, indeed, over-allocate fees to the equity markets. One commenter stated that equity trading volume creates a relatively low burden relative to options activity. 1075 The Commission disagrees with this statement. Based on March 2023 public market data,1076 equities (NMS and OTC) account for approximately 73% of the equivalent share volume while options account for approximately 27%. On the contrary, based on an analysis of

March 2023 CAT data, equities account for 23% of message traffic while options account for 77%. 1077 The message traffic in the options market is driven by options market quotes, which are reported by options exchanges. If processing and storing CAT messages is a primary cost driver and option and equity messages are equally burdensome, aligning fees to costs would result in the Participants and Industry Members in the equities markets being assessed approximately 23% of the fees, suggesting that the Executed Share Model allocation of approximately 73% of the fees overallocates fees to equities.

However, because equity order linking complexity likely accounts for higher costs than option order linking complexity, the higher allocation of CAT fees to equity market Participants and Industry Members could promote efficiency. The linkage processing costs of CAT are three times the storage costs. 1078 The Commission estimated that roughly 90% of CAT Participant message traffic and 72% of total message traffic is comprised of options market quotes. 1079 While option market maker quotes account for such a large fraction of message traffic and, thus, storage costs, option market maker quotes involve lower linkage costs than other messages. 1080 Indeed, the equities market accounted for about 48.4% of the number of linkages processed and the number of options linkages processed was a third of the number of options messages reported, reflecting less linkage processing for many options market maker quotes. 1081 Additionally, the Commission understands that

¹⁰⁷⁰ See Notice, supra note 7, 88 FR at 17103 ("In light of the many inter-related cost drivers of the CAT (e.g., storage, message traffic, processing), determining the precise cost burden imposed by each individual CAT Reporter on CAT is not feasible."). See also CAT LLC July 2023 Response Letter at 34, where the Participants describe that it is difficult to determine the precise cost burden imposed by each individual CAT reporter. They state that increased trading activity impacts message traffic, data processing, storage, and other factors and, thus, correlate with cost burdens and that Industry Member activity is generally for the purpose of transacting.

¹⁰⁷¹ See supra Section IV.A.1.c for further discussion of the inefficiencies of the Original Funding Model.

¹⁰⁷² See supra note 1050 and accompanying text for a discussion of CAT cost drivers. The biggest cost driver is for linking order messages into a lifecycle, followed by storage costs.

¹⁰⁷³ See Citadel July Letter at 20. This commenter states that trades in stocks with sub \$1 prices account for 33% of retail NMS stock trading and that rounding fractional shares to 1 share further increases the share of CAT costs charged to retail transactions. See also Citadel August Letter at 4.

¹⁰⁷⁴ See, e.g., CAT NMS Plan Approval Order, supra note 2, 81 FR at 84863, 84881, 84888, and 84893 for examples of statements on investors bearing the costs of CAT and at 84833 to 84845 for ways that investors benefit from CAT.

 $^{^{1075}}$ See FINRA April 2023 Letter at note 23. See also Citadel August Letter at 4 citing to the FINRA April 2023 Letter.

¹⁰⁷⁶ Calculated using monthly market volume data from Cboe for equities: Cboe, US Equities: Historical Market Volume Data, available at https:// www.cboe.com/us/equities/market_statistics/ historical market volume/, OCC for options: Options Clearing Corp., Market Data: Monthly & Weekly Volume Statistics, available at https:// www.theocc.com/market-data/market-data-reports/ volume-and-open-interest/monthly-weekly-volumestatistics, and FINRA for OTC securities: FINRA Over-the-Counter-Equities: Market Statistics, available at https://otce.finra.org/otce/ marketStatistics/historicalData. Option contract volume is multiplied by 100 and ÔTC volume is divided by 100 to establish rough estimates of equivalent share volume to reported equity transactions.

¹⁰⁷⁷ CAT Plan Participant and Industry Member Report Card Monthly Summary Tables, which contain the number of records processed into CAT.

¹⁰⁷⁸ See supra note 1050 and accompanying text for a discussion of cost drivers. "Linker" accounts for 51% of CAT costs while storage accounts for 17%. Data processing, Collection and ETL costs are 15%.

¹⁰⁷⁹ Mar. 2023 CAT data. If processing and storing CAT messages is a primary cost driver, options exchanges' collective 8.9% share of CAT costs (compared to equity exchanges' 13.6% share and FINRA's 10.8% share) may also appear to inefficiently over-allocate the Participants' share of CAT costs to equity exchanges. However, processing and storage costs combined account for lower costs than linkage processing. See id.

¹⁰⁸⁰ See supra Section IV.A.1.b for further discussion of option market maker quotes.

¹⁰⁸¹ Based on Mar. 2023 CAT data containing statistics for validations and linkage for files submitted to FINRA CAT, the equities market accounted for 1.24 trillion linkages processed on 1.20 trillion messages reported while the options market accounted for 1.33 trillion linkages processed on 4.02 trillion messages reported. Most options market maker quotes have only two events in their CAT Lifecycle (i.e., quote and quote cancelation) and don't require linkage to other CAT events.

equities linkages can be more complex, and thus more costly to process, than are options messages. As a result, the Commission disagrees with the commenter's assertion that equity trading volume creates a relatively low burden relative to options activity.

