VIA EMAIL (rule-comments@sec.gov)

February 15, 2023

Ms. Vanessa Countryman Secretary Securities and Exchange Commission 100 F Street, NE Washington, DC 20549-1090

Re: <u>File Number 4-698 – Notice of Filing of Partial Amendment No. 1 to an</u>

Amendment to the National Market System Plan Governing the Consolidated

Audit Trail

Dear Ms. Countryman:

On May 13, 2022, the Consolidated Audit Trail, LLC ("CAT LLC" or "Company"), on behalf of the Participants¹ in the National Market System Plan Governing the Consolidated Audit Trail (the "CAT NMS Plan" or "Plan"), filed with the Securities and Exchange Commission ("SEC" or "Commission") a proposed amendment to the CAT NMS Plan ("Proposed Amendment").² On August 30, 2022, the SEC instituted proceedings, under Rule 608(b)(2)(i) of Regulation NMS, 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.³ In response to the SEC's order instituting proceedings ("OIP"), CAT LLC submitted a letter to propose a partial amendment of the Proposed Amendment ("Partial Amendment") and to respond to issues discussed in the OIP.⁴ The SEC published the Partial Amendment for comment on November 28, 2022. CAT LLC submits this letter to propose additional amendments to the Proposed Amendment as proposed to be revised by the Partial Amendment ("Funding Proposal") and to respond to issues discussed in the comments on the Partial Amendment. The Operating Committee has approved the proposed additional amendments to the Funding Proposal as set forth in Section II of this letter in accordance with the CAT NMS Plan. CAT LLC notes that the responses set forth in this letter represent the consensus of the Participants, but that all Participants may not fully agree with each response set forth in this letter.

_

Letter from Michael Simon, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, Commission (May 13, 2022). The SEC published the proposed amendment for comment on May 25, 2022. *See* Securities Exchange Act Rel. No. 94984 (May 25, 2022), 87 Fed. Reg. 33226 (June 1, 2022) ("Proposing

Release").

⁵ Securities Exchange Act Rel. No. 96394 (Nov. 28, 2022), 87 Fed. Reg. 74183 (Dec. 2, 2022) ("Partial Amendment").

The twenty-five Participants of the CAT NMS Plan are: BOX Exchange LLC, Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe C2 Exchange, Inc., Cboe Exchange, Inc., 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.

Securities Exchange Act Rel. No. 95634 (Aug. 30, 2022), 87 Fed. Reg. 54558 (Sept. 6, 2022) ("OIP"). Letter from Michael Simon, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, Commission (Nov. 15, 2022) ("Partial Amendment Letter").

I. Executive Summary

CAT LLC proposes to amend the CAT NMS Plan⁶ to implement a revised funding model for the consolidated audit trail ("CAT") and to establish a fee schedule for Participant CAT fees in accordance with the Funding Proposal. After considering the comments provided in response to the Partial Amendment, ⁷ CAT LLC continues to believe that the Funding Proposal satisfies the applicable requirements of the Exchange Act as well as the funding principles and other requirements of the CAT NMS Plan, as proposed to be revised.

The Funding Proposal would provide reasonable fees that are equitably allocated, not unfairly discriminatory, and do not impose an undue burden on competition, in that the proposal 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. Moreover, the Funding Proposal would be consistent with past fee structures that have been approved by the Commission. It also is transparent, would be relatively easy to calculate and administer, and is designed to not have an impact on market activity because it is neutral as to the location and manner of execution. CAT LLC has gone through an extensive process of evaluating and seeking comment on various funding models since the inception of CAT. As the Commission is aware, the Exchange Act does not require CAT LLC to demonstrate that the Funding Proposal is *superior to any other potential proposal*. Instead, CAT LLC must demonstrate that the Funding Proposal is *consistent with the Exchange Act and the rules and regulations thereunder*. CAT LLC believes that the Funding Proposal satisfies the requirements of the Exchange Act and should be approved by the Commission.

CAT LLC, however, proposes to amend the Partial Amendment to provide additional detail and clarity on the funding model in response to the comments on the Partial Amendment. Specifically, CAT LLC proposes to amend the Partial Amendment by making changes summarized below and discussed in detail in Section II of this letter. In addition to these proposed revisions, CAT LLC responds to other issues raised by commenters in Section III of this letter, including comments about the process for proposing and approving the Partial Amendment. Section IV provides an illustrative example of a Historical CAT Assessment, as that term is described below.

-

The Limited Liability Company Agreement of Consolidated Audit Trail, LLC is the CAT NMS Plan. Unless otherwise defined herein, capitalized terms are defined as set forth in the CAT NMS Plan, the Proposing Release, and the Partial Amendment.

See Letter from Ellen Greene, Managing Director, Equities and Options Market Structure, SIFMA, to Vanessa Countryman, Secretary, SEC (Dec. 14, 2022) ("SIFMA Letter I"); Letter from Kelvin To, Founder and President, Data Boiler Technologies, LLC, to Vanessa Countryman, Secretary, SEC (Dec. 22, 2022) ("Data Boiler Letter"); and Letter from Timothy Miller, Chief Operating Officer, DASH Financial Technologies LLC, to Vanessa Countryman, Secretary, SEC (Jan. 3, 2023) ("DASH Letter"); Letter from Ellen Greene, Managing Director, Equities and Options Market Structure, and Joseph Corcoran, Managing Director, Associate General Counsel, SIFMA, to Vanessa Countryman, Secretary, SEC (Jan. 12, 2023) ("SIFMA Letter II"); and Letter from Patrick Murphy, Chief Operating Officer, Wolverine Executing Services, Inc., to Vanessa Countryman, Secretary, SEC (Jan. 31, 2023) ("Wolverine Letter"). The comment letters submitted in response to the Partial Amendment are available at https://www.sec.gov/comments/4-698/4-698-a.htm.

- (1) <u>CAT Executing Broker</u>. CAT LLC proposes to provide a definition of a "CAT Executing Broker" to clarify which Industry Members have the obligation to pay CAT fees under the Funding Proposal.
- (2) <u>Reasonable Fees</u>. CAT LLC proposes to clarify that CAT Fees and Historical CAT Assessments must be reasonable.
- (3) <u>Additional Clarity regarding the Reserve</u>. CAT LLC proposes to provide additional clarity regarding the use and size of the reserve, including additional examples of the reserve.
- (4) <u>Number of Historical CAT Assessments</u>. CAT LLC proposes to amend the CAT NMS Plan to reflect the fact that there may be more than one Historical CAT Assessment.
- (5) Additional Cost Transparency; Sufficient Detail to Demonstrate That Costs Are "Reasonable and Appropriate". CAT LLC proposes amendments to provide additional detail and transparency regarding both Historical CAT Costs and Prospective CAT Costs. In addition, CAT LLC proposes to clarify that the CAT budget used in calculating CAT fees must provide sufficient detail to demonstrate that such costs are "reasonable and appropriate."
- (6) Effect of Financial Accountability Milestones. CAT LLC proposes to clarify that Participants will not make a filing with the SEC pursuant to Section 19(b) of the Exchange Act regarding any CAT Fee or Historical CAT Assessment until any applicable Financial Accountability Milestone ("FAM") described in Section 11.6 of the CAT NMS Plan has been satisfied.
- (7) <u>Loan Cancellation</u>. CAT LLC proposes amended language to clarify further that the loans from the Participants to CAT LLC would be repaid based on the outstanding amounts due under the loans, and that the portion of the loans from the Participants to CAT LLC that are not repaid via the Historical CAT Assessments (*i.e.*, the amounts owed and already paid by Participants) would be cancelled.
- (8) <u>Fee Filing Process for Historical CAT Assessments</u>. CAT LLC proposes to clarify that the Participants will be required to file fee filings pursuant to Section 19(b) of the Exchange Act to describe each Historical CAT Assessment.
- (9) <u>Mid-Year Commencement of CAT Fees</u>. CAT LLC proposes to clarify that the first CAT Fee related to Prospective CAT Costs 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 in accordance with the procedures for calculating a CAT Fee during the year.
- (10) <u>Details regarding Calculation of CAT Fees</u>. CAT LLC proposes to clarify that it will provide details regarding the calculation of a CAT Executing Broker's or Participant's CAT fees upon request.

II. Proposed Revisions to Proposed Amendment

CAT LLC has considered comments received in response to the Partial Amendment and it has determined to propose revisions to the Partial Amendment. These proposed revisions are discussed in this Section II below. In addition, <u>Exhibit A</u> to this letter sets forth the cumulative changes proposed to be made to the CAT NMS Plan, including both those changes set forth in the Partial Amendment as well as the additional revisions proposed in this letter. <u>Exhibit B</u> to this letter sets forth the proposed additional revisions to the Partial Amendment as described in this letter.

A. CAT Executing Broker

As described in the Partial Amendment, each Industry Member that is the executing broker for the buyer in a transaction in Eligible Securities ("Executing Broker for the Buyer" or "EBB") and each Industry Member that is the executing broker for the seller in a transaction in Eligible Securities ("Executing Broker for the Seller" or "EBS") would be required to pay a CAT Fee for each such transaction in Eligible Securities in the prior month based on CAT Data. ⁸ Commenters generally supported this change, ⁹ but requested additional information regarding which Industry Members would qualify as Executing Brokers for purposes of the Funding Proposal. ¹⁰ CAT LLC recognizes that the term "executing broker" has varying definitions depending on the context in which it is used. ¹¹ CAT LLC proposes to use the term "CAT Executing Broker," rather than "Executing Broker," to distinguish the term from other definitions of "executing broker." In addition, CAT LLC proposes to add a definition of CAT Executing Broker for purposes of the Funding Proposal.

CAT LLC proposes to add a definition of the term "CAT Executing Broker" to Section 1.1 of the CAT NMS Plan. CAT LLC would define "CAT Executing Broker" to mean:

(a) with respect to a transaction in an Eligible Security that is executed on an exchange, the Industry Member identified as the Industry Member responsible for the order on the buy-side of the transaction and the Industry Member responsible for the sell-side of the transaction in the equity order trade event and option trade events in the CAT Data submitted to the CAT by the relevant exchange pursuant to the Participant Technical Specifications; and (b) with respect to a transaction in an Eligible Security that is executed otherwise than on an exchange and required to be reported to an equity trade reporting facility of a registered national securities association, the Industry Member identified as the executing broker and the Industry Member identified as the contra-side executing broker in the TRF/ORF/ADF transaction data event in the CAT Data submitted to the CAT by FINRA pursuant to the Participant Technical Specifications; provided, however, in

⁸ See Partial Amendment at 74185, 74189.

⁹ See SIFMA Letter II at 7 (supporting charging executing brokers). Note that the DASH Letter and the Wolverine Letter expressed concerns about the use of executing brokers.

SIFMA Letter I at 2-3; SIFMA Letter II at 7-8.

For example, the proposed definition of "CAT Executing Broker" differs from the definition of executing broker as used in FINRA trade reporting rules. *See* FINRA Rules 7110, 7210A, 7310 (defining the terms "Correspondent Executing Broker-Dealer" and "Correspondent Executing Broker").

those circumstances where there is a non-Industry Member identified as the contraside executing broker in the TRF/ORF/ADF transaction data event or no contraside executing broker is identified in the TRF/ORF/ADF transaction data event, then the Industry Member identified as the executing broker in the TRF/ORF/ADF transaction data event would be treated as CAT Executing Broker for the Buyer and for the Seller.

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." The Industry Members identified in these fields for the transaction reports would be the CAT Executing Brokers for transactions executed on an exchange. Specifically, the following fields of the Participant Technical Specifications will indicate the CAT Executing Brokers for the transactions executed on an exchange.

(1) Equity Order Trade (EOT) ¹³

#	Field	Data Type	Description	Include
	Name			Key
12. <i>n</i> .8/ 13. <i>n</i> .8	member	Member Alias	The identifier for the member firm that is responsible for the order on this side of the trade.	С
			Not required if there is no order for the side as indicated by the NOBUYID/NOSELLID instruction.	
			This must be provided if orderID is provided.	

(2) Option Trade (OT) ¹⁴

#	Field	Data Type	Description	Include
	Name			Key
16. <i>n</i> .13 /	member	Member	The identifier for the member firm that	R
17. <i>n</i> .13		Alias	is responsible for the order	

13 See Table 23, Section 4.7 (Order Trade Event) of the CAT Reporting Technical Specifications for Plan Participants (Nov. 11, 2022).

See 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 (Nov. 11, 2022).

See Table 51, Section 5.2.5.1 (Simple Option Trade Event) of the CAT Reporting Technical Specifications for Plan Participants (Nov. 11, 2022).

FINRA is required to report to the CAT transactions in Eligible Securities reported to a FINRA trade reporting facility (*i.e.*, the FINRA Trade Reporting Facilities ("TRF"), Over-the Counter Reporting Facility ("ORF") and Alternative Display Facility ("ADF")). 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. The Industry Members identified in these two fields for the transaction reports would be the CAT Executing Brokers for over-the-counter transactions. Specifically, the following fields of the Participant Technical Specifications will indicate the CAT Executing Brokers for the transactions executed otherwise than on an exchange.

(1) TRF/ORF/ADF Transaction Data Event (TRF)¹⁶

#	Field Name	Data Type	Description	Include
				Key
26	reportingExecutingMpid	Member Alias	MPID of the executing party	R
28	contraExecutingMpid	Member Alias	MPID of the contra-side executing party.	С

Note that a CAT Executing Broker in over-the-counter 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 is <u>not</u> determined based on a non-tape report (*e.g.*, a regulatory report or a clearing report), which are not publicly disseminated.¹⁷

Therefore, 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 for purposes of calculating the CAT fees as well as the CAT Executing Broker for each transaction for purposes of calculating the CAT fees. Accordingly, all data used to calculate the fees under the Funding Proposal would be CAT Data, and, therefore, it would be available through the CAT for calculating CAT fees. FINRA CAT would be responsible for calculating the CAT fees and submitting invoices to the CAT Executing Brokers based on this CAT Data. Moreover, defining a "CAT Executing Broker" in this way is a simpler analytical approach than other potential approaches for defining the relevant executing broker, such as identifying the originating broker for the order via an evaluation of CAT linkages. ¹⁸

Specifications for Plan Participants (Nov. 11, 2022).

See Section 6.1 of the CAT Reporting Technical Specifications for Plan Participants (Nov. 11, 2022).
 See Table 61, Section 6.1 (TRF/ORF/ADF Transaction Data Event) of the CAT Reporting Technical

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".

Each CAT Executing Broker could determine, but would not be required, to pass their CAT fees through to their clients, who, in turn, could pass their CAT fees to their clients, until the fee is imposed on the ultimate participant in the transaction.

CAT LLC also proposes to amend the Funding Proposal to make use of the newly defined term "CAT Executing Broker" in the place of the term "Executing Broker" and "executing broker." Specifically, CAT LLC proposes to replace the references to "Executing Broker," "EBB," and "EBS" in Proposed Sections 11.3(a)(iii)(A) and (b)(iii)(A) with "CAT Executing Broker," "CEBB" and "CEBS," respectively.

CAT LLC believes these changes would address the concerns related to providing a clear definition of when and in what situations an Industry Member would be considered a CAT Executing Broker for purposes of the Funding Proposal.

1. Treatment of ATSs

A commenter also requested clarification as to how CAT fees would be assessed with regard to transactions executed on an alternative trading system ("ATSs"), including clarification as to which party to an ATS transaction would be treated as the executing broker for purposes of the CAT funding model. ¹⁹ The definition of a "CAT Executing Broker" as proposed above would determine the CAT Executing Brokers for transactions executed on an ATS. Specifically, 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 CAT funding model. If the ATS is identified as the executing party for the buyer in such transaction reports, then the ATS would be the CAT Executing Broker for the Buyer, and if the ATS is identified as the executing party for the seller in such transaction reports, then the ATS would be the CAT Executing Broker for the Seller. An ATS also could be identified as both the CAT Executing Broker for the Buyer and the CAT Executing Broker for the Seller. 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.

