

**VIA EMAIL (NMSPlans@sec.gov)**

March 13, 2023

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

Re: File Number 4-698  
Notice of Filing of Amendment to the National Market System Plan Governing the  
Consolidated Audit Trail regarding CAT Funding Model

Dear Ms. Countryman:

The Consolidated Audit Trail, LLC (“CAT LLC”), on behalf of the Participants<sup>1</sup> in the National Market System Plan Governing the Consolidated Audit Trail<sup>2</sup> (the “CAT NMS Plan” or “Plan”), is filing with the Securities and Exchange Commission (the “SEC” or “Commission”) this proposed amendment to the CAT NMS Plan pursuant to Rule 608 of Regulation NMS under the Securities Exchange Act of 1934 (the “Exchange Act”).<sup>3</sup> CAT LLC proposes to amend the CAT NMS Plan to implement a revised funding model (the “Funding Proposal”) for the consolidated audit trail (the “CAT”) and to establish a fee schedule for Participant CAT fees in accordance with the Funding Proposal. The proposed changes to the CAT NMS Plan, including the fee schedule set forth in proposed Appendix B to the CAT NMS Plan, are set forth in Exhibit A to this filing.<sup>4</sup>

### **Executive Summary**

CAT LLC proposes to replace the funding model set forth in Article XI of the CAT NMS Plan (the “Original Funding Model”) with the Funding Proposal. The Original Funding Model involves a bifurcated approach, where costs associated with building and operating the CAT would be borne by (1) Industry Members (other than alternative trading systems (“ATs”) that

---

<sup>1</sup> 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.

<sup>2</sup> The CAT NMS Plan is a national market system plan approved by the Commission pursuant to Section 11A of the Exchange Act and the rules and regulations thereunder. See Securities Exchange Act Rel. No. 79318 (Nov. 15, 2016), 81 Fed. Reg. 84696 (Nov. 23, 2016) (“CAT NMS Plan Approval Order”). The full text of the CAT NMS Plan is available at [www.catnmsplan.com](http://www.catnmsplan.com). Unless otherwise defined herein, capitalized terms are defined as set forth in the CAT NMS Plan.

<sup>3</sup> 17 C.F.R. § 242.608.

<sup>4</sup> As required by Section 11.1(b) of the CAT NMS Plan, the Participants will file with the SEC pursuant to Section 19(b) of the Exchange Act CAT fees applicable to Industry Members that the Operating Committee approves.

execute transactions in Eligible Securities (“Execution Venue ATSSs”)) through fixed tiered fees based on message traffic for Eligible Securities, and (2) Participants and Industry Members that are Execution Venue ATSSs for Eligible Securities through fixed tiered fees based on market share. In contrast, the Funding Proposal would charge fees based on executed equivalent share volume of transactions in Eligible Securities rather than based on market share and message traffic.

Under the Funding Proposal, CAT LLC proposes to establish two categories of CAT fees. The first category of CAT fees would be fees (“CAT Fees”) payable by Participants and Industry Members that are CAT Executing Brokers for the Buyer and for the Seller with regard to CAT costs not previously paid by the Participants (“Prospective CAT Costs”). The CAT Fee for each transaction would be calculated by multiplying the executed equivalent shares in the transaction by one-third and the applicable “Fee Rate.” The Funding Proposal would describe in detail each aspect relevant to the CAT Fees, including a description of the Prospective CAT Costs, the calculation of the Fee Rate, the definition of “CAT Executing Broker,” the fee filings made pursuant to Section 19(b) of the Exchange Act for CAT Fees, and information available related to CAT Fees, both publicly and upon request.