The Commission believes that the Executed Share Model presents a risk, as the Original Funding Model did,1082 that Participants might not have the incentive to seek efficient ways to achieve the regulatory objectives of CAT. While the Executed Share Model specifies an allocation that was unknown in the Original Funding Model, several commenters question whether the allocation provides Participants with incentives to seek efficiency. 1083 Commenters also expressed concern with rising CAT costs to illustrate the magnitude of this potential inefficiency,1084 stating that they do not have enough transparency on cost drivers to assess whether CAT costs are reasonable,1085 that no data or estimates regarding future costs were provided, 1086 and that the Proposed Amendment has no mechanism to control or limit the budget.1087 Some commenters further stated that the ability to pass through fees lessens Participants' incentive to control costs.1088

The Participants have stated that the transparency and level of detail in the fee filings will impose a discipline on the Participants to justify the costs of CAT. 1089 For example, separating

Historical CAT Costs from Prospective CAT Costs allows Industry Members more insight into the sources of CAT costs underlying the fees and to allow Industry Members to comment on the size of such fees. The Participants offer explanations for the increases in CAT costs. For example, at the adoption of the CAT NMS Plan in 2016, the Commission estimated that the CAT would receive 58 billion records per day, but the Participants state that as of the fourth quarter of 2022, the CAT receives an average 418 billion records per day.1090 This highlights the difficulty in estimating future costs because costs are directly related to trading activity. While the Participants did not provide data or estimates regarding future costs, they discussed how costs are related to trading activity, which should help Industry Members and other market participants form their own estimates.

The Participants also disagree that they are not incentivized to manage costs with a one-third allocation. They argue that currently, there is a strong incentive to manage costs while paying 100% of the costs and that incentive will continue with a one-third allocation. They state that CAT costs are substantial and they will continue to receive critical review. 1091 In response to comments on whether the exchanges will pass through all of their fees, some of the equity exchange Participants already charge transaction fees at the maximum level allowed by regulation, which prevents them from increasing their transaction fees to efficiently pass through all CAT fees to their members. 1092 As a result, such equities exchanges will likely internalize some of their CAT fees, ensuring some incentive to limit costs. In addition, the fact that FINRA is expected to be the heaviest regulatory user of CAT suggests that FINRA being responsible for a large proportion of CAT costs promotes efficiency. 1093 Further, the Participants

argue that the complexity and diversity of Industry Members' chosen business models and order handling practices contributes substantially to CAT costs because they result in increased processing and storage costs. 1094 In contrast, exchange features are not nearly as diverse as the ways in which Industry Members execute trades. 1095 In addition, Industry Members have customers that create CAT costs related to FDIDs, CCIDs, and CAIS, while Participants do not.1096 Further, the Participants state that "Industry Members have far more late data and corrections than Participants" and that "[t]he linker costs related to late data and corrections are significant." $^{\rm 1097}$ The Commission believes that Industry Members being responsible for a large proportion of CAT costs promotes efficiency. This is particularly valid for late data and corrections, which is something Industry Members can directly control to reduce overall CAT costs.

The Commission believes the Executed Share Model trades off incentives to inefficiently spend too much against incentives to inefficiently spend too little. The Commission does not believe that being responsible for CAT costs (or having to internalize CAT costs they do not pass through) will result in Participants having the incentive to under-spend on regulatory tools. 1098 Any such under-spending would not reduce the Participants' self-regulatory duties and could result in inefficiencies in their own regulatory costs.

One commenter stated that charging for Historical CAT Costs using current volumes bears no relation to the contributions to CAT Costs. 1099 The Commission agrees that the Historical Assessments in the Executed Share Model do not provide much incentive for efficiency. However, this does not reflect a change in the efficiency from the Original Funding Model, because Industry Members cannot retroactively change their behavior to reduce CAT

¹⁰⁸² See supra Section IV.A.1.b.

¹⁰⁸³ See, e.g., Citadel July Letter at 1, 5, 6, and 16; Citadel August Letter at 2; MMI July Letter at 1–3. ¹⁰⁸⁴ See, e.g., Citadel July Letter at 2, 5, 7–9, 23, and 26–27; Citadel August Letter at 7–8; FIA PTG at 4–5; FIF/SIFMA at 5. One commenter pointed out that CAT costs typically exceed the budget by 20% (See Citadel July Letter at 8–9, n.21; Citadel August Letter at 7). In addition, one commenter stated that CAT operating costs significantly exceed cost estimates in the CAT NMS Plan and recent increases in CAT operating costs are not sustainable (See FIF/SIFMA Letter at 7–8).

 $^{^{1085}}$ See, e.g., Citadel July Letter at 2, 6–7, 13–14, and nn.63, 64; Citadel August Letter at 6–7; FIA PTG at 1 and 4, MMI July Letter at 3. In addition, one commenter stated that enhanced transparency about CAT costs is necessary, especially for the cloud costs (See FIF/SIFMA Letter at 8–9).

¹⁰⁸⁶ See Citadel August Letter at 7.

¹⁰⁸⁷ See, e.g., SIFMA June Letter at 2 and 4; Virtu Letter at 4; FIF/SIFMA Letter at 5; SIFMA AMG Letter at 3. One commenter (FIF/SIFMA Letter at 5) pointed out that there is no legal limit to CAT costs. One commenter (Citadel August Letter at 7) states that there are no constraints on costs.

¹⁰⁸⁸ See, e.g., FIA PTG Letter at 2–3; Citadel July Letter at 16 and 22; and MMI July Letter at 4.

¹⁰⁸⁹ See also, CAT LLC May 2023 Response Letter at 10–11 for a discussion of other efforts to manage the costs of CAT. The Participants provide a more comprehensive response about cost management efforts (See CAT LLC July 2023 Response Letter at 19–20). They state that Industry Members will have ample opportunity to comment, there will be

quarterly budget information and financials, there is Commission oversight, and the Participants have ongoing cost discipline efforts through a cost management group and other efforts. For more details of the activities of the cost management group, see CAT LLC July 2023 Response Letter at 22–26.

 ¹⁰⁹⁰ See CAT LLC July 2023 Response Letter at 22.
 1091 See CAT LLC July 2023 Response Letter at 22.
 1092 See Securities Exchange Act Release No.
 1092 See Securities Exchange Act Release No.