2. Treatment of Fractional Shares

A question has been posed as to how transactions in fractional shares would be treated under the Funding Proposal. As described above, CAT fees would be charged based on the Equity Order Trade Events, Options Trade Events and the ADF/ORF/TRF Transaction Data Events in the Participant Technical Specifications. None of these transaction reports provide for fractional quantities; the transaction reports must reflect whole shares/contracts. Therefore, under the Funding Proposal, CAT fees would be calculated without reference to fractional shares or fractional share component of executed orders.²⁰

3. Non-Industry Members on Transaction Reports

A question also has been posed as to how transactions that involve a non-Industry Member would be treated under the Funding Proposal (*e.g.*, for internalized trades or trades with a non-FINRA member). The FINRA trade reporting requirements state that "[w]hen reporting a

SIFMA Letter I at 2-3; SIFMA Letter at 8.

To the extent that FINRA's equity transaction reporting facilities or the exchanges report transactions in fractional shares in the future, then the calculation of CAT fees would reflect fractional shares as well.

trade with a broker-dealer that is not a FINRA member, the non-member should not be identified on the trade report as the contra party to the trade."²¹ Accordingly, when the transaction in these cases is reported to CAT via the TRF/ORF/ADF Transaction Data Event, the field for the reportingExecutingMpid would be populated with the MPID of the executing broker and the field for the contraExecutingMpid would be blank or null. As noted above, the reportingExecutingMpid is a required field (include key = 'R') that must be entered on all CAT reports, but the contraExecutingMpid field is conditional; it does not need to be populated, specifically to account for cases like those at issue here (*e.g.*, transactions with a non-FINRA member). Therefore, in those scenarios where the contraExecutingMpid is blank, the FINRA member identified in the reportingExecutingMpid field 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.

In addition, under the FINRA trade reporting requirements, there is a limited exception to the general rule about not reporting a non-member as the contra party to the trade. Specifically, pursuant to FINRA Trade Reporting FAQ 202.1, "[t]here is a limited exception where a Canadian non-member firm uses the FINRA/NASDAQ TRF or ORF for purposes of comparing trades pursuant to a valid Non-Member Addendum to the NASDAQ Services Agreement. In that instance, however, the Canadian non-member must appear on the trade report as the contra party to the trade and not as the reporting party. For any trade report on which a Canadian non-member appears as a party to the trade, the FINRA member must appear as the reporting party." In this case involving the Canadian non-member firm exception, the executing broker identified in the reportingExecutingMpid field would be billed for both sides of the transaction.

CAT LLC proposes to include language in the definition of "CAT Executing Broker" to address these scenarios. Specifically, CAT LLC proposes to state the following in the definition of "CAT Executing Broker: "in those circumstances where there is a non-Industry Member identified as the contra-side executing broker in the TRF/ORF/ADF transaction data event or no contra-side executing broker is identified in the TRF/ORF/ADF transaction data event, then the Industry Member identified as the executing broker in the TRF/ORF/ADF transaction data event would be treated as CAT Executing Broker for the Buyer and for the Seller."

4. Cancellations and Corrections

Questions have been received regarding how the Funding Proposal would address cancellations and corrections. CAT LLC expects to determine CAT fees based on the transaction reports for a month as of a particular day. 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; 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. As CAT LLC is required under the CAT NMS Plan to adopt policies, procedures, and practices regarding the billing and collection of fees, CAT LLC will establish specific policies and procedures regarding the treatment of such adjustments as those related to cancellations and corrections. Furthermore, CAT LLC will

FINRA Trade Reporting FAQ 202.1.

Section 11.1(d) of the CAT NMS Plan

inform Industry Members and other market participants of these policies and procedures via FAQs, CAT Alerts and/or other appropriate methods.

B. Reasonable Fees

CAT LLC proposes to clarify that CAT Fees and Historical CAT Assessments must be reasonable. Accordingly, CAT proposes to introduce the term "reasonably" to the following proposed provisions of the CAT NMS Plan:

- (1) CAT LLC proposes to amend Proposed Section 11.1(a)(i) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "Without 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 cost categories as reasonably determined by the Operating Committee to be included in the budget."
- (2) CAT LLC proposes to amend Proposed Section 11.1(a)(ii) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "For 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."
- (3) CAT LLC proposes to amend Proposed Section 11.3(a)(i)(A)(I) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "For the beginning of each year, the Operating Committee will calculate the Fee Rate by dividing the reasonably budgeted CAT costs for the year by the projected total executed equivalent share volume of all transactions in Eligible Securities for the year."²³
- (4) CAT LLC proposes to amend Proposed Section 11.3(a)(i)(A)(II) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "During each year, the Operating Committee will calculate a new Fee Rate by dividing the reasonably budgeted CAT costs for the remainder of the year by the projected total executed equivalent share volume of all transactions in Eligible Securities for the remainder of the year."
- (5) CAT LLC proposes to amend Proposed Section 11.3(a)(i)(B) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "For purposes of calculating CAT Fees, executed equivalent shares in a transaction in Eligible Securities will be reasonably counted as follows:".
- (6) CAT LLC proposes to amend Proposed Section 11.3(a)(i)(C) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "The budgeted CAT costs for the year shall be comprised of all 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

In addition, CAT LLC proposes to revise the phrase "[a]t the beginning of each year" in Proposed Section 11.3(a)(i)(A)(I) of the CAT NMS Plan to read "[f]or the beginning of each year," as the calculation may occur before the beginning of each year to facilitate the charging of fees at the beginning of each year.

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."

- (7) CAT LLC proposes to amend Proposed Section 11.3(a)(i)(D) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "The Operating Committee shall reasonably determine the projected total executed equivalent share volume of all transactions in Eligible Securities for each relevant period based on the executed equivalent share volume of all transactions in Eligible Securities for the prior twelve months."
- (8) CAT LLC proposes to amend Proposed Section 11.3(a)(ii)(A) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "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 reasonably determined pursuant to paragraph (a)(i) of this Section 11.3."
- (9) CAT LLC proposes to amend Proposed Section 11.3(a)(ii)(B) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "Each Participant will be required to pay the CAT Fee calculated using the Fee Rate reasonably determined pursuant to paragraph (a)(i) of this Section 11.3 and approved by the Operating Committee only if such CAT Fees are in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act."
- (10) CAT LLC proposes to amend Proposed Section 11.3(a)(iii)(A) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "'The CEBS'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 Fee Rate reasonably determined pursuant to paragraph (a)(i) of this Section 11.3."
- CAT LLC proposes to amend Proposed Section 11.3(a)(iii)(B) of the CAT NMS (11)Plan to add the term "reasonably" to the following sentence: "When the Participants file with the SEC pursuant to Section 19(b) of the Exchange Act CAT Fees to be charged to Industry Members calculated using the Fee Rate that the Operating Committee approved in accordance with paragraph (a) of this Section 11.3, such filings shall set forth (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; (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."

- (12) CAT LLC proposes to amend Proposed Section 11.3(b)(i)(B) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "For purposes of calculating each Historical CAT Assessment, executed equivalent shares in a transaction in Eligible Securities will be reasonably counted in the same manner as set forth in paragraph (a)(i)(B) of this Section 11.3."
- (13) CAT LLC proposes to amend Proposed Section 11.3(b)(i)(C) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "The 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 excluded by the Operating Committee."
- (14) CAT LLC proposes to amend Proposed Section 11.3(b)(i)(D)(I) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "The length of the Historical Recovery Period used in calculating each Historical Fee Rate will be reasonably established by the Operating Committee based upon the amount of the Historical CAT Costs to be recovered by the Historical CAT Assessment."
- (15) CAT LLC proposes to amend Proposed Section 11.3(b)(i)(E) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "The 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."
- (16) CAT LLC proposes to amend Proposed Section 11.3(b)(iii)(A) of the CAT NMS Plan to add the term "reasonably" to the following sentence: "Each month in which a Historical CAT Assessment is in effect, each CEBB and each CEBS shall pay a fee 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 paragraph (b)(i) of this Section 11.3."

C. Additional Clarity regarding the Reserve

In the Partial Amendment, CAT LLC provided additional details regarding the use and size of the reserve. As described in the Partial Amendment, the annual CAT budget would include an amount necessary to allow the Company to maintain a reserve of not more than 25% of the annual budget, and, if the CAT Fees exceed CAT costs, including the reserve, then the surplus will be used to offset future fees. Commenters requested additional clarification regarding the collection of the reserve, specifically information as to how budget surpluses would be treated for purposes of the reserve. Accordingly, CAT LLC proposes to state in Section 11.1(a)(ii) of the CAT NMS Plan 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)."

The following provides examples to explain the circumstances under which a reserve would be included in the budget:

- (1) Suppose that the Operating Committee had approved a budget of \$100 million for CAT costs for Year X, and a reserve of \$25 million, for a total budget of \$125 million for Year X. Suppose that CAT Fees of \$125 million were collected during Year X, and that actual CAT costs for Year X were \$100 million. Therefore, CAT ended Year X with \$25 million in reserve. Suppose further that the Operating Committee had approved a budget of \$100 million for CAT costs and a reserve of \$25 million, for a total budget of \$125 million for Year X+1. Because CAT LLC had collected \$25 million in excess of costs for the reserve in Year X, and the excess was not necessary to cover additional costs in Year X, CAT LLC would not include any additional amount in the budget for reserve for Year X+1. CAT LLC would use the excess fees collected for the reserve.
- (2) Suppose that the Operating Committee had approved a budget of \$100 million for CAT costs for Year Y, and a reserve of \$25 million, for a total budget of \$125 million for Year Y. Suppose that CAT Fees of \$110 million were collected during Year Y, and that actual CAT costs for Year Y were \$100 million. Therefore, CAT ended Year Y with \$10 million in reserve. Suppose further that the Operating Committee had approved a budget of \$100 million for CAT costs, and a reserve of \$25 million, for a total budget of \$125 million for Year Y+1. Because CAT LLC had collected \$10 million in excess of costs for the reserve in Year Y, and the reserve was not necessary to cover additional costs in Year Y, CAT LLC would only need to collect an additional \$15 million for the reserve in Year Y+1, not \$25 million.

D. Additional Clarity regarding Number of Historical CAT Assessments

CAT LLC proposes to amend the CAT NMS Plan to reflect the fact that there may be more than one Historical CAT Assessment. Specifically, CAT LLC proposes to amend Proposed Section 11.3(b) to state that "[t]he Operating Committee will establish one or more fees (each a "Historical CAT Assessment") to be payable by Industry Members with regard to CAT costs previously paid by the Participants ("Past CAT Costs") as follows:". In addition, CAT LLC proposes to make conforming revisions to Proposed Sections 11.(3)(b)(i)(A), 11.3(b)(i)(B), 11.3(b)(i)(C), 11.3(b)(i)(D)(I), 11.3(b)(i)(D)(II), 11.3(b)(i)(E), 11.3(b)(ii), 11.3(b)(iii)(A) and 11.3(b)(iii)(B) of the CAT NMS Plan to reflect that there may be more than one Historical CAT Assessment.

E. Additional CAT Cost Detail

1. Description of Additional CAT Cost Detail; Sufficient Detail to Demonstrate That Costs Are "Reasonable and Appropriate"

In the Partial Amendment, CAT LLC proposed to provide additional detail regarding budgeted and actual CAT costs.²⁴ Such detailed information would provide Industry Members and other interested parties with a clear understanding of the calculation of the CAT fees and

See Partial Amendment at 74188.

their relationship to CAT costs. Commenters, however, have urged CAT LLC to provide even more granular details regarding budgeted and actual CAT cost. In particular, SIFMA recommends a further breakdown of technology costs to address (i) cloud hosting services; (ii) operating fees; (iii); CAIS operating fees; and (iv) change request fees. Accordingly, CAT LLC proposes to require further details about CAT costs as described below, including a further breakdown of technology costs.

First, in the Partial Amendment, CAT LLC proposed to amend Proposed Section 11.1(a)(i) to require that "[w]ithout limiting the foregoing, the budgeted CAT costs include technology, legal, consulting, insurance, professional and administration and public relations cost, a reserve and such other cost categories as determined by the Operating Committee to be included in the budget." In order to provide more granular information regarding technology costs, which represent more than 90% of CAT costs, CAT LLC proposes to require the inclusion of five subcategories of technology costs in the budget: (1) cloud hosting services, (2) operating fees, (3) CAIS operating fees, (4) change request fees, and (5) capitalized developed technology costs. Breaking out technology costs in this manner is consistent with how such costs are broken out in the CAT budgets available on the CAT website. Accordingly, CAT LLC proposes to amend Proposed Section 11.1(a)(i) of the CAT NMS Plan to reference these five subcategories of technology costs.

A commenter requested that CAT LLC provide a further breakdown of the category of cloud hosting services into production costs, including linker costs and storage costs. ²⁸ CAT LLC currently does not propose to require the disclosure of such additional subcategories of cost information at this time. However, CAT LLC will consider the need to provide additional cost disclosure going forward.

Furthermore, CAT LLC has determined not to provide more detailed subcategories for the other cost categories (that is, legal, consulting, insurance, professional and administration, and public relations costs) at this time. Breaking out these costs into further subcategories would establish new subcategories that are not set forth in the budgets. In addition, these costs in the aggregate represent less than seven percent (7%) of total CAT costs, with professional and administration costs and public relations costs, in particular, each representing less than one percent (1%) of overall CAT costs. Therefore, CAT LLC does not believe that these costs warrant additional subcategory disclosure. CAT LLC further notes that it is not considered a best practice to publicly disclose detailed legal or insurance information, which is particularly sensitive. Nevertheless, the Participants note that the CAT NMS Plan requires that detailed cost information be made available to the Commission upon request, and detailed information on CAT costs and operations is regularly made available to the Commission staff and the Advisory Committee on a confidential basis.

Second, in the Partial Amendment, CAT LLC proposed to amend Proposed Section 11.3(a)(iii)(B) of the CAT NMS Plan to require that the fee filings to be made pursuant to

²⁵ SIFMA Letter II at 6.

²⁶ *Id*

The CAT LLC budgets are available at https://www.catnmsplan.com/cat-financial-and-operating-budget.

SIFMA Letter II at 6.

Section 19(b) of the Exchange and Rule 19b-4 for CAT Fees to include, among other things, a brief description of each line item in the budget (including technology, legal, consulting, insurance, professional and administration, and public relations costs, a reserve and such other categories as 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.²⁹ To provide additional detail about CAT costs, CAT LLC proposes to require the inclusion of a description of the same five subcategories of technology costs discussed above (*i.e.*, cloud hosting services, operating fees, CAIS operating fees, change request fees and capitalized developed technology costs) in the description of technology costs for the fee filings for CAT Fees. Accordingly, CAT LLC proposes to amend Proposed Section 11.3(a)(iii)(B) of the CAT NMS Plan to reference these five subcategories of technology costs.

Furthermore, CAT LLC proposes to amend Proposed Section 11.3(a)(iii)(B) of the CAT NMS Plan to clarify 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. Therefore, CAT LLC proposes to add the following sentence to Proposed Section 11.3(a)(iii)(B) of the CAT NMS Plan: "The information provided in this Section would be provided with sufficient detail to demonstrate that the budget for the upcoming year or part of year, as applicable, is reasonable and appropriate."

Third, in the Partial Amendment, CAT LLC proposed to require that the fee filings to be made pursuant to Section 19(b) of the Exchange and Rule 19b-4 for Historical CAT Assessments include a brief description of the amount and type of the Historical CAT Costs. ³⁰ CAT LLC proposes to amend this provision to require the similar level of detail in fee filings for the Historical CAT Assessments as are required for CAT Fees. Accordingly. CAT LLC proposes to amend Proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan to require the inclusion in the fee filings of a brief description of the amount and type of the 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.

In addition, CAT LLC proposes to amend Proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan 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."

Furthermore, CAT LLC proposes to amend Proposed Section 11.3(b)(i)(C) of the CAT NMS Plan to further clarify the amount to be collected via the Historical CAT Assessments. Specifically, CAT LLC proposes to add the clarifying statement that "[e]each 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." This statement

See Partial Amendment at 74189.

³⁰ *Id.* at 74191.

reiterates the requirement set forth in Proposed Section 11.3(b)(iii)(A) of the CAT NMS Plan regarding the calculation of the Historical CAT Assessment, which requires the multiplication of the number of executed equivalent shares in the transaction by <u>one-third</u> and by the Historical Fee Rate. Each CEBS and CEBB pays one-third, and, therefore, two-thirds of the Historical CAT Costs would be collected from CAT Executing Brokers.

2. Description of Historical CAT Costs for Prior to 2022

In keeping with the requirement to provide enhanced disclosure about CAT costs as described in the paragraph E.1 above, the following summarizes the Historical CAT Costs for prior to 2022. CAT LLC previously described these costs in its August Response Letter.³¹ However, additional cost details regarding the subcategories for technology costs are described below, as are additional details regarding costs excluded from Historical CAT Costs. These Historical CAT Costs figures are being provided in this letter for transparency purposes only. Such costs will be described in the relevant fee filings that the Participants submit pursuant to Section 19(b) under the Exchange Act and Rule 19b-4 thereunder regarding Historical CAT Assessments.

a. Historical CAT Costs Incurred Prior to June 22, 2020 (i.e., Pre-FAM Costs)

Historical CAT Costs would include costs incurred by CAT prior to June 22, 2020 and already funded by the Participants, excluding Excluded Costs (described further below). Historical CAT Costs would include costs for the period prior to June 22, 2020 of \$143,919,521. Participants would remain responsible for one-third of this cost (which they have previously paid), and Industry Members would be responsible for the remaining two-thirds, with CEBBs paying one-third (\$47,973,174) and CEBSs paying one-third (\$47,973,174). The following table breaks down the Historical CAT Costs for the period prior to June 22, 2020 into the categories set forth in Proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan.

Operating Expense	Historical CAT Costs for Period Prior to June 22, 2020
Capitalized Developed	\$71,475,941
Technology Costs and	
Transition Fee*	
Technology Costs:	\$33,568,579
Cloud Hosting Services	\$10,268,840
Operating Fees	\$21,085,485
CAIS Operating Fees	\$2,072,908
Change Request Fees	\$141,346
Legal	\$19,674,463
Consulting	\$17,013,414
Insurance	\$880,419

Letter from Michael Simon, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, Commission (August 16, 2022) (the "August Response Letter") at 23-29.

Professional and administration	\$1,082,036
Public relations	\$224,669
Total Operating Expenses	\$143,919,521

^{*} The non-cash amortization of these capitalized developed technology costs of \$2,115,545 incurred during the period prior to June 22, 2020 have been appropriately excluded from the above table.

b. CAT Costs Incurred in Period 1

Historical CAT Costs would include costs incurred by CAT and already funded by Participants during FAM Period 1, which covers the period from June 22, 2020 – July 31, 2020. The Historical CAT Costs for Period 1 are \$6,377,343. Participants would remain responsible for one-third of this cost (which they have previously paid) (\$2,125,781), and Industry Members would be responsible for the remaining two-thirds, with CEBBs paying one-third (\$2,125,781) and CEBSs paying one-third (\$2,125,781). The following table breaks down the Historical CAT Costs for Period 1 into the categories set forth in Proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan.

Operating Expense	Historical CAT Costs for
	Period 1
Capitalized Developed	\$1,684,870
Technology Costs*	
Technology Costs:	\$3,996,800
Cloud Hosting Services	\$2,642,122
Operating Fees	\$1,099,680
CAIS Operating Fees	\$254,998
Change Request Fees	-
Legal	\$481,687
Consulting	\$137,209
Insurance	-
Professional and administration	\$69,077
Public relations	\$7,700
Total Operating Expenses	\$6,377,343

^{*} The non-cash amortization of these capitalized developed technology costs of \$362,121 incurred during Period 1 have been appropriately excluded from the above table.

c. CAT Costs Incurred in Period 2

Historical CAT Costs would include costs incurred by CAT and already funded by Participants during FAM Period 2, which covers the period from August 1, 2020 – December 31, 2020. The Historical CAT Costs for Period 2 are \$42,976,478. Participants would remain responsible for one-third of this cost (which they have previously paid) (\$14,325,493), and Industry Members would be responsible for the remaining two-thirds, with CEBBs paying one-

third (\$14,325,492.70) and CEBSs paying one-third (\$14,325,492.70). The following table breaks down the Historical CAT Costs for Period 2 into the categories set forth in Proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan.

Operating Expense	Historical CAT Costs for
	Period 2
Capitalized Developed	\$6,761,094
Technology Costs*	
Technology Costs:	\$31,460,033
Cloud Hosting Services	\$20,709,212
Operating Fees	\$9,108,700
CAIS Operating Fees	\$1,590,298
Change Request Fees	\$51,823
Legal	\$2,766,644
Consulting	\$532,146
Insurance	\$976,098
Professional and administration	\$438,523
Public relations	\$41,940
Total Operating Expenses	\$42,976,478

^{*} The non-cash amortization of these capitalized developed technology costs of \$1,892,505 incurred during Period 2 have been appropriately excluded from the above table.

d. CAT Costs Incurred in Period 3

Historical CAT Costs would include costs incurred by CAT and already funded by Participants during FAM Period 3, which covers the period from January 1, 2021 – December 31, 2021. The Historical CAT Costs for Period 3 are \$144,415,268. Participants would remain responsible for one-third of this cost (which they have previously paid) (\$48,238,423), and Industry Members would be responsible for the remaining two-thirds, with CEBBs paying one-third (\$48,238,423) and CEBSs paying one-third (\$48,238,423). The following table breaks down the Historical CAT Costs for Period 3 into the categories set forth in Proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan.

Operating Expense	Historical CAT Costs for Period 3
Capitalized Developed	\$10,763,372
Technology Costs*	
Technology Costs:	\$123,639,402
Cloud Hosting Services	\$94,574,759
Operating Fees	\$23,106,091
CAIS Operating Fees	\$5,562,383
Change Request Fees	\$396,169
Legal	\$6,333,248

Consulting	\$1,408,209
Insurance	\$1,582,714
Professional and administration	\$595,923
Public relations	\$92,400
Total Operating Expenses	\$144,415,268

^{*} The non-cash amortization of these capitalized developed technology costs of \$5,108,044 incurred during Period 3 have been appropriately excluded from the above table.

e. Excluded Costs

As described in the August Response Letter, the Historical CAT Costs would not include two categories of CAT costs: (1) \$48,874,937 of Excluded Costs, and (2) \$14,749,362 of costs related to the termination of the relationship with the Initial Plan Processor.³² The Participants would remain responsible for 100% of these costs, which total \$63,624,299. CAT LLC believes that the exclusions of these costs addresses concerns expressed by commenters about costs incurred related to the period of the operation of the Initial Plan Processor.³³

First, Historical CAT Costs would exclude Excluded Costs, which are all CAT costs incurred from November 15, 2017 through November 15, 2018. CAT LLC determined to exclude all costs during this one-year period from fees charged to Industry Members due to the delay in the start of reporting to the CAT. Excluded Costs are \$48,874,937. The Participants would remain responsible for 100% of the \$48,874,937 of Excluded Costs. The following table breaks down the Excluded Costs into the categories set forth in Proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan.

Operating Expense	Excluded Costs
Capitalized Developed	\$37,852,083
Technology Costs	
Technology Costs:	-
Cloud Hosting Services	-
Operating Fees	-
CAIS Operating Fees	-
Change Request Fees	-
Legal	\$6,143,278
Consulting	\$4,452,106
Insurance	-
Professional and administration	\$340,145
Public relations	\$87,325
Total Operating Expenses	\$48,874,937

See August Response Letter at 28-29.

SIFMA Letter II at 6.

Second, Historical CAT Costs would not include \$14,749,362 of costs related to the conclusion of the relationship with the Initial Plan Processor.³⁴ The Participants would remain responsible for 100% of the \$14,749,362 of these costs.

Accordingly, Historical CAT Costs would exclude a total of \$63,624,299 of prior CAT costs, and the Participants would remain responsible for 100% of these costs.

F. Effect of Financial Accountability Milestones

CAT LLC recognizes that the collection of CAT Fees and Historical CAT Assessments from Industry Members are subject to Section 11.6 of the CAT NMS Plan regarding the Financial Accountability Milestones. Accordingly, CAT LLC proposes to clarify that Participants will not make CAT fee filings until any applicable Financial Accountability Milestone has been satisfied. Specifically, CAT LLC proposes to add Proposed Section 11.3(a)(iii)(C) to the CAT NMS Plan. This provision would state that "[n]o Participant will make a filing with the SEC pursuant to Section 19(b) of the Exchange Act regarding any CAT Fee related to Prospective CAT Costs until the Financial Accountability Milestone related to Period 4 described in Section 11.6 has been satisfied." Similarly, CAT LLC proposes to add Proposed Section 11.3(b)(iii)(B)(III) to the CAT NMS Plan. This provision would state that "[n]o Participant will make a filing with the SEC pursuant to Section 19(b) of the Exchange Act regarding any Historical CAT Assessment until any applicable Financial Accountability Milestone described in Section 11.6 has been satisfied."

G. Loans to CAT LLC

In the Partial Amendment, CAT LLC clarified that Participants would not be obligated to pay the Historical CAT Assessment as Participants have previously paid 100% of Past CAT Costs via loans to CAT LLC, and the Historical CAT Assessment paid by Industry Members would be used by CAT LLC to repay a portion of the loans made to CAT LLC by the Participants on a pro rata basis.³⁵ Specifically, Proposed Section 11.3(b)(ii) of the CAT NMS Plan, as set forth in the Partial Amendment, would state that:

Because Participants previously have paid Past CAT Costs via loans to the Company, Participants would not be required to pay the Historical CAT Assessment. The Historical CAT Assessment to be paid by Industry Members and collected by the Company will be used by the Company to repay a portion of the loans from the Participants to the Company on a pro rata basis. The Historical CAT Assessment is designed to recover two-thirds of the Historical CAT Costs.

CAT LLC proposes to amend Proposed Section 11.3(b)(ii) of the CAT NMS Plan to clarify further how the loans from the Participants to CAT LLC would be repaid, and that the portion of

See August Response Letter at 23.

See Partial Amendment at 74191; Partial Amendment Letter at 18.

the loans from the Participants to CAT LLC that are not required to be repaid via the Historical CAT Assessments would be cancelled.

The Partial Amendment stated that the Historical CAT Costs collected from Industry Members would be allocated pro rata, based on the outstanding amounts due under the loans to the Participants for repayment of outstanding loans to the Company. CAT LLC proposes to amend Proposed Section 11.3(b)(ii) of the CAT NMS Plan to clarify this point in the language of the Plan by replacing the following sentence: "The Historical CAT Assessment to be paid by Industry Members and collected by the Company will be used by the Company to repay a portion of the loans from the Participants to the Company on a pro rata basis," with the following sentence: "In lieu of a Historical CAT Assessment, the Participants' one-third share of Past CAT Costs will be paid by the cancellation of loans made by the Company on a pro rata basis based on the outstanding loan amounts due under the loans." CAT LLC believes that the revised language more clearly describes how the loans will be treated under the Funding Proposal.

H. Fee Filing Process for Historical CAT Assessments

Questions have been posed regarding how many fee filings pursuant to Section 19(b) of the Exchange Act Participants would be required to make with regard to the Historical CAT Assessments. CAT LLC proposes to clarify that each Participant will be required to file a fee filing pursuant to Section 19(b) of the Exchange Act to describe each Historical CAT Assessment. Accordingly, CAT LLC proposes to describe this requirement in Proposed Section 11.3(b)(iii)(B)(I) of the CAT NMS Plan, which 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."

I. Mid-Year Commencement of CAT Fees

An inquiry also has been made as to whether the first CAT Fee related to Prospective CAT Costs could commence during the year (due to, for example, mid-year approval of the CAT Fee by the SEC), rather than at the beginning of the year, and, if so, how it would be calculated. CAT LLC believes that it would be appropriate to commence the first CAT Fee either at the beginning of the year or during the year, whichever is closest to the time that such a CAT Fee could become effective, so as to seek prompt recovery of CAT costs. If the CAT Fee were to commence during the year, the first CAT Fee would be calculated in the same way that a mid-year CAT Fee would be calculated. To clarify this approach, CAT LLC proposes to add Proposed Section 11.3(a)(i)(A)(IV) to the CAT NMS Plan. This provision would state that "[f]or the avoidance of doubt, 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 described in paragraph (II) of this Section."

J. Details regarding CAT Fee Calculations

See Partial Amendment at 74191; Partial Amendment Letter at 37.

Commenters have requested the ability to understand the details regarding the calculation of their CAT fees. Accordingly, CAT LLC proposes to clarify that it will provide Participants and CAT Executing Brokers with details regarding the calculation of their CAT fees upon request. Specifically, CAT LLC proposes to add Proposed Section 11.3(a)(iv) to the CAT NMS Plan. This provision would state 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." Similarly, CAT LLC proposes to add Proposed Section 11.3(b)(iv) to the CAT NMS Plan. This provision would state that "[d]etails regarding the calculation of a CAT Executing Broker's Historical CAT Assessment will be provided upon request to such CAT Executing Broker."

III. Response to Comments

CAT LLC has considered each of the comment letters as well as other comments raised in response to the Partial Amendment. In this Section III, CAT LLC responds to the comments that were not addressed in Section II of this letter.

A. Past CAT Costs: Collected from Current versus Past Industry Members and Use of Prior Month's Transactions

Comments have been received regarding the proposal to collect CAT fees related to Past CAT Costs from current Industry Members and based on transaction activity from the prior month, as opposed to from Industry Members that were active at the time when the Past CAT Costs were incurred and based on trading activity from the time when the Past CAT Costs were incurred.³⁷ One commenter recommended imposing fees on Industry Members based on the lesser of the fees calculated on current activity versus fees calculated on past activity.³⁸ CAT LLC continues to believe that the Historical CAT Assessment is appropriately assessed to current Industry Members based on current market activity.³⁹

The Operating Committee believes that it is appropriate to collect the Historical CAT Assessment from current Industry Members based on current market activity because current market participants are the beneficiaries of the regulatory value provided by the CAT to the securities markets. The SEC has emphasized that the CAT provides a benefit to all market participants, ⁴⁰ and, therefore, current Industry Members are benefitting from the efforts to create and operate the CAT.

In addition, the approach recognizes the many practical difficulties of imposing fees retroactively on Industry Members' market activity from the past, sometimes years in the past as the relevant recovery period extends to 2012. For example, one of the practical difficulties may include the fact that some Industry Members that would be subject to such a retroactive fee may no longer be in business or no longer registered as a broker-dealer that is subject to the

For prior discussions of this issue by CAT LLC, see Partial Amendment Letter at 39-40.

³⁷ SIFMA Letter II at 6-7.

³⁸ *Id.* at 7.

See generally Securities Exchange Act Rel. No. 67457 (Jul. 18, 2012), 77 Fed. Reg. 45722 (Aug. 1, 2012) ("Rule 613 Adopting Release").

jurisdiction of the Participants or SEC. Indeed, this is likely to be a substantial issue. For example, in the SEC's approval order of the CAT NMS Plan, the SEC used an estimate of 1800 broker-dealers subject to CAT reporting for its cost estimates. However, the number of current Industry Members has greatly diminished from these early estimates to approximately 1100. Therefore, at least approximately 40% of the broker-dealers that may have been subject to CAT reporting in 2012 are no longer CAT Reporters.

Another practical issue involves the difficulty of accurately determining the transactions in Eligible Securities of the Industry Member for the past decade that would be subject to CAT fees. Because the recovery period for Past CAT Costs spans a period in which the CAT was not in existence yet, as well as periods in which CAT reporting was being phased in, the CAT may not have any record of relevant transactions from earlier periods, and it may not have a complete record of the relevant transactions for later periods. The SEC anticipated the recovery of CAT fees after such costs were incurred, as it contemplated the recovery of CAT costs for the creation of the CAT as well as its implementation and maintenance.⁴³

Moreover, imposing retroactive fees for past market activity could raise fairness issues. For example, because the fee would be retroactive, market participants could not have taken into consideration the CAT fee when they decided to enter into the transactions in the past. In addition, given the passage of time, past CAT Reporters may not be in a position to pay a fee related to earlier market activity.