^{96494 (}Dec. 14, 2022), 87 FR 80266, tbl.5 (Dec. 29, 2022). While exchanges charge several tiers of fees, they will not be able to raise the fees that already match the fee cap.

¹⁰⁹³ But see FINRA April 2023 Letter: "it is unclear . . . how the outsized allocation to FINRA is based on the extent to which FINRA participates in and benefits from the markets. In addition, this rationale conflates the costs to create and operate CAT with the usage of CAT data." The Commission

believes that data usage does significantly contribute to CAT costs. Query tools, for example, account for 7% of CAT costs. See supra note 1050. Note that FINRA's allocation in the Original Funding Model (~48% for Participants' share of the costs allocated to equities) could have been the same or greater than the allocation in the Executed Share Model.

 $^{^{1094}\,}See$ CAT LLC July 2023 Response Letter at 7.

¹⁰⁹⁵ See supra note 1094.

 $^{^{1096}\,}See\,supra$ note 1094.

¹⁰⁹⁷ See supra note 1094.

¹⁰⁹⁸ The Participants state that they seed to reduce costs "without adversely affecting the regulatory goals of the CAT." See CAT LLC July 2023 Response Letter at 22.

¹⁰⁹⁹ See SIFMA January 2023 Letter at 7.

costs under either model. Indeed, by separating Historical CAT Assessments from CAT Fees, the Executed Share Model could allow Industry Members and Participants to more clearly assess how their own actions could affect the Prospective CAT Costs and their CAT Fees to promote improvements to efficiency relative to the Original Funding Model.

The Executed Share Model could change other incentives that could potentially affect efficiencies, but the expected magnitude of CAT Fees will mitigate the impact of such incentive changes. For example, if the fees for OTC transactions are not passed on to non-FINRA members, the Executed Share Model could discourage FINRA membership by those who have a choice. Further, the Historical Fee Rate in Exhibit C of \$0.0000417950 per Executed Equivalent Share would result in each CEBB and CEBS paying \$0.00001393167 per Executed Equivalent Share (one third of \$0.0000417950). A comparison to recent Section 31 fees of \$0.00009 per share to \$0.0004 per share 1100 and average effective half spreads of \$0.013 1101 indicates that the anticipated Historical Fee Rate and Fee Rate, assuming the Fee Rate is of a similar magnitude as the Historical Fee Rate, are expected to be relatively small.1102

c. Market Efficiency

The Commission believes that the Executed Share Model will promote market efficiency, but has uncertainty as to the degree of any improvement. The Executed Share Model eliminates the disincentives to provide liquidity of the Original Funding Model that could have resulted in market inefficiencies including removing the potential for perverse incentives near the tier cutoffs. 1103 Instead of paying higher fees with more message traffic, which would discourage liquidity providing activity, 1104 the Executed Share Model charges a fee for each Executed Equivalent Share. Because market making and other liquidity providing activity tends to have a high ratio of message traffic to transactions, the Executed Share Model could be more favorable towards providing liquidity than the Original Funding Model. Promoting liquidity provision promotes market efficiency. However, because the Original Funding Model addressed this disincentive in its tier structure, the Commission cannot be certain that the

Historical Fee Rate per equivalent share, will be calculated using the methods laid out in the table "Calculation of Historical CAT Assessment. Further, the Commission assumes that the example Historical Fee Rate is of the approximate magnitude of potential Historical Fee Rates because this rate was calculated using actual CAT costs and volume estimates grounded in historical volume. While the rate may be imprecise for the reasons discussed in Exhibit C, the rate is unlikely to be orders of magnitudes larger because the sample fees assume two-year collection whereas the Operating Committee could choose a longer collection period. While Exhibit C only estimates Historical Fee Rates. the Commission does not expect Fee Rates to be significantly larger than Historical Fee Rates because Historical Fees will cover a longer time period than CAT Fees and will cover a broader scope of activities than CAT Fees. Historical Costs include costs incurred since the CAT Approval in Nov. 2016 to build, operate and maintain CAT up to a certain date and will be spread out over two to five years (the estimate was based on spreading it out two years). On the other hand, CAT Fees are based on Prospective Costs, which are estimates of monthly costs from a certain date forward and include costs to operate and maintain CAT. While some commenters expressed concern about increasing CAT costs that are much higher than those estimated in the 2016 Approval Order (See, e.g., SIFMA June Letter at 4; MMI July Letter at 3; and Virtu Letter at 4), some of those costs may reflect implementation costs in addition to ongoing costs. Once CAT is fully implemented, the Commission expects annual operating costs to reflect ongoing costs only. See also CAT LLC July 2023 Response Letter at 17 for a comparison and discussion of historical and prospective CAT costs. The CAT LLC July 2023 Response Letter at 18-19 also provides another example of a Historical Fee Rate. They add an additional year and consider all Historical CAT Costs for prior to 2023 and find that each CEBB and CEBS would pay \$0.0000142689 per executed equivalent share (one third of \$0.0000428068). The Historical Fee Rate based in this example is close to the Historical Fee Rate in Exhibit C.

reduction of this disincentive would have a significant effect on market efficiency. Further, the Commission previously concluded that the effect of behavior changes around the tier cutoffs on market efficiency was likely not significant. 1105 As a result, the Commission believes the removal of tiers promotes market efficiency but is unable to conclude that it will significantly improve market efficiency.

Some commenters stated that the Proposed Amendments would harm liquidity provision and increase costs for investors, thus harming market efficiency. 1106 The Commission recognizes that in charging fees only to CEBB and CEBS, the fees will be charged to fewer Industry Members than under the Original Funding Model and that market makers could be charged a large proportion of those fees. This could increase the importance of passing through fees to the ability to spread those fees out among more market participants. The Commission believes that efficiency improvements to the ability to pass through fees 1107 will help alleviate the risk that CAT fees will harm liquidity provision from market makers and market efficiency.