In addition, CAT LLC notes that the SEC has approved similar funding practices with regard to new Participants for the CAT as well as new participants for other national market system plans. In each case, the new participant is required to pay a fee to join the plan, and the fee is based on past costs for creating, implementing and maintaining the plan at issue. ⁴⁴ As a result, a new participant would be required to pay a fee for costs incurred in the past by the relevant plan. For example, Section 3.3 of the CAT NMS Plan states that, to become a new Participant to the CAT NMS Plan, the applicant must:

pay a fee to the Company in an amount determined by a Majority Vote of the Operating Committee as fairly and reasonably compensating the Company and the Participants for costs incurred in creating, implementing, and maintaining the CAT, including such costs incurred in evaluating and selecting the Initial Plan Processor and any subsequent Plan Processor and for costs the Company incurs in providing for the prospective Participant's participants in the Company, including after consideration of the factors identified in Section 3.3(b) (the "Participation Fee").

As this provision indicates, new CAT Participants are required to contribute to paying for costs incurred since the inception of the CAT. Indeed, the costs related to evaluating and selecting the

See, e.g., Section III(b) of the CTA Plan; Section VIII of the UTP Plan.

_

Securities Exchange Act Rel. No. 79318 (Nov. 15, 2016), 81 Fed. Reg. 84696, 84862 (Nov. 23, 2016) ("CAT NMS Plan Approval Order").

An average of 1,124 unique CAT Reporters sent transaction data to the CAT from July 1, 2022 to August 8, 2022.

See, e.g., Rule 613(a)(1)(vii)(D) of Regulation NMS under the Exchange Act.

Initial Plan Processor were incurred in 2017 and before.⁴⁵ For example, a CAT Participant applicant in 2022 may be required to pay a fee that reflects CAT costs incurred years ago. Similarly, the Funding Proposal would require current Industry Members to pay a share of CAT costs from years ago.

B. Charging CAT Executing Brokers

In the Partial Amendment, CAT LLC proposed to impose the payment obligation on the executing broker for the buyer for the transaction instead of the clearing broker for the buyer for the transaction, and impose the payment obligation on the executing broker for the seller instead of the clearing broker for the seller for the transaction. Two commenters have questioned the proposal to charge fees to executing brokers rather than clearing brokers. AT LLC continues to support the proposal to charge CAT fees to executing brokers, and believes that such an approach is consistent with the requirements of the Exchange Act.

First, the proposal to charge executing brokers is broadly supported by the industry. ⁴⁸ For example, SIFMA has supported charging executing brokers, and continues to support charging executing brokers, rather than clearing brokers. ⁴⁹ In one of its comment letters, SIFMA stated that "we support the Participants' decision to allocate CAT costs to executing brokers rather than clearing brokers." ⁵⁰

Second, the proposal to rely on executing brokers, rather than clearing brokers, was proposed in direct response to concerns raised by SIFMA and other commenters regarding the cost burden that clearing firms would experience if clearing brokers were charged CAT fees. ⁵¹ As noted by commenters, imposing the fee payment obligation on clearing brokers, rather than on executing brokers more generally, potentially may impose a significant financial burden on clearing firms if the fees imposed on clearing firms are not passed through to their clients.

Third, charging the CEBBs and CEBSs would reflect the executing role the CEBB and CEBS have in each transaction. Such a fee model is currently used and well-known in the securities markets. For example, SRO members regularly pay transaction-based fees. As a result, the CAT fees could be paid by Industry Members without requiring significant and potentially costly changes.

Fourth, 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. The

See Partial Amendment at 74185; Partial Amendment Letter at 5.

Letter from Participants, to Brent J. Fields, Secretary, SEC re: Selection of Plan Processor for the National Market System Plan Governing Consolidated Audit Trail (Jan. 18, 2017).

See Proposed Sections 11.3(a)(iii)(A) and (b)(iii)(A) of the CAT NMS Plan.

DASH Letter at 1-2; Wolverine at 1-2.

See SIFMA Letter I at 2; Letter from Ellen Greene, Managing Director, Equities and Options Market Structure, SIFMA, to Vanessa Countryman, Secretary, SEC (Oct. 7, 2022) ("October SIFMA Letter") at 4-5.
 SIFMA Letter II at 7. See also SIFMA Letter I at 2 ("[W]e support changing the payment obligation to executing brokers.").

See Partial Amendment at 74185; Partial Amendment Letter at 5.

CEBBs and CEBSs are identified on the transaction reports, thereby streamlining the CAT collection process.

Fifth, CAT LLC does not believe that the proposal would burden executing brokers. The CEBBs and CEBSs could determine, but would not be required, to pass their CAT fees through to their clients, who, in turn, could pass their CAT fees to their clients, until the fee is imposed on the ultimate participant in the transaction. With such a pass through, the CEBBs and CEBSs would not ultimately incur the cost of all CAT fees related to their transactions. It is common practice in the industry for broker-dealers to pass transaction-based fees through to their clients, and CAT fees would introduce no unique issues for passing the CAT fee on to clients.

Finally, one commenter argues that clearing brokers "should remain responsible for CAT fees because Clearing Brokers are in the best position to 'pass-through' or collect CAT fees from other industry participants." This commenter argues that "Clearing Brokers are responsible for collecting fees such as Options Regulatory Fees, OCC and SEC-related fees and have demonstrated their ability to both pay and 'pass-through' fees to their clients in a timely and efficient manner. The responsibility for CAT fees should be no different than these other fees." The proposal to charge CAT Executing Brokers CAT fees only addresses the party responsible for the payment of the CAT fee. As an administrative matter regarding the method of payment, each CAT Executing Broker may seek to enter into a bilateral arrangement with its clearing broker for the clearing broker to collect and pass-through the CAT fees as it does in other contexts.

C. Plan Amendment Process

Certain commenters have argued that the Partial Amendment should have been treated as a new filing, rather than an amendment to the existing filing regarding the Funding Proposal. ⁵⁴ CAT LLC disagrees with this assertion, and agrees with the SEC's determination to treat the filing as a partial amendment to the existing filing. Contrary to the commenters' assertions, the proposed amendments in the Partial Amendment were made as a result of extensive public discussions regarding the Funding Proposal over many months. For example, the commenters argue that the shift from reliance on clearing brokers to executing brokers is a significant change that requires additional comment. However, commenters have had ample time to consider this proposal. Moreover, SIFMA itself specifically recommended the use of the executing broker many months ago in response to the Proposed Amendment, ⁵⁵ and the proposal to change the payment obligation from clearing brokers to executing brokers was made in response to SIFMA's comments. In addition, the SEC requested comment on this specific issue in its order instituting proceedings regarding the Proposed Amendment. ⁵⁶ Additional time to consider this issue would serve no purpose, and would introduce unnecessary delays in the implementation of the Funding Proposal. To require otherwise would create the perverse incentive of discouraging

Wolverine Letter at 1.

⁵³ Ia

SIFMA Letter I at 1-2; DASH Letter at 1; and Wolverine Letter at 1.

October SIFMA Letter at 4-5.

Request for Comment No. 8, OIP at 54578.

the Participants from being responsive to any industry comments, so as not to restart a new notice and review period for the filing of up to 300 days.

D. FINRA Fee

Under the Funding Proposal, for each transaction in Eligible Securities based on CAT Data, the CEBS, the CEBB and the applicable Participant for the transaction each would pay a fee calculated by multiplying the number of executed equivalent shares in the transaction and the applicable Fee Rate and dividing the product by three. The applicable Participant for the transaction would be the national securities exchange on which the transaction was executed, or FINRA for each transaction executed otherwise than on an exchange. Commenters have questioned whether (1) the assessment of a CAT fee on FINRA would indirectly impose FINRA's CAT fee on Industry Members, and therefore increase Industry Members' share of CAT fees; (2) if so, whether this would result in a burden on competition for FINRA and for Industry Members, particularly those who trade OTC Equity Securities; and (3) whether FINRA should be assessed a CAT fee in the same manner as the national securities exchanges. One commenter suggested charging FINRA a nominal regulatory usage fee rather than charging FINRA like the exchange Participants. CAT LLC believes that the proposed CAT fees for FINRA are consistent with the Exchange Act and the CAT NMS Plan.

The Funding Proposal is designed to be neutral as to the manner of execution and place of execution. The CAT fees would be the same regardless of whether the transaction is executed on an exchange or in the over-the-counter market. 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-for-profit entity. Their usage of CAT Data, either directly or indirectly through regulatory services agreements, would be for the same regulatory purposes in accordance with those obligations. By treating each Participant the same, the CAT fees would not become a competitive issue by and among the Participants.

In addition, the size of FINRA's fee is calculated based on the activity in the over-the-counter market, which is substantial. For example, 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. ⁵⁸ Accordingly, approximately 34% of the executed equivalent share volume in Eligible Securities took place in the over-the-counter market.

Moreover, FINRA and the exchanges should not be evaluated differently based upon the potential for any particular Participant to pass its CAT fees onto its members through regulatory, trading or other fees. Each Participant will need to determine for itself how it will obtain the funds to pay for its CAT fees. Because each Participant, not just FINRA, is using CAT Data to satisfy the same self-regulatory obligations, each Participant may determine to charge their members fees to fund their share of the CAT fees, and the Exchange Act specifically permits self-regulatory organizations to do so, provided the fee filing requirements of the Exchange Act

SIFMA Letter II at 4.

These figures for executed equivalent share volume for 2021 are set forth in the illustrative example in the Proposing Release. *See* Proposing Release at 33246.

are satisfied. Indeed, in approving the CAT NMS Plan, the SEC stated that "the Exchange Act specifically permits the Participants to charge members fees to fund their self-regulatory obligations." ⁵⁹

Furthermore, FINRA and the exchanges should not be evaluated differently based upon the potential for a particular Participant to recoup its fees through revenue-generating activity other than fees imposed on its members. In this regard, SIFMA has argued that "the proposal is flawed because it fails to appropriately consider that Industry Members pay the full costs of operating FINRA." This assertion is incorrect. In fact, FINRA, just like the exchange Participants, has revenue sources other than membership fees. For example, FINRA generates significant revenues via regulatory services agreements with the exchanges, among other sources. These sources, too, may be used to pay CAT fees, and, if they are used, it would not lead to an increase in fees for Industry Members, but rather the exchange Participants. Any review of how the Participants obtain their funds to pay CAT fees is beyond the scope of the CAT fee filing.

The issues raised regarding the possibility of passing FINRA's allocation to Industry Members also fail to recognize the basic fact that Industry Members themselves face the same issue that they raise with regard to FINRA. Industry Members may determine to pass their CAT fees through to their customers, just as they may do with Section 31-related fees and other fees. Accordingly, the two-thirds allocation of CAT costs to Industry Members may be entirely passed through to investors, thereby alleviating Industry Members of any burden of funding the CAT. As one commenter, a member of the Advisory Committee for the CAT and the former Chief Economist of the Commission, previously noted, "[b]ecause the markets for exchange, dealing, and brokerage services are all highly competitive in the long run, any fees imposed on any of these groups will ultimately pass through to the retail and institutional traders who use the markets." 62

Finally, CAT LLC does not agree with one comment that CAT LLC should not treat FINRA as a market center for CAT funding purposes when it has not treated FINRA as market center for governance purposes under the National Market System Plan Regarding Consolidated Equity Market Data ("CT Plan"). 63 Although the CT Plan and the CAT Plan are both national market system plans, their purpose and implementation are different. The CAT NMS Plan, as approved by the Commission, explicitly contemplates charging fees to all Participants, including FINRA. For example, Section 11.1(b) of the CAT NMS Plan states that "[s]ubject to Section 11.2, the Operating Committee shall have discretion to establish funding for the Company, including: (i) establishing fees that the Participants shall pay." In addition, the purpose of the CAT is solely for regulatory purposes; it provides a regulatory system to facilitate the

See 2021 FINRA Annual Financial Report at 43.

⁵⁹ CAT NMS Plan Approval Order at 84794.

See SIFMA October Letter at 3.

Letter from Larry Harris, Fred V. Keenan Chair in Finance, USC Marshal School of Business, to Vanessa Countryman, Secretary, SEC (June 21, 2022).

Letter from Ellen Greene, Managing Director, Equities and Options Market Structure, and Joseph Corcoran, Managing Director, Associate General Counsel, SIFMA, to Vanessa Countryman, Secretary, SEC (Oct. 7, 2022).

See also Sections 11.2 and 11.3 of the CAT NMS Plan.

performance of the self-regulatory obligations of all the Participants, including the exchanges and FINRA. In contrast, the CT Plan governs the public dissemination of real-time consolidated equity market data for NMS stocks.

E. One-Third/One-Third Allocation Between CEBS, CEBB and Participant

A commenter also commented on the proposed cost funding allocation in which the CEBS, the CEBB and the relevant Participant each pay one-third of the fee obligation for each transaction. Another commenter noted that it "generally supports the proposed distribution of costs among Plan Participants and Industry Members in the [Proposed Amendment]." CAT LLC continues to believe that the proposed allocation between the CEBS, CEBB and relevant Participant satisfies the requirements of the Exchange Act.

The proposed 1/3, 1/3 allocation recognizes the three primary roles in each transaction: the buyer, the seller and the market regulator, and assigns an equal one-third share of the fee per transaction to each of these three roles. The Exchange Act itself recognizes the importance of these three roles in a transaction by imposing registration and other regulatory obligations on the broker-dealers and regulator involved in a transaction. This allocation is similar to the approach taken with the FINRA transaction activity fee, the options regulatory fees and Section 31 sales value fees, and also recognizes the role of the market regulator and the buyer in the transaction as well as the seller.

Furthermore, the allocation of two-thirds of the CAT costs to Industry Members and only one-third to Participants recognizes that a substantial portion of CAT costs originates from Industry Members. CAT costs are dominated by technology costs, and the predominant technology costs are data processing (*e.g.*, linker) and storage costs. The data processing and storage costs are related to message traffic and the complexity of the reporting requirements for CAT, which, in turn, are determined by market activity. Industry Members are responsible for originating trading activity that necessitates message traffic to the CAT, and the complexity of Industry Members' chosen business models contributes substantially to the costs of the CAT.

Moreover, allocating a greater percentage of the CAT costs to Participants would raise fairness issues in light of the greater financial resources of Industry Members. There are only 25 Participants and approximately 1100 Industry Members. Moreover, based upon an analysis of available CAT Reporter revenue, Participants only represented approximately 4% of the total CAT Reporter revenue while Industry Members represented 96% of the total CAT Reporter revenue. In addition, various individual Industry Members have revenue in excess of some or

An average of 1,124 unique CAT Reporters sent transaction data to the CAT from July 1, 2022 to August 8, 2022.

Wolverine Letter at 1.

See Securities Exchange Act Rel. No. 91555 (Apr. 14, 2021), 86 Fed. Reg. 21050, 20155 (Apr. 21, 2021). Industry Member revenue was calculated based on the total revenue reported in the Industry Member's FOCUS reports. Participant revenue was calculated based on revenue information provided in Form 1 amendments and/or publicly reported figures. Participants are not required to file uniform FOCUS-type reports regarding revenue like Industry Members. Accordingly, the revenue calculation for Participants is not as straightforward as for Industry Members.

all of the Participants. Accordingly, CAT LLC determined that allocating a higher percentage of the total CAT costs to the Participants was not a fair and equitable approach.

1. Commenter's Alternative Allocation Proposal: 50-50 Allocation

One commenter recommended allocating 50% of CAT costs to the Participant Exchanges and 50% to Industry Members. 68 The commenter did not offer a reasoned basis for why a 50-50 allocation would satisfy the standards set forth in the Exchange Act. The commenter merely proposes to provide a mathematically equal split between two groups without further justification. CAT LLC has previously considered and rejected a 50-50 allocation because, among other things, it would not provide an equitable allocation between and among Industry Members and Participants. Such an allocation raises fairness issues as Industry Members have far greater financial resources than the Participants, and the complexity of Industry Members' chosen business models contribute substantially to the costs of the CAT.

2. **Cost Effect of Complexity of Industry Member Reporting**

CAT LLC believes that Industry Members' chosen business models and their resulting trading activity are substantial drivers of CAT costs, and that, accordingly, it is reasonable to allocate two-thirds of CAT cost to Industry Members, among other reasons. One commenter argued that Participant activity is similarly complex, and, therefore, Industry Member complexity should not be a basis for the two-thirds allocation to Industry Members. ⁶⁹ However, this comment fails to recognize that the analysis is based on the effects of the business models on the costs of the CAT, not on the complexity of the market generally. The complexity of Industry Member activity adds significantly to the cost of the CAT in a way that Participant activity does not.

The complexity of Industry Members' chosen business models contributes substantially to the costs of the CAT. For example, in light of the complexity of market activity, the CAT's technical documentation must address hundreds of scenarios for Industry Members, including, for example, scenarios related to representative orders, internal routing, order modification, order cancellation, ATS scenarios, OTC scenarios, foreign scenarios, child orders, proprietary orders, fractional shares, stop and conditional orders, RFQs, floor activity and more. The processing and storage of data related to such a large number of complex reporting scenarios requires very complex algorithms, which, in turn, lead to significant data processing and storage costs. In contrast, the Participants do not originate market activity or orders or otherwise bring this level of complexity to the markets. Accordingly, CAT LLC believes that it is reasonable and equitable to require that Industry Members pay a substantial portion of CAT costs. CAT LLC further notes that the commenter's references to the potential market complexities related to the SEC's recent market structure proposals are not relevant to the CAT discussion, as they are only proposals and have not been approved.⁷⁰

⁶⁸ SIFMA Letter II at 4.

⁶⁹ *Id.* at 3-4. Id.

3. Internal Cost of Compliance by Industry Members

One commenter urged CAT LLC to take into consideration the internal costs incurred by Industry Members in complying with CAT requirements in determining how to allocate costs between Industry Members and Participants.⁷¹ This commenter advocates for allocating Industry Members a smaller portion of CAT costs because of their substantial CAT compliance costs. CAT LLC disagrees with this novel and unworkable approach.

There is no precedent for regulatory fees to be determined based on the cost of compliance of the regulated entity. Regulatory fees are intended to cover the regulatory costs of the entity providing the regulation. In the case of the CAT, the CAT funding model is intended to charge fees to pay for the direct costs of the CAT, not for ancillary compliance costs of Industry Members. Moreover, as a practical matter, accurately determining an Industry Member's compliance costs, without recordkeeping requirements and appropriate standards to determine expenses accurately, would be infeasible.

Furthermore, the substantial internal compliance costs of the Participants are not taken into consideration in the Funding Proposal. Each Participant incurs its own internal cost to comply with the requirements of the CAT NMS Plan, including, among other things, updating its systems for CAT reporting. Additionally, Participants have expended countless internal hours on the creation, implementation and operation of the CAT. These costs are not included in the funding model.

F. Cost Transparency

One commenter recommends a variety of proposals to increase transparency regarding CAT costs, including a mechanism to review budget information prior to a fee filing, additional details about cost transparency, and an independent cost review mechanism. ⁷³ CAT LLC believes that it has provided mechanisms to address each of the commenter's recommendations, as discussed below.

1. Budget Disclosure Prior to Fee Filings

The commenter recommends that CAT LLC provide Industry Members and other members of the public with an opportunity to review the budget that would be included in the SRO fee filings prior to such filings. The CAT LLC is currently providing such budget information to the public. CAT LLC publicly provides the annual operating budget for the CAT LLC as well as quarterly updates to the budget that occur during the year. This budget information is readily accessible to the public on a dedicated web page on the CAT NMS Plan. CAT LLC does not just provide the annual budget, or the mid-year budget, the two budgets that would be necessary for

_

⁷¹ *Id.* at 4-5.

See CAT NMS Plan Approval Order at 84795 n.1749 ("The Participants stated that the funding model provides a framework for the recovery of the costs to create, develop and maintain the CAT, and is not meant to address the cost of compliance for Industry Members and Participants with the reporting requirements of Rule 613.").

⁷³ SIFMA Letter II at 5-6.

⁷⁴ *Id*. at 5.

the fee filings; it also provides two other quarterly updates each year. Accordingly, Industry Members and other members of the public will have the opportunity to review regular updates of the budget more often than is necessary for the fee filings. Such transparency would allow Industry Members and other members of the public to understand the budget and changes thereto throughout the year.

2. Detailed Cost Transparency in Fee Filings

A commenter recommends that CAT LLC require Participants to provide additional details regarding technology costs in their fee filings. Specifically, the commenter recommends that the technology costs be broken down further in the fee filings into the following categories: (i) cloud hosting services; (ii) operating fees; (iii); CAIS operating fees; and (iv) change request fees. As discussed above in detail in Section II.E.1 of this letter, CAT LLC proposes to amend the Funding Proposal to require such a breakdown of technology costs in the fee filings.

3. Independent Cost Review Mechanism

The commenter also advocates for an independent review mechanism of proposed CAT expenditures for CAT costs. ⁷⁶ CAT LLC does not believe that such an approval process is necessary or appropriate. First, as a preliminary matter, unlike the Commission, CAT LLC is not a governmental entity, with a responsibility to the taxpaying public. It is a private entity subject to the regulatory requirements of the Exchange Act. Second, such a budget review process is unnecessary as any CAT fees proposed to be established pursuant to the CAT NMS Plan are already subject to the existing, well-established review practices under Rule 608 of Regulation NMS and Section 19(b) of the Exchange Act and Rule 19b-4 thereunder. Under those provisions, CAT fees must be filed with the SEC, thereby providing transparency and an opportunity for comment by the public, and may only be implemented if they satisfy the requirements of the Exchange Act. Third, the SEC has the ability to request budget and financial information from CAT LLC to the extent that it believes that such additional information is necessary for it to evaluate any CAT fee proposals.

G. Effect on Net Capital

Commenters raised a question regarding the effect of the Funding Proposal on the net capital of CAT Executing Brokers. The commenter stated that "assessing CAT fees to Executing Brokers could have an adverse effect on the net capital of those firms, whereas requiring Clearing Brokers to collect the fees would not affect the net capital of any industry member." The commenter further stated that

Under net capital rules, certain accounts receivable at a broker-dealer must be treated as non-allowable assets. These include both any accounts receivable from

76 *Id.* at 5-6

Wolverine Letter at 2.

⁷⁵ *Id.* at 6.

DASH Letter at 2; Wolverine Letter at 2.

a non-broker-dealer client, and any accounts receivable from a broker-dealer that is more than 30 days old. If Executing Brokers become responsible for the payment of CAT fees on behalf of their brokerage clients, then those Executing Brokers would be required to use their own firms' capital to pay for certain client CAT fees, essentially guaranteeing their clients' due bill, while awaiting payment from clients to reimburse the Executing Brokers for remuneration of those fees. Requiring Executing Brokers to functionally bridge the payments due from customer to CAT NMS will adversely affect the net capital of those Executing Brokers, particularly when considering that many accounts receivable for which a given Executing Broker is awaiting reimbursement must be treated as non-allowable assets.

CAT fees do not raise new or different issues for CAT Executing Brokers than other transaction-based fees charged to executing brokers. CAT fees will be billed on a monthly basis, and Section 11.4 of the CAT NMS Plan states that "Participants shall 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)." CAT Executing Brokers may determine whether to establish arrangements with their brokerage clients to account for costs incurred by the CAT Executing Broker on the client's behalf, including setting the terms under which they must be repaid by their broker-dealer clients such that receivables need not extend beyond 30 days.

H. Impact on Options versus Equities

CAT LLC believes that the Funding Proposal provides for a fair, reasonable and equitable treatment of the equities and options markets. As a preliminary matter, unlike other previously proposed fee models, the Funding Proposal does not allocate costs between the equities and options markets; instead, the fee attributable to a transaction in an equity or option security depends on equivalent executed share volume. The use of equivalent executed share volume is designed to normalize options and equities in the calculation of fees, and to recognize and address the different trading characteristics of different types of securities. Recognizing that Listed Options trade in contracts rather than shares, the Funding Proposal would count executed equivalent share volume differently for Listed Options. Specifically, each executed contract for a transaction in Listed Options would be counted based on the multiplier applicable to the specific Listed Option contract in the relevant transaction (*e.g.*, 100 executed equivalent shares or such other applicable equivalency).

IV. Illustrative Example of Historical CAT Assessment

A commenter has requested an illustrative example of the Funding Proposal to demonstrate how CAT fees would be calculated with regard to CEBBs and CEBSs. ⁷⁹ Accordingly, CAT LLC has prepared an example of how a Historical CAT Assessment would be calculated pursuant to the Funding Proposal for illustrative purposes only. The illustrative example is set forth in Exhibit C to this letter. Note that the calculation of any actual Historical

⁷⁹ SIFMA Letter I at 2-3; SIFMA Letter II at 8.

CAT Assessment for CAT costs from prior to 2022 would differ from this example in various ways, as described in more detail in <u>Exhibit C</u>.

* * * * *

Respectfully submitted,

MiM.

Mike Simon

CAT NMS Plan Operating Committee Chair Emeritus

cc: The Hon. Gary Gensler, Chair

The Hon. Hester M. Peirce, Commissioner

The Hon. Caroline A. Crenshaw, Commissioner

The Hon. Mark T. Uyeda, Commissioner

The Hon. Jaime Lizárraga, Commissioner

Mr. Hugh Beck, Senior Advisor for Regulatory Reporting

Mr. Haoxiang Zhu, Director, Division of Trading and Markets

Mr. David S. Shillman, Associate Director, Division of Trading and Markets

Mr. David Hsu, Assistant Director, Division of Trading and Markets

Mr. Mark Donohue, Senior Policy Advisor, Division of Trading and Markets

Ms. Erika Berg, Special Counsel, Division of Trading and Markets

CAT NMS Plan Participants

EXHIBIT A:

Cumulative Proposed Revisions to CAT NMS Plan

Additions <u>underlined</u>; deletions [bracketed]

* * * * *

ARTICLE I

DEFINITIONS

* * * * *

"CAT Executing Broker" means (a) with respect to a transaction in an Eligible Security that is executed on an exchange, the Industry Member identified as the Industry Member responsible for the order on the buy-side of the transaction and the Industry Member responsible for the sell-side of the transaction in the equity order trade event and option trade event in the CAT Data submitted to the CAT by the relevant exchange pursuant to the Participant Technical Specifications; and (b) with respect to a transaction in an Eligible Security that is executed otherwise than on an exchange and required to be reported to an equity trade reporting facility of a registered national securities association, the Industry Member identified as the executing broker and the Industry Member identified as the contra-side executing broker in the TRF/ORF/ADF transaction data event in the CAT Data submitted to the CAT by FINRA pursuant to the Participant Technical Specifications; provided, however, in those circumstances where there is a non-Industry Member identified as the contra-side executing broker in the TRF/ORF/ADF transaction data event or no contra-side executing broker is identified in the TRF/ORF/ADF transaction data event, then the Industry Member identified as the executing broker in the TRF/ORF/ADF transaction data event would be treated as CAT Executing Broker for the Buyer and for the Seller.

* * * * *

["Execution Venue" means 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).]

ARTICLE XI

FUNDING OF THE COMPANY

Section 11.1. Funding Authority.

- (a) On an annual basis the Operating Committee shall approve an operating budget for the Company. The budget shall 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.
- (i) Without 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 cost categories as reasonably determined by the Operating Committee to be included in the budget.
- (ii) For 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. To the extent collected CAT fees exceed CAT costs, including the reserve of 25% of the annual budget, such surplus shall be used to offset future fees. For 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).
- (b) Subject to Section 11.2, the Operating Committee shall have discretion to establish funding for the Company, including: (i) establishing fees that the Participants shall pay; and (ii) establishing fees for Industry Members that shall be implemented by Participants. The Participants shall file with the SEC under Section 19(b) of the Exchange Act any such fees on Industry Members that the Operating Committee approves, and such fees shall be labeled as "Consolidated Audit Trail Funding Fees."
- (c) To fund the development and implementation of the CAT, the Company shall time the imposition and collection of all fees on Participants and Industry Members in a manner reasonably related to the timing when the Company expects to incur such development and implementation costs. In determining fees on Participants and Industry Members the Operating Committee shall take into account fees, costs and expenses (including legal and consulting fees and expenses) incurred by the Participants on behalf of the Company prior to the Effective Date in connection with the creation and implementation of the CAT, and such fees, costs and expenses shall be fairly and reasonably shared among the Participants and Industry Members. Any surplus of the Company's revenues over its expenses shall be treated as an operational reserve to offset future fees.
- (d) Consistent with this Article XI, the Operating Committee shall adopt policies, procedures, and practices regarding the budget and budgeting process, [assignment of tiers,] resolution of disputes, billing and collection of fees, and other related matters. [For the avoidance of doubt, as part of its regular review of fees for the CAT, the Operating Committee shall have the right to change the tier assigned to any particular Person in accordance with fee schedules previously filed with the Commission that are reasonable, equitable and not unfairly discriminatory and subject to public notice and comment,

pursuant to this Article XI. Any such changes will be effective upon reasonable notice to such Person.]

Section 11.2. Funding Principles. In establishing the funding of the Company, the Operating Committee shall seek:

- (a) to create transparent, predictable revenue streams for the Company that are aligned with the anticipated costs to build, operate and administer the CAT and the other costs of the Company;
- (b) to establish an allocation of the Company's related costs among Participants and Industry Members that is consistent with the Exchange Act, taking into account the timeline for implementation of the CAT [and distinctions in the securities trading operations of Participants and Industry Members and their relative impact upon Company resources and operations];
- (c) to establish a [tiered] fee structure in which the fees charged to [: (i)] Participants and [CAT Reporters that are Execution Venues, including ATSs, are based upon the level of market share; (ii)] Industry Members[' non-ATS activities] are based upon the executed equivalent share volume of transactions in Eligible Securities, and the costs of the CAT [message traffic; and (iii) the CAT Reporters with the most CAT-related 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)].
 - (d) to provide for ease of billing and other administrative functions;
- (e) to avoid any disincentives such as placing an inappropriate burden on competition and a reduction in market quality; and
 - (f) to build financial stability to support the Company as a going concern.

Section 11.3. Recovery.

- (a) <u>Prospective CAT Costs.</u> The Operating Committee will establish [fixed] fees ("CAT Fees") to be payable by [Execution Venues] <u>Participants and Industry Members</u> with regard to CAT costs not previously paid by the Participants ("Prospective CAT Costs") as follows [provided in this Section 11.3(a)]:
- (i) <u>Fee Rate. The Operating Committee will calculate the Fee</u>

 <u>Rate for the CAT Fee twice per year, once at the beginning of the year and once during the year as follows.</u>

(A) General.

- (I) For the beginning of each year, the Operating Committee will calculate the Fee Rate by dividing the reasonably budgeted CAT costs for the year by the projected total executed equivalent share volume of all transactions in Eligible Securities for the year. Once the Operating Committee has approved such Fee Rate, the Participants shall be required to file with the SEC pursuant to Section 19(b) of the Exchange Act CAT Fees to be charged to Industry Members calculated using such Fee Rate. 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.
- (II) During each year, the Operating Committee will calculate a new Fee Rate by dividing the reasonably budgeted CAT costs for the remainder of the year by the projected total executed equivalent share volume of all transactions in Eligible Securities for the remainder of the year. Once the Operating Committee has approved the new Fee Rate, the Participants shall be required to file with the SEC pursuant to Section 19(b) of the Exchange Act CAT Fees to be charged to Industry Members calculated using the new Fee Rate. 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.
- (III) For the avoidance of doubt, CAT Fees with a Fee Rate calculated as set forth in this paragraph (a)(i) shall remain in effect until the Operating Committee approves a new Fee Rate as described in paragraph (a)(i) and CAT Fees with the new Fee Rate are in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act.
- (IV) For the avoidance of doubt, 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 first CAT Fee would be calculated as described in paragraph (II) of this Section.
- (B) Executed Equivalent Shares. For 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;
- (II) each executed contract for a transaction in Listed Options will be counted based on the multiplier applicable to the specific Listed Option (i.e., 100 executed equivalent shares or such other applicable multiplier); and
- (III) each executed share for a transaction in OTC Equity Securities shall be counted as 0.01 executed equivalent share.
- (C) Budgeted CAT Costs. The budgeted CAT costs for the year shall be comprised of all 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.
- (D) Projected Total Executed Equivalent Share Volume of Transactions in Eligible Securities. The Operating Committee shall reasonably determine the projected total executed equivalent share volume of all transactions in Eligible Securities for each relevant period based on the executed equivalent share volume of all transactions in Eligible Securities for the prior twelve months.