Some commenters argued that under the Proposed Amendment all CAT fees will ultimately be passed through to investors 1108 and retail investors in particular, 1109 thereby increasing transaction costs for investors and reducing market efficiency. The Commission recognizes that CAT fees may be passed through to investors, but the Proposed Amendment covers the allocation of CAT fees for operating the CAT among Participants and Industry Members and does not address whether Industry Members pass through their CAT fees to their customers. 1110 Further, Industry Members may have passed through CAT fees to their customer under the Original Funding Model as well. Hence, any impact on market efficiency of CAT fees being potentially passed through to investors under the Proposed Amendment may not represent a change to the baseline. Finally, while Industry Members may pass through CAT fees to their customers, the customers also receive a

 $^{^{1100}\,\}mathrm{Section}$ 31 fees are expressed per dollar volume traded. Translating this to a per share range involves identifying reasonable high and low trade sizes. The lower end of this range comes from the 25th percentile in \$ trade size of 1,200 and share trade size of 71 from the first quarter of 2021. The higher end of this range comes from the 75th percentile in \$ trade size of 5,200 and share trade size of 300 from the first quarter of 2021. Section 31 fees have ranged from \$5.10 per \$Million to \$23.10 per \$Million from Oct. 1, 2016 to Mar. 1, 2023. The CAT LLC July 2023 Response Letter at 18–19 offers two additional comparisons to transaction-based fees. They state that "Nasdag charges various transaction-based equities fees, ranging from \$0.0005 per share to \$0.0030 [per share]." They also state that "Cboe charges an options regulatory fee that is \$0.0017 per contract, and NYSE American charges an options regulatory fee of \$0.0055." Assuming that option contracts are for 100 shares of the underlying, this would translate to options regulatory fees of \$0.000017 and \$0.000055 per equivalent share.

¹¹⁰¹ This is the average share-weighted effective spread across more liquid stocks from the first quarter of 2021. More liquid stocks were defined as the stocks in the most actively traded decile by total daily trading volume. Effective spreads are a measure of transaction costs. For each trade, the effective spread was calculated as the absolute value of the difference between the trade price and the quote midpoint at the time of the trade. Less liquid stocks have higher effective spreads, making the CAT fees even smaller relative to transaction costs.

¹¹⁰² See Notice, supra note 7, 88 FR at 17130. In particular, Exhibit C sets forth illustrative Historical CAT Assessments. While this is an illustrative example and actual Historical CAT Assessments may differ, the Commission believes that the

¹¹⁰³ See supra Section IV.A.1.a.

¹¹⁰⁴ *Id*.

¹¹⁰⁵ See supra note 1058 and accompanying text. ¹¹⁰⁶ See, e.g., MMI July Letter at 2; Citadel July Letter at 2; Virtu Letter at 5. One commenter stated that the Proposed Amendments would disproportionately impact market makers in particular (see Citadel July Letter at 2 and Citadel August Letter at 4).

¹¹⁰⁷ See supra Section IV.A.1 for a discussion of pass-through efficiency improvements.

¹¹⁰⁸ See SIFMA AMG Letter at 2.

¹¹⁰⁹ See Virtu Letter at 5.

¹¹¹⁰ See supra Section III.A.2.

benefit from the CAT. The CAT provides more effective oversight of market activity, which could increase investor confidence, resulting in expanded investment opportunities and increased trading activity.¹¹¹¹

B. Competition

Several commenters stated that the Proposed Amendments present a burden on competition. 1112 The Commission analyzed the impact of the Proposed Amendments on the competition for trading services, brokerdealer services, and regulatory services. The Commission believes the Proposed Amendment could negatively alter the competitive position of a few types of competitors for trading services and broker-dealer services, but the Commission also believes that whether such changes will render these markets less competitive overall is uncertain. Specifically, the Commission believes that the Executed Share Model could provide exchanges with a competitive advantage relative to off-exchange market makers who internalize in providing trading services. Further, the Executed Share Model could provide competitive advantages to certain broker-dealer business models over others and could harm the competitive position of smaller broker-dealers by putting a strain on their net capital.

1. Baseline

In the CAT NMS Plan Approval Order, the Commission identified certain elements of the Original Funding Model that could have negative implications for competition in trading services, broker-dealer services, and regulatory services. ¹¹¹³ In addition, the Commission stated "the uncertainty regarding how the [Operating] Committee allocated the fees used to fund the Central Repository could affect the conclusions on competition." ¹¹¹⁴

a. Trading Services

The market for trading services, which is served by exchanges, ATSs, and liquidity providers (internalizers and others), relies on competition to supply investors with execution services at efficient prices. These trading venues, which compete to match traders with counterparties, provide a framework for price negotiation and disseminate trading information. The competitors for trading services compete

on a number of dimensions, such as transaction fees and execution quality, and some attempt to attract order flow by paying for that order flow or otherwise rebating.