(ii) Participant CAT Fees.

- (A) CAT Fee Obligation. 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. 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 reasonably determined pursuant to paragraph (a)(i) of this Section 11.3.
- (B) Effectiveness. Each Participant will be required to pay the CAT Fee calculated using the Fee Rate reasonably determined pursuant to paragraph (a)(i) of this Section 11.3 and approved by the Operating Committee only if such CAT Fees are in effect with regard

to Industry Members in accordance with Section 19(b) of the Exchange Act.

(iii) Industry Member CAT Fees.

- (A) CAT Fee Obligation. Each Industry Member that is the CAT Executing Broker 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 Securities ("CAT Executing Broker for the Seller" or "CEBS") will be required to pay a CAT Fee for each such transaction in Eligible Securities in the prior month based on CAT Data. 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 Fee Rate reasonably determined pursuant to paragraph (a)(i) of this Section 11.3.
- Content of Fee Filings. When the Participants file with **(B)** the SEC pursuant to Section 19(b) of the Exchange Act CAT Fees to be charged to Industry Members calculated using the Fee Rate that the Operating Committee approved in accordance with paragraph (a) of this Section 11.3, such filings shall set forth (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; (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. The information provided in this Section would be provided with sufficient detail to demonstrate that the budget for the upcoming year, or part of year, as applicable, is reasonable and appropriate.
- (C) No Participant will make a filing with the SEC pursuant to Section 19(b) of the Exchange Act regarding any CAT Fee related to Prospective CAT Costs until the Financial Accountability Milestone related to Period 4 described in Section 11.6 has been satisfied.

(iv) CAT Fee Details. Details regarding the calculation of a Participant or CAT Executing Brokers' CAT Fees will be provided upon request to such Participant or CAT Executing Broker.

- Each Execution Venue that: (A) executes transactions; or (B) **[(i)** 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 will pay a fixed fee depending on the market share of that Execution Venue in NMS Stocks and OTC Equity Securities, with the Operating Committee establishing at least two and no more than five tiers of fixed fees, based on an Execution Venue's NMS Stocks and OTC Equity Securities market share. For these purposes, market share for Execution Venues that execute transactions will be calculated by share volume, and market share for a national securities association that 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 will be calculated based on share volume of trades reported, provided, however, that the share volume reported to such national securities association by an Execution Venue shall not be included in the calculation of such national security association's market share.]
- [(ii) Each Execution Venue that executes transactions in Listed Options will pay a fixed fee depending on the Listed Options market share of that Execution Venue, with the Operating Committee establishing at least two and no more than five tiers of fixed fees, based on an Execution Venue's Listed Options market share. For these purposes, market share will be calculated by contract volume.]
- (b) Past CAT Costs. The Operating Committee will establish [fixed] one or more fees (each a "Historical CAT Assessment") to be payable by Industry Members with regard to CAT costs previously paid by the Participants ("Past CAT Costs") as follows: [, based on the message traffic generated by such Industry Member, with the Operating Committee establishing at least five and no more than nine tiers of fixed fees, based on message traffic. For the avoidance of doubt, the fixed fees payable by Industry Members pursuant to this paragraph shall, in addition to any other applicable message traffic, include message traffic generated by: (i) an ATS that does not execute orders that is sponsored by such Industry Member; and (ii) routing orders to and from any ATS sponsored by such Industry Member.]

(i) Calculation of Historical Fee Rates.

(A) General. 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 projected total executed equivalent share volume of all transactions in Eligible Securities for the Historical Recovery Period for each Historical CAT Assessment. Once the Operating Committee has approved such Historical Fee Rate, the Participants shall be required

- to file with the SEC pursuant to Section 19(b) of the Exchange Act such Historical CAT Assessment to be charged to Industry Members calculated using such Historical Fee Rate. Industry Members will be required to pay such Historical CAT Assessment calculated using such Historical Fee Rate once such Historical CAT Assessment is in effect in accordance with Section 19(b) of the Exchange Act.
- (B) Executed Equivalent Shares. For purposes of calculating each Historical CAT Assessment, executed equivalent shares in a transaction in Eligible Securities will be reasonably counted in the same manner as set forth in paragraph (a)(i)(B) of this Section 11.3.
- (C) Historical CAT Costs. The 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 excluded from Historical CAT Costs by the Operating Committee. Each 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.

(D) Historical Recovery Period.

- (I) The length of the Historical Recovery Period used in calculating each Historical Fee Rate will be reasonably established by the Operating Committee based upon the amount of the Historical CAT Costs to be recovered by the Historical CAT Assessment; provided, however, no Historical Recovery Period used in calculating the Historical Fee Rate shall be less than 24 months or more than five years.
- (II) Notwithstanding the length of the Historical Recovery Period used in calculating the Historical Fee Rate, each Historical CAT Assessment calculated using the Historical Fee Rate will remain in effect until all Historical CAT Costs for the Historical CAT Assessment are collected.
- (E) Projected Total Executed Equivalent Share Volume of Transactions in Eligible Securities for Historical Recovery Period.

 The 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.

previously have paid Past CAT Costs via loans to the Company, Participants would not be required to pay any Historical CAT Assessment. In lieu of a Historical CAT Assessment, the Participants' one-third share of Past CAT Costs will be paid by the cancellation of loans made by the Company on a pro rata basis based on the outstanding loan amounts due under the loans. Historical CAT Assessments are designed to recover two-thirds of the Historical CAT Costs.

(iii) <u>Historical CAT Assessment for Industry Members.</u>

(A) Each month in which a Historical CAT Assessment is in effect, each CEBB and each CEBS shall pay a fee 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 paragraph (b)(i) of this Section 11.3.

(B) <u>Historical CAT Assessment Fee Filings.</u>

- (I) 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.
- (II) When the Participants file with the SEC pursuant to Section 19(b) of the Exchange Act a Historical CAT Assessment calculated using the Historical Fee Rate that the Operating Committee approved in accordance with paragraph (b) of this Section 11.3, such filing shall set forth (A) the Historical Fee Rate; (B) a brief description of the amount and type of the 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. The information provided in this Section would be provided with sufficient detail to demonstrate that the Historical CAT Costs are reasonable and appropriate.

(III) No Participant will make a filing with the SEC pursuant to Section 19(b) of the Exchange Act regarding any Historical CAT Assessment until any applicable Financial Accountability Milestone described in Section 11.6 has been satisfied.

(iv) Historical CAT Assessment Details. Details regarding the calculation of a CAT Executing Broker's Historical CAT Assessment will be provided upon request to such CAT Executing Broker.

- (c) The Operating Committee may establish any other fees ancillary to the operation of the CAT that it reasonably determines appropriate, including fees: (i) for the late or inaccurate reporting of information to the CAT; (ii) for correcting submitted information; and (iii) based on access and use of the CAT for regulatory and oversight purposes (and not including any reporting obligations).
- (d) The Company shall make publicly available a schedule of effective fees and charges adopted pursuant to this Agreement as in effect from time to time. The Operating Committee shall review such fee schedule on at least an annual basis and shall make any changes to such fee schedule that it deems appropriate. The Operating Committee is authorized to review such fee schedule on a more regular basis, but shall not make any changes on more than a semiannual basis unless, pursuant to a Supermajority Vote, the Operating Committee concludes that such change is necessary for the adequate funding of the Company.

APPENDIX B

Fee Schedule Consolidated Audit Trail Funding Fees for Participants

(a) CAT Fee. Each 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.

* * * * *

EXHIBIT B:

Proposed Additional Revisions to Proposed Changes in Partial Amendment

Additions underlined; deletions [bracketed]

* * * * *

ARTICLE I

DEFINITIONS

* * * * *

"CAT Executing Broker" means (a) with respect to a transaction in an Eligible Security that is executed on an exchange, the Industry Member identified as the Industry Member responsible for the order on the buy-side of the transaction and the Industry Member responsible for the sell-side of the transaction in the equity order trade event and option trade event in the CAT Data submitted to the CAT by the relevant exchange pursuant to the Participant Technical Specifications; and (b) with respect to a transaction in an Eligible Security that is executed otherwise than on an exchange and required to be reported to an equity trade reporting facility of a registered national securities association, the Industry Member identified as the executing broker and the Industry Member identified as the contra-side executing broker in the TRF/ORF/ADF transaction data event in the CAT Data submitted to the CAT by FINRA pursuant to the Participant Technical Specifications; provided, however, in those circumstances where there is a non-Industry Member identified as the contra-side executing broker in the TRF/ORF/ADF transaction data event or no contra-side executing broker is identified in the TRF/ORF/ADF transaction data event, then the Industry Member identified as the executing broker in the TRF/ORF/ADF transaction data event would be treated as CAT Executing Broker for the Buyer and for the Seller.

* * * * *

ARTICLE XI

FUNDING OF THE COMPANY

Section 11.1. Funding Authority.

(a) On an annual basis the Operating Committee shall approve an operating budget for the Company. The budget shall 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.

- (i) Without limiting the foregoing, the <u>reasonably</u> budgeted CAT costs shall include technology <u>(including cloud hosting services, operating fees, CAIS operating fees, change request fees, and capitalized developed technology costs)</u>, legal, consulting, insurance, professional and administration, and public relations costs, a reserve and such other cost categories as <u>reasonably</u> determined by the Operating Committee to be included in the budget.
- (ii) For the reserve referenced in paragraph (a)(i) of this Section, the budget will include an amount <u>reasonably</u> necessary to allow the Company to maintain a reserve of not more than 25% of the annual budget. To the extent collected CAT fees exceed CAT costs, including the reserve of 25% of the annual budget, such surplus shall be used to offset future fees. For 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).
- (b) Subject to Section 11.2, the Operating Committee shall have discretion to establish funding for the Company, including: (i) establishing fees that the Participants shall pay; and (ii) establishing fees for Industry Members that shall be implemented by Participants. The Participants shall file with the SEC under Section 19(b) of the Exchange Act any such fees on Industry Members that the Operating Committee approves, and such fees shall be labeled as "Consolidated Audit Trail Funding Fees."
- (c) To fund the development and implementation of the CAT, the Company shall time the imposition and collection of all fees on Participants and Industry Members in a manner reasonably related to the timing when the Company expects to incur such development and implementation costs. In determining fees on Participants and Industry Members the Operating Committee shall take into account fees, costs and expenses (including legal and consulting fees and expenses) incurred by the Participants on behalf of the Company prior to the Effective Date in connection with the creation and implementation of the CAT, and such fees, costs and expenses shall be fairly and reasonably shared among the Participants and Industry Members. Any surplus of the Company's revenues over its expenses shall be treated as an operational reserve to offset future fees.
- (d) Consistent with this Article XI, the Operating Committee shall adopt policies, procedures, and practices regarding the budget and budgeting process, resolution of disputes, billing and collection of fees, and other related matters.
- **Section 11.2. Funding Principles**. In establishing the funding of the Company, the Operating Committee shall seek:
- (a) to create transparent, predictable revenue streams for the Company that are aligned with the anticipated costs to build, operate and administer the CAT and the other costs of the Company;

- (b) to establish an allocation of the Company's related costs among Participants and Industry Members that is consistent with the Exchange Act, taking into account the timeline for implementation of the CAT;
- (c) 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.
 - (d) to provide for ease of billing and other administrative functions;
- (e) to avoid any disincentives such as placing an inappropriate burden on competition and a reduction in market quality; and
 - (f) to build financial stability to support the Company as a going concern.

Section 11.3. Recovery.

- (a) Prospective CAT Costs. The Operating Committee will establish fees ("CAT Fees") to be payable by Participants and Industry Members with regard to CAT costs not previously paid by the Participants ("Prospective CAT Costs") as follows:
- (i) Fee Rate. The Operating Committee will calculate the Fee Rate for the CAT Fee twice per year, once at the beginning of the year and once during the year as follows:

(A) General.

- (I) For [At] the beginning of each year, the Operating Committee will calculate the Fee Rate by dividing the reasonably budgeted CAT costs for the year by the projected total executed equivalent share volume of all transactions in Eligible Securities for the year. Once the Operating Committee has approved such Fee Rate, the Participants shall be required to file with the SEC pursuant to Section 19(b) of the Exchange Act CAT Fees to be charged to Industry Members calculated using such Fee Rate. 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.
- (II) During each year, the Operating Committee will calculate a new Fee Rate by dividing the <u>reasonably</u> budgeted CAT costs for the remainder of the year by the projected total executed equivalent share volume of all transactions in Eligible Securities for the remainder of the year. Once the Operating Committee has approved the new Fee Rate, the Participants shall

be required to file with the SEC pursuant to Section 19(b) of the Exchange Act CAT Fees to be charged to Industry Members calculated using the new Fee Rate. 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.

- (III) For the avoidance of doubt, CAT Fees with a Fee Rate calculated as set forth in this paragraph (a)(i) shall remain in effect until the Operating Committee approves a new Fee Rate as described in paragraph (a)(i) and CAT Fees with the new Fee Rate are in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act.
- (IV) For the avoidance of doubt, 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 first CAT Fee would be calculated as described in paragraph (II) of this Section.
- (B) Executed Equivalent Shares. For purposes of calculating CAT Fees, executed equivalent shares in a transaction in Eligible Securities will be <u>reasonably</u> counted as follows:
 - (I) each executed share for a transaction in NMS Stocks will be counted as one executed equivalent share;
 - (II) each executed contract for a transaction in Listed Options will be counted based on the multiplier applicable to the specific Listed Option (i.e., 100 executed equivalent shares or such other applicable multiplier); and
 - (III) each executed share for a transaction in OTC Equity Securities shall be counted as 0.01 executed equivalent share.
- (C) Budgeted CAT Costs. The budgeted CAT costs for the year shall be comprised of all fees, costs and expenses <u>reasonably</u> 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.

(D) Projected Total Executed Equivalent Share Volume of Transactions in Eligible Securities. The Operating Committee shall **reasonably** determine the projected total executed equivalent share volume of all transactions in Eligible Securities for each relevant period based on the executed equivalent share volume of all transactions in Eligible Securities for the prior twelve months.

(ii) Participant CAT Fees.

- (A) CAT Fee Obligation. 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. 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 reasonably determined pursuant to paragraph (a)(i) of this Section 11.3.
- (B) Effectiveness. Each Participant will be required to pay the CAT Fee calculated using the Fee Rate **reasonably** determined pursuant to paragraph (a)(i) of this Section 11.3 and approved by the Operating Committee only if such CAT Fees are in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act.

(iii) Industry Member CAT Fees.

- (A) CAT Fee Obligation. Each Industry Member that is the [executing broker] CAT Executing Broker for the buyer in a transaction in Eligible Securities ("CAT Executing Broker for the Buyer" or ["EBB"] "CEBB") and each Industry Member that is the [executing broker] CAT Executing Broker for the seller in a transaction in Eligible Securities ("CAT Executing Broker for the Seller" or ["EBS"] ("CEBS") will be required to pay a CAT Fee for each such transaction in Eligible Securities in the prior month based on CAT Data. The [EBB's] CEBB's CAT Fee or [EBS's] 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 Fee Rate reasonably determined pursuant to paragraph (a)(i) of this Section 11.3.
- (B) Content of Fee Filings. When the Participants file with the SEC pursuant to Section 19(b) of the Exchange Act CAT Fees to be charged to Industry Members calculated using the Fee Rate that the

Operating Committee approved in accordance with paragraph (a) of this Section 11.3, such filings shall set forth (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; (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. The information provided in this Section would be provided with sufficient detail to demonstrate that the budget for the upcoming year, or part of year, as applicable, is reasonable and appropriate.

- (C) No Participant will make a filing with the SEC pursuant to Section 19(b) of the Exchange Act regarding any CAT Fee related to Prospective CAT Costs until the Financial Accountability Milestone related to Period 4 described in Section 11.6 has been satisfied.
- (iv) CAT Fee Details. Details regarding the calculation of a Participant or CAT Executing Brokers' CAT Fees will be provided upon request to such Participant or CAT Executing Broker.
- (b) Past CAT Costs. The Operating Committee will establish <u>one or more</u> fees (<u>each a</u> "Historical CAT Assessment") to be payable by Industry Members with regard to CAT costs previously paid by the Participants ("Past CAT Costs") as follows:
 - (i) Calculation of Historical Fee Rates.
 - (A) General. The Operating Committee will calculate the Historical Fee Rate for [the] each Historical CAT Assessment by dividing the Historical CAT Costs for each Historical CAT Assessment by the projected total executed equivalent share volume of all transactions in Eligible Securities for the Historical Recovery Period for each Historical CAT Assessment. Once the Operating Committee has approved such Historical Fee Rate, the Participants shall be required to file with the SEC pursuant to Section 19(b) of the Exchange Act such Historical CAT Assessment to be charged to Industry Members calculated using such Historical Fee Rate. Industry Members will be required to pay such Historical CAT Assessment calculated using such Historical Fee Rate

once such Historical CAT Assessment is in effect in accordance with Section 19(b) of the Exchange Act.

- (B) Executed Equivalent Shares. For purposes of calculating **each** Historical CAT Assessment, executed equivalent shares in a transaction in Eligible Securities will be **reasonably** counted in the same manner as set forth in paragraph (a)(i)(B) of this Section 11.3.
- (C) Historical CAT Costs. The Operating Committee will reasonably determine the Historical CAT Costs sought to be recovered by [the] each Historical CAT Assessment, where the Historical CAT Costs will be Past CAT Costs minus Past CAT Costs excluded from Historical CAT Costs by the Operating Committee. Each Historical CAT
 thirds of Historical CAT Assessment.
 - (D) Historical Recovery Period.
 - (I) The length of the Historical Recovery Period used in calculating [the] <u>each</u> Historical Fee Rate will be <u>reasonably</u> established by the Operating Committee based upon the amount of the Historical CAT Costs to be recovered by the Historical CAT Assessment; provided, however, no Historical Recovery Period used in calculating the Historical Fee Rate shall be less than 24 months or more than five years.
 - (II) Notwithstanding the length of the Historical Recovery Period used in calculating the Historical Fee Rate, [the] each Historical CAT Assessment calculated using the Historical Fee Rate will remain in effect until all Historical CAT Costs for the Historical CAT Assessment are collected.
- (E) Projected Total Executed Equivalent Share Volume of Transactions in Eligible Securities for Historical Recovery Period. The Operating Committee shall <u>reasonably</u> determine the projected total executed equivalent share volume of all transactions in Eligible Securities for [the] <u>each</u> Historical Recovery Period based on the executed equivalent share volume of all transactions in Eligible Securities for the prior twelve months.
- (ii) Past CAT Costs and Participants. Because Participants previously have paid Past CAT Costs via loans to the Company, Participants would not be required to pay [the] any Historical CAT Assessment. In lieu of a Historical CAT Assessment, the Participants' one-third share of Past CAT Costs will be paid by the cancellation of loans

made by the Company on a pro rata basis based on the outstanding loan amounts due under the loans. [The Historical CAT Assessment to be paid by Industry Members and collected by the Company will be used by the Company to repay of the loans from the Participants to the Company on a pro rata basis. The] Historical CAT Assessments are [is] designed to recover two-thirds of the Historical CAT Costs.

- (iii) Historical CAT Assessment for Industry Members.
- (A) Each month in which **[the]** <u>a</u> Historical CAT Assessment is in effect, each **[EBB]** <u>CEBB</u> and each **[EBS]** <u>CEBS</u> shall pay a fee for each transaction in Eligible Securities executed by the **[EBB]** <u>CEBB</u> or **[EBS]** <u>CEBS</u> 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 <u>reasonably</u> determined pursuant to paragraph (b)(i) of this Section 11.3.

(B) Historical CAT <u>Assessment</u> Fee Filings.

- (I) 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.
- When the Participants file with the SEC pursuant to \mathbf{II} Section 19(b) of the Exchange Act a Historical CAT Assessment calculated using the Historical Fee Rate that the Operating Committee approved in accordance with paragraph (b) of this Section 11.3, such filing shall set forth (A) the Historical Fee Rate; (B) a brief description of the amount and type of the 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. The information provided in this Section would be provided with sufficient detail to demonstrate that the Historical CAT Costs are reasonable and appropriate.
- (III) No Participant will make a filing with the SEC pursuant to Section 19(b) of the Exchange Act regarding any Historical CAT Assessment until any applicable Financial

Accountability Milestone described in Section 11.6 has been satisfied.

(iv) Historical CAT Assessment Details. Details regarding the calculation of a CAT Executing Broker's Historical CAT Assessment will be provided upon request to such CAT Executing Broker.

- (c) The Operating Committee may establish any other fees ancillary to the operation of the CAT that it reasonably determines appropriate, including fees: (i) for the late or inaccurate reporting of information to the CAT; (ii) for correcting submitted information; and (iii) based on access and use of the CAT for regulatory and oversight purposes (and not including any reporting obligations).
- (d) The Company shall make publicly available a schedule of effective fees and charges adopted pursuant to this Agreement as in effect from time to time. The Operating Committee shall review such fee schedule on at least an annual basis and shall make any changes to such fee schedule that it deems appropriate. The Operating Committee is authorized to review such fee schedule on a more regular basis, but shall not make any changes on more than a semiannual basis unless, pursuant to a Supermajority Vote, the Operating Committee concludes that such change is necessary for the adequate funding of the Company.

APPENDIX B

* * * * *

Fee Schedule Consolidated Audit Trail Funding Fees for Participants

(a) CAT Fee. Each 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.

* * * * *

EXHIBIT C

CAT FEE EXAMPLE FOR ILLUSTRATIVE PURPOSES ONLY

The following sets forth an example of a Historical CAT Assessment calculated under the Funding Proposal for illustrative purposes only. The example sets forth the Historical CAT Assessment that each CAT Executing Broker would pay related to CAT costs from prior to 2022 based on each CAT Executing Broker's transactions in December 2022. The first chart, entitled "Calculation of Historical CAT Assessment," describes how the example fees are calculated. The second chart, entitled "Historical CAT Assessment for Each CAT Executing Broker," sets forth the example fees each CAT Executing Broker would pay based on its transactions in Eligible Securities in December 2022 in accordance with the parameters of the example.

Note that Exhibit C only provides an illustrative example of how the Funding Proposal would operate for informational purposes; the calculation of the actual Historical CAT Assessment for CAT costs from prior to 2022 would differ from this example in various ways. For example, the illustrative example calculates the Historical Fee Rate using the projected total executed equivalent share transactions in Eligible Securities for 2023-2024, rather than the projected executed equivalent share volume for the actual Historical Recovery Period, the dates of which will be determined upon approval of the Funding Proposal. In addition, the illustrative example calculates the Historical CAT Assessment based on a CEBB and CEBS's trading activity from December 2022, rather than trading activity during a relevant month in which the Historical CAT Assessment would be in effect. Moreover, the illustrative example, among other things, calculates the executed equivalent shares for each executed contract for a transaction in Listed Options using a 100 executed equivalent share multiplier, instead of the specific multiplier applicable to each Listed Option; it uses a simple projection calculation of doubling the total executed equivalent share volume for 2022 (rather than a projection that considers volume growth and other relevant factors); and it may include cancelled trades or trades that were later corrected.80

CALCULATION OF HISTORICAL CAT ASSESSMENT

Item	Value	Calculation	Proposed Plan
			Provision
Actual Total	4,039,821,841,560.31	Calculated using actual	Proposed Sections
Executed Equivalent	Executed Equivalent	transactions in Eligible	11.3(a)(i)(B) and
Share Volume of	Shares	Securities for 2022	11.3(b)(i)(B)
Transactions in			
Eligible Securities			
for 2022			
Historical Recovery	2 years	Length between 2 and 5	Proposed Section
Period		years as determined by	11.3(b)(i)(D)(I)
		Operating Committee	

Section II.A.4 of this letter discusses how cancellations and corrections would be addressed under the Funding Proposal.

		T	
Projected Total Executed Equivalent Share Volume of Transactions in	8,079,643,683,120.62 Executed Equivalent Shares	2*4,039,821,841,560.31 Executed Equivalent Shares	Proposed Section 11.3(b)(i)(E)
Eligible Securities for 2023-2024		(Actual Executed Equivalent Share Volume of Transactions	
		in Eligible Securities for 2022 multiplied by two)	
Historical CAT Costs for pre-2022	\$337,688,610	\$401,312,909 - \$63,624,299	Proposed Section 11.3(b)(i)(C)
		(Past CAT Costs for pre-2022 minus CAT Costs excluded from Past CAT Costs for pre- 2022)	
Historical Fee Rate	\$0.0000417950 per Executed Equivalent Share	\$337,688,610/ 8,079,643,683,120.62	Proposed Section 11.3(b)(i)(A)
		(Historical CAT Costs for pre-2022 divided by	
		Projected Total Executed Equivalent Share Volume of	
		Transactions in Eligible Securities for 2023- 2024)	
Historical CAT	See "Historical Fee	Executed Equivalent	Proposed Section
Assessment for CAT	Assessment for Each	Share Volume of	11.3(b)(iii)(A)
Executing Brokers	CAT Executing	Transactions in Eligible	
for pre-2022	Broker" chart below	Securities for December	
Historical CAT		2022 for each CAT	
Costs for December		Executing Broker	
2022		multiplied by Historical Fee Rate multiplied by one-third ⁸¹	
Total Amount to be Collected via	\$225,125,740	2/3 * \$337,688,610	Proposed Sections 11.3(b)(i)(C) and
Historical CAT		(Two-thirds of	11.3(b)(iii)(A)
Assessment for pre-		Historical CAT Costs)	

Because the Historical Fee Rate is multiplied by one-third in calculating the Historical CAT Assessment for the example, CAT Executing Brokers would pay \$0.00001393167 per executed equivalent share (that is, \$0.0000417950 per executed equivalent share multiplied by one-third).

2022 Historical		
CAT Costs		

HISTORICAL FEE ASSESSMENT for EACH CAT EXECUTING BROKER 82

CAT	Executed Equivalent	Historical CAT Assessment
Executing	Share Volume of	for December 2022
Broker	Transactions in	(in Dollars)
	Eligible Securities for	
	December 2022	
1	86,112,198,133.20	1,199,686.09
2	38,481,541,952.55	536,111.86
_		
3	38,393,700,002.03	534,888.08
	20 470 064 244 22	
4	38,459,064,211.23	535,798.71
5	27 294 (72 407 15	201.514.02
5	27,384,672,407.15	381,514.02
6	23,625,876,388.24	329,147.74
0	25,025,070,500.24	327,177.77
7	22,953,981,909.23	319,787.13
8	17,620,665,100.45	245,485.16
9	17,628,940,532.54	245,600.45
10	20,031,215,101.53	279,068.13
11	16,301,270,280.00	227,103.80

CAT LLC recognizes that an Industry Member's knowledge of its own fees in the illustrative example would be helpful in analyzing the Funding Proposal. Accordingly, if a CAT Executing Broker is interested in learning which anonymized CAT Executing Broker in the illustrative example represents its volume and fees, the CAT Executing Broker may contact the FINRA CAT Helpdesk by email at help@finracat.com. Accordingly, subject to verification of the identity of the requesting party as an authorized representative of the relevant Industry Member, the Helpdesk will provide the authorized representative of the CAT Executing Broker with the number of the applicable anonymized CAT Executing Broker in Exhibit C. In addition, upon request, the Helpdesk also will provide the CAT Executing Broker with a breakdown of their executed equivalent share volume and corresponding fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on an exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions. CAT LLC notes that the calculations provided in the table may reflect minor variations due to rounding.

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
12	19,404,461,254.15	270,336.41
13	11,441,178,404.00	159,394.64
14	12,179,858,717.98	169,685.68
15	12,076,770,928.00	168,249.50
16	11,623,298,048.64	161,931.87
17	9,955,221,266.53	138,692.78
18	10,285,573,046.70	143,295.13
19	10,481,313,179.31	146,022.12
20	9,456,042,067.81	131,738.39
21	7,969,275,763.65	111,025.26
22	5,853,036,941.30	81,542.54
23	9,044,202,748.00	126,000.78
24	8,129,937,025.67	113,263.54
25	9,466,559,704.00	131,884.92
26	8,098,701,385.00	112,828.38
27	6,220,173,476.92	86,657.36
28	4,940,607,300.00	68,830.87
29	5,496,193,202.99	76,571.11
30	4,183,004,192.80	58,276.20

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
31	3,748,760,073.00	52,226.46
32	3,930,225,757.70	54,754.58
33	2,926,196,700.00	40,766.79
34	4,040,159,976.45	56,286.15
35	2,462,962,342.00	34,313.16
36	3,255,347,005.69	45,352.40
37	1,795,144,783.11	25,009.35
38	1,533,939,983.00	21,370.33
39	2,462,084,862.71	34,300.94
40	2,226,415,053.41	31,017.66
41	1,847,364,910.34	25,736.86
42	2,416,691,618.00	33,668.53
43	1,232,981,799.00	17,177.49
44	2,181,268,648.12	30,388.70
45	2,131,136,467.07	29,690.27
46	1,099,857,600.00	15,322.85
47	1,469,689,428.23	20,475.22
48	2,168,992,900.00	30,217.68
49	1,496,908,444.00	20,854.42

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
50	1,534,294,028.00	21,375.27
51	65,606,592.00	914.01
52	1,735,293,007.06	24,175.52
53	1,307,878,500.00	18,220.92
54	1,178,185,898.26	16,414.09
55	1,430,077,857.02	19,923.36
56	1,151,205,287.63	16,038.20
57	1,409,986,241.50	19,643.45
58	1,103,808,027.33	15,377.88
59	1,029,656,664.02	14,344.83
60	857,333,700.00	11,944.08
61	961,305,300.00	13,392.58
62	1,867,947,700.00	26,023.62
63	1,039,246,045.38	14,478.43
64	1,101,469,802.00	15,345.31
65	562,430,300.00	7,835.59
66	733,501,357.00	10,218.89
67	877,224,476.00	12,221.20
68	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
69	829,161,852.00	11,551.60
70	966,607,368.00	13,466.45
71	821,501,400.00	11,444.88
72	677,405,637.00	9,437.39
73	1,015,740,702.00	14,150.96
74	522,418,991.27	7,278.17
75	989,301,187.72	13,782.61
76	773,642,309.00	10,778.12
77	<u>-</u>	-
78	590,057,809.16	8,220.49
79	737,007,679.37	10,267.74
80	536,705,303.00	7,477.20
81	767,854,826.21	10,697.49
82	635,942,409.58	8,859.74
83	864,089,556.95	12,038.20
84	620,860,189.00	8,649.61
85	700,713,844.00	9,762.11
86	727,102,431.00	10,129.75
87	556,678,644.00	7,755.46

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
88	581,059,177.09	8,095.12
89	559,881,462.22	7,800.08
90	483,502,237.48	6,735.99
91	413,725,788.00	5,763.89
92	610,245,108.09	8,501.73
93	405,594,302.00	5,650.60
94	353,080,033.04	4,918.99
95	550,986,110.00	7,676.15
96	522,200,254.96	7,275.12
97	452,909,875.00	6,309.79
98	314,934,600.00	4,387.56
99	1,172,981,298.00	16,341.58
100	418,591,392.71	5,831.67
101	56,226,707.15	783.33
102	444,528,797.00	6,193.03
103	243,033,674.00	3,385.86
104	826,825,093.31	11,519.05
105	363,355,742.00	5,062.15
106	319,206,742.76	4,447.08