The market for trading services in options and equities consists of 24 national securities exchanges, which are all Plan Participants, and off-exchange trading venues including broker-dealer internalizers, which execute substantial volumes of transactions in equities, and 39 ATSs, which are not Plan Participants. 1115 Aside from trading venues, exchange market makers provide trading services in the securities market. These firms stand ready to buy and sell a security "on a regular and continuous basis at publicly quoted prices." 1116 Exchange market makers quote both buy and sell prices in a security held in inventory, for their own account, for the business purpose of generating a profit from trading with a spread between the sell and buy prices. Off-exchange market makers also stand ready to buy and sell out of their own inventory, but they do not quote buy and sell prices. 1117

In the Original Funding Model, the portion of fees allocated to the exchanges, FINRA, and ATSs would have been divided among them according to market share of share volume and the portion allocated to Industry Members would have been divided among them according to message traffic, including message traffic sent to and from an ATS.1118 The Operating Committee would have allocated fees for the equities market and options market separately based on market share in each market. The Commission concluded that the Original Funding Model could have resulted in a competitive advantage for exchanges over ATSs because message traffic to and from an ATS would have generated fee obligations on the broker-dealer that sponsors the ATS, while exchanges would have incurred almost no message traffic fees.1119 In addition, the Commission recognized uncertainties associated with the allocation of fees that could have affected competition, such as the level of fees at each tier (though the entities in the smallest

activity tier would have paid the lowest fees) and whether off-exchange liquidity providers would have paid fees similar to similarly-sized ATSs and exchanges. Finally, the Commission recognized potentially differential fees across market participants, including lower fees for internalizers, which could affect competition. 1120

b. Broker-Dealer Services

For simplification, the Commission presents its analysis as if the competition to provide broker-dealer services encompasses one broad market with multiple segments even though, in terms of competition, it actually may be more realistic to think of it as numerous inter-related markets. There are approximately 1,100 broker-dealers that are CAT Reporters. 1121 The competition to provide broker-dealer services covers many different markets for a variety of services, including, but not limited to, managing orders for customers and routing them to various trading venues, holding customer funds and securities, handling clearance and settlement of trades, intermediating between customers and carrying/clearing brokers, dealing in government bonds, private placements of securities, and effecting transactions in mutual funds that involve transferring funds directly to the issuer. Some broker-dealers may specialize in just one narrowly defined service, while others may provide a wide variety of services.

The market for broker-dealer services relies on competition among brokerdealers to provide the services listed above to their customers at efficient levels of quality and quantity. The broker-dealer industry is highly competitive, with most business concentrated among a small set of large broker-dealers and thousands of small broker-dealers competing for niche or regional segments of the market. Brokerdealers often compete among each other through commission rates, service quality, and service variety and some bundle their services. At present, some broker-dealers specializing in individual investors charge zero commissions and instead cover costs by receiving payment for order flow or charging more for other services. To limit costs and make business more viable, small broker-dealers often contract with larger broker-dealers or service bureaus to handle certain functions, such as clearing and execution, or to update

¹¹¹¹ See supra note 761 and preceding text.

¹¹¹² See SIFMA June Letter at 1–2; SIFMA July Letter at 2; Virtu Letter at 2 and 3; and Citadel July Letter at 1.

 $^{^{1113}\,}See$ CAT NMS Plan Approval Order, supra note 2, 81 FR at 84882–84884.

¹¹¹⁴ See id. at 84882 n.2800.

¹¹¹⁵ See Securities Exchange Act Release No. 61358, 75 FR 3594 (Nov. 23, 2016) at 3598–3560, (for a discussion of the types of trading centers). The number of ATSs includes 34 NMS ATSs from https://www.sec.gov/divisions/marketreg/form-ats-n-filings.htm and 5 OTC ATSs.

¹¹¹⁶ See SEC, Market Maker, available at http://www.sec.gov/answers/mktmaker.htm.

¹¹¹⁷ See Securities Exchange Act Release No. 96495, 88 FR at 181 (Jan. 3, 2023).

 $^{^{1118}\,}See$ CAT NMS Plan Approval Order, supra note 2, 81 FR at 84793.

¹¹¹⁹ See id. at 84883.

¹¹²⁰ See id. at 84879.

¹¹²¹ See Notice, supra note 7, 88 FR at 17104.

their technology. 1122 Large broker-dealers typically enjoy economies of scale over small broker-dealers and compete with each other to service the smaller broker-dealers, who are both their competitors and their customers.

Some broker-dealers may offer specialized services in one line of business mentioned above, while other broker-dealers may offer diversified services across many different lines of businesses. As such, the competitive dynamics within each of these specific lines of business for broker-dealers is different, depending on the number of broker-dealers that operate in the given segment and the market share that the

broker-dealers occupy.

The CAT NMS Plan Approval Order described the Original Funding Model as an explicit source of financial obligation for broker-dealers and therefore an important feature to evaluate when considering potential differential effects of the Plan on competition in the market for brokerdealer services. 1123 The Commission understood that the Original Funding Model should have resulted in the smallest broker-dealers paying the lowest fees,1124 but the Plan did not outline how the magnitudes of fees would have differed across the tiers or whether the smallest broker-dealers would have paid the highest permessage fees. The Commission concluded that, regardless of the differential effects of the CAT NMS Plan Funding Model on small versus large broker-dealers, the CAT NMS Plan Funding Model, in aggregate, would have likely not reduced competition in the overall market for broker-dealer services.1125

c. Regulatory Services

In the CAT Approval Order, the Commission considered the effect of the CAT NMS Plan on competition to provide regulatory services. 1126 SROs compete to provide regulatory services in at least two ways. First, because SROs are responsible for regulating their members and the trading within venues they operate, their regulatory oversight is bundled with the operations of their venues. Consequently, for a brokerdealer, selecting a trading venue also involves being subject to regulatory oversight of the SRO that operates that

venue. Second, SROs can provide regulatory services for other SROs through the use of RSAs. 1127 In addition, some regulatory activity is coordinated among SROs through multiparty 17d–2 agreements. 1128 FINRA is the primary provider of contracted regulatory services. Any new competitors for regulatory services would face significant barriers to entry in building up the necessary expertise and technical capabilities. 1129

RSAs are contracts that would not be renegotiated as often as CAT Fees would vary, which limits the precision to which FINRA can increase the charges on these agreements as a mechanism to pass through its CAT Fees. Since the start of the CAT NMS Plan implementation, the Commission has not observed a change in the competition for regulatory services.

2. Analysis of the Proposed Amendment

a. Trading Services

The Participants state that, "the [Executed Share Model] would not impose an inappropriate burden on competition," arguing that transactionbased models for fee recovery are already in place. 1130 The Commission agrees that transaction-based models do offer some efficiency benefits over the Original Funding Model,1131 but believes the Proposed Amendment may provide a competitive advantage to exchanges and a competitive disadvantage to executing brokerdealers who internalize. The effects on these competitors might not affect the overall level of competition because the fees are expected to be relatively small.

The Commission believes that the Proposed Amendment may provide a competitive advantage for exchanges over off-exchange trading venues, but this advantage may not be large relative to the level of competition and relative to the advantages for exchanges in the Original Funding Model. In particular, the Executed Share Model will allocate higher CAT fee allocations to Industry Members relative to Participants, but

exchanges, one type of Participant, could be in a better position to avoid raising transaction fees to offset their CAT fee allocations. Using March 2023 data, the Commission estimates that 31% of share volume is reported to FINRA trade reporting facilities while the remaining 69% is reported by exchanges. 1132 The Commission believes that FINRA's allocation of CAT fees likely will be passed through to Industry Members. 1133 If FINRA's CAT fees are passed through to Industry Members, the Commission believes that Industry Members could bear 77% of CAT costs, 1134 assuming that the exchanges do not also directly passthrough their CAT fee allocations to their members. 1135 In fact, if the exchanges are able to offset their CAT fees in ways other than increasing transaction fees on exchanges, the cost to transact on ATSs or directly through broker-dealers will appear to increase more in response to CAT fee allocations, providing exchanges with a competitive advantage. 1136 This is particularly probable for exchanges who do not rely solely on revenues from transaction fees. However, ATSs might be better off relative to exchanges under the Executed Share Model than they would have been under the Original Share Model, which would have resulted in a competitive disadvantage for ATSs. 1137

The Executed Share Model could increase the costs of internalization

¹¹²² See Securities Exchange Act Release No.
63241 (Nov. 3, 2010), 75 FR 69791, 69822 (Nov. 15,
2010) (Risk Management Controls for Brokers or Dealers with Market Access).

 $^{^{1123}\,}See$ CAT NMS Plan Approval Order, supra note 2, 81 FR at 84885.

¹¹²⁴ See id. at 84884.

¹¹²⁵ See id. at 84887.

¹¹²⁶ See id. at 84887.

¹¹²⁷ See supra note 320 and accompanying text.

¹¹²⁸ See 17 CFR 240.17d-2.

¹¹²⁹ The Commission stated in the Approval Order that "CAT may reduce barriers to entry for this market" while acknowledging other barriers to entry. See CAT NMS Plan Approval Order, supra note 2, 81 FR at 84887, note 2849 (describing the barriers to entry addressed by CAT). See also Securities Exchange Act Release No. 95388 (July 29, 2022), 87 FR 49930 (August 12, 2022) at 49961 (describing the barriers to entry of potential new national securities associations more generally).

¹¹³⁰ See Notice, supra note 7, 88 FR at 17115.

¹¹³¹ See supra Section IV.A.2.b and IV.A.2.c for discussions of efficiency gains associated with basing CAT fees on shares executed rather than message traffic.

¹¹³² Calculated using monthly market volume data from CBOE for equities, OCC for options, and FINRA for OTC securities. Option contract volume is multiplied by 100 and OTC volume is divided by 100 to establish equivalent share volume to reported equity transactions.

¹¹³³ See FINRA April 2023 Letter at 7 ('If the Funding Model is approved by the Commission, FINRA intends to file a rule change to increase member fees simultaneous with the filing of any proposed rule change to effectuate the Funding Model.').

 $^{^{1134}}$ This results from dividing the FINRA allocation (31%) by its share of each off-exchange or OTC Executed Equivalent Share, three, and then adding the Industry Member share, two-thirds, to the result (31% × ½ + ½ = 77%) and ignores what Industry Members would pass to investors. Several commenters expressed concerns about the competitive effects of Industry Members paying 78–80% of CAT fees, assuming 100% FINRA pass through, and potentially more if exchanges pass through as well (See, e.g., Virtu Letter at 1–2 and 4, FIA PTG Letter at 2–3, and Citadel July Letter at 16, 21 and 22). The Commission analysis assesses this competition from the ability to competitively price transaction services.

¹¹³⁵ If exchanges passed their CAT fees onto their members in full, the Industry Members would effectively bear 100% of the CAT allocation (ignoring what they would pass to investors).

¹¹³⁶ One commenter stated that the Proposed Amendments will result in off-exchange transactions being assessed higher fees than onexchange transactions (*See* Citadel July Letter at 21).

¹¹³⁷ See supra note 1119 and accompanying text.

relative to agency order matching (or riskless principal), creating a competitive disadvantage for the internalization model, reversing the competitive advantage internalizers would have had under the Original Funding Model. 1138 Specifically, offexchange market makers will be assessed at least CEBB or CEBS for their internalizing trades, both when trading with non-broker-dealer customers or broker-dealers who are not FINRA members and also when internalizing the orders of FINRA members or their customers. However, they do not have more than one customer to which to directly pass-through this fee. In particular, if an exchange were to directly pass-through its CAT Assessments, it could split its 1/3 fee across buyers and sellers, or 1/6 each (each side would also have a 1/3 CAT assessment as CEBB or CEBS for a total of ½). However, for internalizers to directly pass-through their fees would mean the internalized customer (whether an Industry Member or not) would pay 2/3 of the fee plus whatever pass-through they pay for the FINRA assessment (up to 1/3). Alternatively, an internalizer could also recover CAT assessments by reducing payment for order flow or price improvement. 1139 Any of these alternatives could hurt internalizers competitively and create the incentive to not fully pass-through their fees. 1140 thus reducing their profit margins. In addition, some executing brokers could be charged two-thirds of the fee per Executed Equivalent Share when internalizing the orders of customers or non-FINRA broker-dealers, though this is likely rare.