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
107	234,606,209.64	3,268.45
108	714,493,322.00	9,954.08
109	313,455,910.25	4,366.96
110	1,031,910,466.00	14,376.23
111	258,090,705.06	3,595.63
112	472,580,692.79	6,583.83
113	431,793,880.31	6,015.61
114	337,914,803.56	4,707.72
115	339,736,815.43	4,733.10
116	909,158,616.00	12,666.09
117	290,642,115.00	4,049.13
118	347,421,063.79	4,840.15
119	350,667,538.15	4,885.38
120	318,322,800.00	4,434.77
121	263,757,425.20	3,674.58
122	-	-
123	375,530,471.00	5,231.76
124	53,557,200.00	746.14
125	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
126	283,825,411.16	3,954.16
127	143,392,400.00	1,997.69
128	217,718,090.88	3,033.17
129	165,915,140.89	2,311.47
130	457,613,070.46	6,375.31
131	251,132,793.81	3,498.70
132	219,112,442.00	3,052.60
133	43,938,745.15	612.14
134	330,967,497.01	4,610.93
135	188,838,809.00	2,630.84
136	227,575,404.47	3,170.50
137	206,478,844.94	2,876.59
138	-	-
139	292,467,800.00	4,074.56
140	165,645,008.32	2,307.71
141	214,739,622.63	2,991.68
142	185,617,991.19	2,585.97
143	165,469,188.00	2,305.26
144	5,019,600.00	69.93

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
145	956,355,049.08	13,323.62
146	64,960,719.00	905.01
147	289,141,549.00	4,028.22
148	147,498,787.28	2,054.90
149	158,995,017.79	2,215.06
150	122,676,294.48	1,709.08
151	136,312,675.96	1,899.06
152	27,284,757.00	380.12
153	352,462,000.00	4,910.38
154	126,212,114.45	1,758.34
155	-	-
156	128,125,560.32	1,785.00
157	60,988,464.36	849.67
158	131,730,011.56	1,835.22
159	74,526,683.59	1,038.28
160	147,853,117.00	2,059.84
161	113,883,427.93	1,586.59
162	-	-
163	116,699,318.87	1,625.82

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
164	129,812,902.58	1,808.51
165	106,768,335.00	1,487.46
166	140,139,530.00	1,952.38
167	82,905,120.00	1,155.01
168	99,813,775.33	1,390.57
169	61,257,698.00	853.42
170	265,568,648.00	3,699.81
171	98,014,634.68	1,365.51
172	95,296,632.53	1,327.64
173	52,272,295.77	728.24
174	38,307,460.47	533.69
175	84,787,219.45	1,181.23
176	79,498,966.79	1,107.55
177	55,374,006.21	771.45
178	156,404,961.23	2,178.98
179	60,642,356.86	844.85
180	118,133,629.00	1,645.80
181	76,062,700.00	1,059.68
182	248,176,128.68	3,457.51

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
183	79,008,100.00	1,100.71
184	85,278,937.00	1,188.08
185	70,228,707.00	978.40
186	62,833,390.18	875.37
187	41,480,726.45	577.90
188	176,929,414.00	2,464.92
189	29,253,925.81	407.56
190	105,263,657.06	1,466.50
191	77,787,800.00	1,083.71
192	68,984,712.00	961.07
193	61,335,825.68	854.51
194	67,297,274.77	937.56
195	51,129,783.08	712.32
196	-	-
197	68,089,568.19	948.60
198	40,730,576.79	567.44
199	39,525,291.39	550.65
200	91,093,000.00	1,269.08
201	57,676,030.00	803.52

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
202	6,831,789.24	95.18
203	316,923,604.92	4,415.27
204	56,604,000.00	788.59
205	33,836,692.76	471.40
206	3,686,360.00	51.36
207	87,223,619.59	1,215.17
208	22,659,425.86	315.68
209	36,155,445.78	503.71
210	27,633,449.00	384.98
211	3,789,049.10	52.79
212	<u>-</u>	-
213	-	-
214	11,802,608.52	164.43
215	39,707,587.00	553.19
216	69,601,570.00	969.67
217	26,765,942.82	372.89
218	32,246,115.00	449.24
219	5,604,885.00	78.09
220	15,282,378.75	212.91

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
221	21,777,071.28	303.39
222	19,782,551.00	275.60
223	25,665,436.26	357.56
224	24,403,825.19	339.99
225	69,596,229.05	969.59
226	15,677,771.93	218.42
227	25,267,934.00	352.02
228	22,258,692.00	310.10
229	10,262,505.79	142.97
230	-	-
231	18,989,070.64	264.55
232	14,408,226.00	200.73
233	18,945,600.00	263.94
234	13,376,162.82	186.35
235	20,807,919.37	289.89
236	17,593,056.07	245.10
237	15,126,721.74	210.74
238	13,674,994.00	190.52
239	6,144,297.00	85.60

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
240	14,525,850.31	202.37
241	38,208,766.82	532.31
242	14,895,098.80	207.51
243	11,078,635.00	154.34
244	10,226,692.01	142.47
245	11,521,371.11	160.51
246	11,162,808.43	155.52
247	18,083,706.64	251.94
248	15,739,833.71	219.28
249	9,587,210.86	133.57
250	18,980,980.00	264.44
251	5,974,342.18	83.23
252	18,009,063.00	250.90
253	12,371,171.00	172.35
254	16,961,858.62	236.31
255	12,751,377.12	177.65
256	7,665,867.62	106.80
257	14,798,978.38	206.17
258	11,422,776.00	159.14

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
259	9,486,103.23	132.16
260	18,142,315.00	252.75
261	13,643,800.00	190.08
262	<u>-</u>	-
263	21,333,324.60	297.21
264	14,024,523.06	195.38
265	9,609,378.96	133.87
266	3,764,664.51	52.45
267	9,263,917.20	129.06
268	13,514,542.97	188.28
269	7,063,688.49	98.41
270	9,204,383.57	128.23
271	-	-
272	4,165,675.24	58.03
273	8,795,482.50	122.54
274	-	-
275	7,151,874.00	99.64
276	2,656,709.93	37.01
277	-	_

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
278	11,041,371.25	153.82
279	9,618,241.51	134.00
280	10,409,870.33	145.03
281	2,381,247.97	33.17
282	79,562,536.00	1,108.44
283	5,028,862.00	70.06
284	3,583,471.00	49.92
285	6,047,686.70	84.25
286	10,121,031.10	141.00
287	-	-
288	4,562,944.01	63.57
289	1,995,032.12	27.79
290	3,603,016.17	50.20
291	49,058,772.00	683.47
292	5,326,788.04	74.21
293	5,199,894.30	72.44
294	-	-
295	7,396,224.93	103.04
296	8,377,144.03	116.71

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
297	10,426,990.00	145.27
298	4,328,332.63	60.30
299	-	-
300	22,059,594.00	307.33
301	2,719,871.36	37.89
302	-	-
303	9,336,370.70	130.07
304	8,250,582.32	114.94
305	11,309,704.54	157.56
306	2,825,954.04	39.37
307	3,015,453.22	42.01
308	2,985,881.79	41.60
309	3,550,440.79	49.46
310	3,796,542.00	52.89
311	681,600.00	9.50
312	6,701,908.00	93.37
313	7,515,141.47	104.70
314	1,813,867.00	25.27
315	25,693,200.00	357.95

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
316	8,571,418.81	119.41
317	4,618,323.00	64.34
318	2,871,231.32	40.00
319	1,312,921.00	18.29
320	3,167,425.85	44.13
321	101,019.48	1.41
322	3,859,688.00	53.77
323	4,632,446.85	64.54
324	-	-
325	2,755,282.00	38.39
326	3,449,977.69	48.06
327	2,682,536.34	37.37
328	6,303,034.00	87.81
329	1,464,170.44	20.40
330	2,405,671.00	33.51
331	3,837,456.05	53.46
332	2,098,139.00	29.23
333	927,380.00	12.92
334	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
335	453,254.09	6.31
336	8,591,832.75	119.70
337	3,385,354.11	47.16
338	<u>-</u>	-
339	1,634,758.00	22.77
340	935,226.00	13.03
341	823,172.38	11.47
342	7,230,086.55	100.73
343	2,994,432.00	41.72
344	5,133,362.77	71.52
345	-	-
346	1,744,000.00	24.30
347	-	-
348	5,993,119.17	83.49
349	-	-
350	652,857.00	9.10
351	424,927.00	5.92
352	953,388.28	13.28
353	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
354	2,291,065.00	31.92
355	3,155,865.00	43.97
356	374,015.00	5.21
357	1,665,732.44	23.21
358	128,500.00	1.79
359	401,400.00	5.59
360	830,021.00	11.56
361	910,747.00	12.69
362	1,232,435.70	17.17
363	14,888,100.00	207.42
364	1,702,250.00	23.72
365	3,676,612.12	51.22
366	919,741.00	12.81
367	3,712,051.51	51.72
368	635,368.00	8.85
369	447,894.00	6.24
370	2,272,345.00	31.66
371	1,374,837.10	19.15
372	1,552,729.36	21.63

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
373	2,180,116.97	30.37
374	-	-
375	798,527.92	11.12
376	-	-
377	1,399,199.54	19.49
378	4,536,762.00	63.20
379	1,061,788.00	14.79
380	2,827,862.97	39.40
381	1,053,097.00	14.67
382	939,300.00	13.09
383	254.00	0.00
384	1,088,114.00	15.16
385	773,060.00	10.77
386	387,116.56	5.39
387	873,812.55	12.17
388	665,749.00	9.27
389	795,558.50	11.08
390	2,597,253.00	36.18
391	948,046.00	13.21

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
392	1,107,547.00	15.43
393	3,654,035.00	50.91
394	521,279.00	7.26
395	410,769.00	5.72
396	2,622,813.00	36.54
397	554,541.44	7.73
398	179,200.00	2.50
399	841,840.24	11.73
400	523,709.00	7.30
401	-	-
402	-	-
403	462,520.50	6.44
404	379,314.02	5.28
405	217,857.00	3.04
406	513,184.27	7.15
407	130,200.00	1.81
408	480,937.70	6.70
409	658,680.86	9.18
410	1,230,112.99	17.14

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
411	5,625,111.00	78.37
412	620,200.00	8.64
413	3,879,491.00	54.05
414	852,915.67	11.88
415	468,524.00	6.53
416	338,139.73	4.71
417	86,853.84	1.21
418	382,210.00	5.32
419	-	-
420	183,173.25	2.55
421	655,954.75	9.14
422	165,639.00	2.31
423	-	-
424	84,016.00	1.17
425	-	-
426	220,899.00	3.08
427	-	-
428	-	-
429	38,100.00	0.53

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
430	78,640.00	1.10
431	212,985.00	2.97
432	79,334.00	1.11
433	-	-
434	22,991.02	0.32
435	8,120.00	0.11
436	44,988.45	0.63
437	81,718.00	1.14
438	91,513.00	1.27
439	234,239.00	3.26
440	509,039.50	7.09
441	-	-
442	28,633.00	0.40
443	-	-
444	7,497.00	0.10
445	69,548.86	0.97
446	1,243,936.05	17.33
447	111,283.00	1.55
448	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
449	435,740.00	6.07
450	-	-
451	1,907,630.00	26.58
452	<u>-</u>	-
453	94,505.19	1.32
454	500,187.00	6.97
455	189,004.00	2.63
456	<u>-</u>	-
457	5,154.00	0.07
458	<u>-</u>	-
459	<u>-</u>	-
460	-	-
461	426.90	0.01
462	1,065.00	0.01
463	150,058.61	2.09
464	282,990.00	3.94
465	16,625.00	0.23
466	-	-
467	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
468	139,267.00	1.94
469	49,367.91	0.69
470	330,964.00	4.61
471	6,532.00	0.09
472	-	-
473	<u>-</u>	-
474	9.00	0.00
475	34,000.00	0.47
476	15,708.00	0.22
477	14,355.00	0.20
478	151,323.00	2.11
479	6,090.28	0.08
480	67,340.20	0.94
481	16,356.00	0.23
482	37.00	0.00
483	94,762.08	1.32
484	16,191.00	0.23
485	30,000.00	0.42
486	17,679.82	0.25

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
487	3,762.52	0.05
488	-	-
489	111,812.00	1.56
490	-	-
491	30,513.00	0.43
492	86,676.00	1.21
493	-	-
494	500.00	0.01
495	98,319.74	1.37
496	36,465.84	0.51
497	20,653.01	0.29
498	29,603.84	0.41
499	<u>-</u>	-
500	4,165.29	0.06
501	7,100.00	0.10
502	-	-
503	-	-
504	5,582.00	0.08
505	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
506	38,770.00	0.54
507	18,855.43	0.26
508	-	-
509	9,817.02	0.14
510	900.00	0.01
511	4,472.75	0.06
512	266.00	0.00
513	5,298.16	0.07
514	-	-
515	169.00	0.00
516	-	-
517	4,646.78	0.06
518	4,646.78	0.06
519	6,417.00	0.09
520	257.00	0.00
521	13,387.78	0.19
522	1,313.00	0.02
523	-	-
524	23,714.00	0.33

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
525	4,488.00	0.06
526	2,787.00	0.04
527	1,200.00	0.02
528	-	-
529	1,947.72	0.03
530	2,360.20	0.03
531	200.00	0.00
532	15,261.00	0.21
533	267.00	0.00
534	-	-
535	2.00	0.00
536	-	-
537	1,895.46	0.03
538	1,369.04	0.02
539	1,047.00	0.01
540	1,507.00	0.02
541	_	-
542	2,183.01	0.03
543	973.00	0.01

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
544	-	-
545	760.01	0.01
546	2,774.00	0.04
547	45.00	0.00
548	747.00	0.01
549	-	-
550	799.00	0.01
551	257.00	0.00
552	207.00	0.00
553	-	-
554	6.00	0.00
555	-	-
556	402.00	0.01
557	-	-
558	-	-
559	164.00	0.00
560	-	-
561	-	-
562	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
563	<u>-</u>	-
564	-	-
565	118.00	0.00
566	5.00	0.00
567	-	-
568	68.00	0.00
569	75.00	0.00
570	15.00	0.00
571	34.00	0.00
572	-	-
573	9.00	0.00
574	-	-
575	85.00	0.00
576	75.00	0.00
577	-	-
578	-	-
579	54.00	0.00
580	26.00	0.00
581	34.00	0.00

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
582	423.55	0.01
583	6.00	0.00
584	-	-
585	91.00	0.00
586	43.00	0.00
587	<u>-</u>	-
588	25.00	0.00
589	-	-
590	16.00	0.00
591	20.00	0.00
592	31.00	0.00
593	-	-
594	25.00	0.00
595	-	-
596	29.00	0.00
597	22.00	0.00
598	-	-
599	-	-
600	3.00	0.00

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
601	26.00	0.00
602	-	-
603	-	-
604	55.02	0.00
605	20.00	0.00
606	-	-
607	18.00	0.00
608	<u>-</u>	-
609	-	-
610	18.00	0.00
611	-	-
612	27.00	0.00
613	<u>-</u>	-
614	-	-
615	14.00	0.00
616	8.00	0.00
617	18.00	0.00
618	-	-
619	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
620	-	-
621	<u>-</u>	-
622	16.00	0.00
623	3.00	0.00
624	1.00	0.00
625	7.00	0.00
626	-	-
627	6.00	0.00
628	-	-
629	8.00	0.00
630	11.00	0.00
631	9.00	0.00
632	-	-
633	2.26	0.00
634	10.00	0.00
635	-	-
636	8.00	0.00
637	2.00	0.00
638	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
639	4.00	0.00
640	15.00	0.00
641	-	-
642	-	-
643	6.00	0.00
644	1.00	0.00
645	-	-
646	2.00	0.00
647	1.00	0.00
648	2.00	0.00
649	3.00	0.00
650	-	-
651	-	-
652	-	-
653	-	-
654	-	-
655	4.00	0.00
656	5.00	0.00
657	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
658	<u>-</u>	-
659	1.00	0.00
660	-	-
661	3.00	0.00
662	8.00	0.00
663	-	-
664	-	-
665	-	-
666	-	-
667	-	-
668	-	-
669	<u>-</u>	-
670	-	-
671	<u>-</u>	-
672	1.00	0.00
673	-	-
674	-	-
675	-	-
676	-	-

Vanessa Countryman February 15, 2023 Page 90

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for	Historical CAT Assessment for December 2022 (in Dollars)
	December 2022	
677	-	-
678	-	-
679	1.00	0.00
680	-	-
681	-	-
682		
683	-	-

.