More generally, any market makers, whether on exchange or not, will be charged fees for their proprietary trading, and this could create competitive advantages in certain situations. The Commission recognizes that this likely would result in onexchange market makers in equities being at a competitive disadvantage in having to absorb the fees because they do not know the identities of their

counter-parties to directly pass-through the fees and they do not have other arrangements, such as payment for order flow, that could facilitate indirectly passing-through fees. Because other liquidity providers who post limit orders and quotes to trade would face the same cost, the displayed quotations on exchanges could appear to be less competitive overall but would likely increase only marginally—enough to cover CAT assessments. Such a marginal increase could also help to offset any disadvantage to internalization because marginally wider spreads could help internalizers avoid reductions in price improvement and payment for order flow. In options, however, the Executed Share Model could result in exchange members who bring an order to an exchange experiencing a competitive advantage in price improvement auctions. In particular, because knowing who is responsible for the order allows them to pass-through their fees, they can bid more competitively in the auctions than can exchange members who cannot directly pass-through the fees.

However, the Commission believes that the magnitude of changes in any competitive advantages or disadvantages is unlikely to significantly affect order flow because fee differences between competing venues are only one of many factors (such as availability of non-displayed order types and price impact characteristics of transactions on different venues) that broker-dealers consider when choosing how to route their order flow. Further, the Executed Share Model levels the playing field between exchanges and ATSs relative to the Original Funding Model.¹¹⁴¹ In particular, the assessments and any pass-throughs paid by broker-dealers or investors of an execution on an ATS could be similar to those of an execution on an exchange, depending on how (and whether) ATSs and exchanges choose to pass-through their fees. Further, the magnitude of the fees in the example in Exhibit C are small relative to current transaction costs. 1142

b. Broker-Dealer Services

The Commission believes that the Executed Share Model alleviates concerns with the Original Funding Model about the allocation of fees across small and large broker-dealers. In particular, by charging CEBBs and

CEBSs based on Executed Equivalent Shares, small broker-dealers are less likely to face CAT fees that are outsized relative to their revenue, whether they act as executing brokers or are charged pass-throughs by executing brokers. This could reduce barriers to entry.

On the other hand, the efficiency gains in passing through fees from the Executed Share Model will not be evenly distributed across broker-dealer competitive strategies. In particular, where competition has driven commissions to zero, the Executed Share Model Fees are more easily passed through to customers of brokerdealers who offer a wider variety of services than for broker-dealers who do not. These latter broker-dealers could be at a competitive disadvantage if they have no other option but to absorb such fees or accept reduced payment for order flow as a form of pass-through from executing brokers. Because more established broker-dealers are more likely to be the ones offering a wider variety of services, this effect could increase barriers to entry.

Furthermore, as one commenter stated, there may be capital requirements associated with carrying the receivable associated with passing through these CAT fees, which could be burdensome for small and mediumsized Executing Brokers. 1143 According to this commenter, these burdens, coupled with FINRA Rule 15c3-1 will significantly impact healthy small and medium-sized brokers. 1144 If so, the Executed Share Model could increase barriers to entry in providing brokerdealer services. However, whether and how to pass-on the CAT assessments is at the discretion of Executing Brokers. 1145 Further, the economic effect of not passing-on fees is equivalent to passing-on fees to clients who pay more than 30 days after the Executing Broker has booked the receivable. 1146 Therefore, this issue boils down to the magnitude of the potential costs and whether small and medium-sized Executing Brokers are treated the same as others. If small and

¹¹³⁸ See supra note 1120 and accompanying text. ¹¹³⁹ See CAT LLC July 2023 Response Letter at 9–

¹¹⁴⁰ One commenter stated that many executing brokers will absorb CAT fees (See Virtu Letter at 5). However, the Participants argue that the executing brokers may determine to pass their CAT fees through to their own customers and thus may not absorb the CAT fees (See CAT LLC July 2023 Response Letter at 8–9). Another commenter stated that fees charged on proprietary trading cannot be passed through (See Citadel July Letter at 19–20; see also Citadel August Letter at 3). This latter commenter also stated that the potential to pass through some CAT costs does not alleviate the competitive issues (See Citadel July Letter at 19; see also Citadel August Letter at 4).

¹¹⁴¹ See supra note 1120 and accompanying text for a discussion of the effect of the Original Funding Model on ATSs.

¹¹⁴² See supra notes 1100, 1101, and 1102 and accompanying text for analysis of the potential magnitude of fees under the Executed Share Model.

 $^{^{1143}\,}See$ DASH January 2023 Letter at 1; DASH April 2023 Letter at 1.

 $^{^{1144}\,}See$ DASH January 2023 Letter at 2.

 $^{^{1145}}$ See supra Section III.A.4 for further discussion of the comments on net capital and the Commission's response to those comments.

¹¹⁴⁶ The effect on net capital comes when Industry Members record that they expect to receive a pass-through from customers as an asset (a "booked" receivable) more than 30 days before when their customers pay. If the Industry Members book a receivable for the pass-through more than 30 days before they collect, they cannot count that receivable as an asset toward net capital. If Industry Members instead do not pass-through the fees, they will not have a receivable at all to count toward net capital.

medium-sized Executing Brokers have lower trading activity than large Executing Brokers, their CAT assessments will be lower as well. Further, the per equivalent share fee rate will be the same across all Executing Brokers in the Executed Share Model whereas it would not have been under the Original Funding Model. In fact, small broker-dealers, including Executing Brokers, could be better positioned competitively under the Executed Share Model than under the Original Funding model, which contained uncertainty in the tier structure and whether small brokerdealers would have paid more in assessments than they earn in revenues.

One commenter stated that the top 10 (20) Industry Members would be allocated 50% (70%) of the fees under the Executed Share Model, "unduly burdening competition".1147 The Commission has considered this concentration and believes that several factors alleviate this concern. In particular, the Commission believes that many of these Industry Members will pass through much of their fees to client broker-dealers. 1148 In addition, the Commission believes that the Industry Members that will be charged the most under the Proposed Amendments engage in different services than brokerdealers who are charged the least or not charged fees at all under the Proposed Amendments. 1149 Therefore, these two sets of broker-dealers are not direct competitors.

c. Regulatory Services

The Commission recognizes that if FINRA were to pass through its CAT fees by increasing its fees for RSAs over time, FINRA could be less competitive in providing regulatory services. 1150

This could increase the chances either of exchanges conducting more of their own regulatory services or of another SRO attempting to compete with FINRA for RSAs. Indeed, such potential competitors would not have the burden of having to cover CAT Fees for offexchange and OTC volume. However, because RSAs are not renegotiated as often as CAT Fees are likely to change, FINRA will likely not attempt to cover all of their share of CAT costs by increasing what they charge for RSAs. 1151 Further, even with access to CAT, the barriers to entry in competing for RSAs could limit new competitors.

C. Capital Formation

In the CAT NMS Plan Approval Order, the Commission stated that the Original Funding Model for CAT was not wholly certain and, thus, stated the "view that there is uncertainty concerning the extent to which investors will bear Plan costs and consequently to what extent Plan costs could affect investors' allocation of capital." ¹¹⁵² The Participants state that they believe the Proposed Amendment would have a positive effect on capital formation due to improvements in investor confidence. ¹¹⁵³

The Commission recognizes that the Proposed Amendment may have negative effects on capital formation if the CAT fees ultimately borne by investors are large enough to affect investors' allocation of capital or if capital constraints of small or mid-sized broker-dealers significantly hinder innovating to find more efficient ways to service investors. 1154 However, the Commission believes that the net capital effect would not be significant. 1155 Further, the additional costs borne by investors are likely small relative to

current transaction costs. ¹¹⁵⁶ While recognizing that the Executed Share Model might change which investors ultimately bear CAT costs, the Executed Share Model might not change the total costs borne by investors relative to the Original Funding Model.

V. Conclusion

For the reasons discussed, the Commission, pursuant to Section 11A of the Exchange Act, 1157 and Rule 608(b)(2) 1158 thereunder, is approving the Proposed Amendment. Section 11A of the Exchange Act authorizes the Commission, by rule or order, to authorize or require the self-regulatory organizations to act jointly with respect to matters as to which they share authority under the Exchange Act in planning, developing, operating, or regulating a facility of the national market system. 1159 Rule 608 of Regulation NMS authorizes two or more SROs, acting jointly, to file with the Commission proposed amendments to an effective NMS plan, 1160 and further provides that the Commission shall approve an amendment to an effective NMS plan if it finds that the 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. 1161

For the reasons set forth above, the Commission finds that the Proposed Amendment meets the required standard.

It is therefore ordered, pursuant to Section 11A of the Exchange Act,¹¹⁶² and Rule 608(b)(2) ¹¹⁶³ thereunder, that the Proposed Amendment (File No. 4–698) be, and hereby is, approved.

By the Commission.

J. Matthew DeLesDernier,

Deputy Secretary.

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 $^{^{1147}\,}See$ Citadel July Letter at 19.

¹¹⁴⁸ See supra Section IV.A.2.a.

¹¹⁴⁹ Broker dealers that compete as electronic liquidity providers in high-volume securities are likely to have the highest executed share volume and thus pay the highest fees. However, these broker-dealers compete against each other in providing this service, and thus are likely to be similarly burdened by fees under the amendment. Broker-dealers that pay the lowest or no fees are unlikely to compete in this activity because such activity entails high fixed costs in specialized technology and thus are unlikely to gain a competitive advantage from the amendment.

¹¹⁵⁰ The Participants state, "[b]y treating each Participant the same, the CAT fees would not become a competitive issue by and among the Participants." See Notice supra note 7, 88 FR at 17115. See also a similar statement at 17122. This conclusion does not seem to address competition to

provide regulatory services specifically. However, the comments about the treatment of FINRA in, for example, the FINRA April 2023 Letter at 2–5 warrants considering this competition given FINRA's position in providing RSAs.

¹¹⁵¹ See FINRA April 2023 Letter at 7 ("If the Funding Model is approved by the Commission, FINRA intends to file a rule change to increase member fees simultaneous with the filing of any proposed rule change to effectuate the Funding Model")

 $^{^{1152}\,}See$ CAT NMS Plan Approval Order, supra note 2, 81 FR at 84893.

¹¹⁵³ See Notice, supra note 7, 88 FR at 17115.

¹¹⁵⁴ See, e.g., DASH April 2023 Letter at 1; Virtu Letter at 2; SIFMA AMG at 2–3.

¹¹⁵⁵ See supra Section III.A.4 for a response to a commenter's concerns regarding net capital and supra Section IV.B.2.b for an explanation of why the net capital effects are like to be small.

¹¹⁵⁶ See supra notes 1100, 1101, and 1102 and accompanying text for analysis of the potential magnitude of fees under the Executed Share Model.

^{1157 15} U.S.C. 78k-1.

^{1158 17} CFR 242.608(b)(2).

¹¹⁵⁹ See 15 U.S.C. 78k-1(a)(3)(B).

¹¹⁶⁰ See 17 CFR 242.608.

¹¹⁶¹ See 17 CFR 242.608(b)(2).

¹¹⁶² 15 U.S.C. 78k–1.

^{1163 17} CFR 242.608(b)(2).