The second category of CAT fees would be fees (“Historical CAT Assessments”) to be payable by Industry Members that are CAT Executing Brokers for the Buyer and for the Seller with regard to CAT costs previously paid by the Participants (“Past CAT Costs”). The Historical CAT Assessment for each transaction would be calculated by multiplying the number of executed equivalent shares in the transaction by one-third and the applicable “Historical Fee Rate.” Like with the CAT Fees related to Prospective CAT Costs, the Funding Proposal would describe in detail each aspect relevant to Historical CAT Assessments, including a description of Historical CAT Costs, the calculation of the Historical Fee Rate, the definition of “CAT Executing Broker,” the fee filings made pursuant to Section 19(b) of the Exchange Act for Historical CAT Assessments, and information available related to Historical CAT Assessments, both publicly and upon request.

The Participants separately intend to file rule filings under Section 19(b) of the Exchange Act and Rule 19b-4(f)(2) thereunder to establish the CAT Fees and Historical CAT Assessments to be charged to Industry Members based on the Funding Proposal set forth in the CAT NMS Plan.

CAT LLC has gone through an extensive process of evaluating and seeking comment on various funding models since the inception of CAT. In addition to the variety of alternative models considered by CAT LLC (as described in Section A.10 of this filing), the proposed CAT funding model has been subject to substantial public review and comment via the proposed amendment to the CAT NMS Plan published by the SEC on May 25, 2022 (the “2022 Funding Proposal”),<sup>5</sup> the subsequent order instituting proceedings related to the 2022 Funding Proposal<sup>6</sup>

---

<sup>5</sup> Securities Exchange Act Rel. No. 94984 (May 25, 2022), 87 Fed. Reg. 33226 (June 1, 2022) (“2022 Funding Proposal Release”).

<sup>6</sup> Securities Exchange Act Rel. No. 95634 (Aug. 30, 2022), 87 Fed. Reg. 54558 (Sept. 6, 2022).

and two partial amendments regarding the 2022 Funding Proposal.<sup>7</sup> Thirteen comment letters were submitted in response to the 2022 Funding Proposal, as amended, and CAT LLC submitted three detailed responses to comments.<sup>8</sup> CAT LLC withdrew the 2022 Funding Proposal on March 1, 2023.<sup>9</sup> Subject to certain minor revisions, the Funding Proposal set forth herein is the same proposal as the 2022 Funding Proposal, as amended in the two partial amendments. The minor changes made to the 2022 Funding Proposal are noted in this filing, and separately identified in Exhibit B to this filing.

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 not to have an impact on market activity because it is neutral as to the location and manner of execution. 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.

### **Requirements Pursuant to Rule 608(a)**

#### **A. Description of the Proposed Amendments to the CAT NMS Plan**

CAT LLC describes in detail the Funding Proposal in this Section A:

- Definition of CAT Executing Broker: CAT LLC describes the definition of a “CAT Executing Broker” in Section A.1 of this filing.
- CAT Budget: Budgeted CAT costs are described in Section A.2 of this filing.
- CAT Fees related to Prospective CAT Costs: CAT LLC discusses CAT Fees related to Prospective CAT Costs in Section A.3 of this filing.

---

<sup>7</sup> Securities Exchange Act Rel. No. 96394 (Nov. 28, 2022), 87 Fed. Reg. 74183 (Dec. 2, 2022) (“Partial Amendment I”), and Letter from Michael Simon, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, Commission (Feb. 15, 2023) (“February 2023 Proposed Partial Amendment”).

<sup>8</sup> Letter from Michael Simon, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, Commission (Aug. 16, 2022); Letter from Michael Simon, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, Commission (Nov. 15, 2022); and February 2023 Proposed Partial Amendment.

<sup>9</sup> Letter from Brandon Becker, CAT NMS Plan Operating Committee Chair, to Vanessa Countryman, Secretary, Commission (Mar. 1, 2023).

- Historical CAT Assessments: CAT LLC discusses Historical CAT Assessments related to Historical CAT Costs in Section A.4 of this filing.
- CAT Fee Schedule for Participants: To implement the CAT fees to be paid by the Participants under the Funding Proposal, CAT LLC proposes to add a fee schedule, entitled “Consolidated Audit Trail Funding Fees,” to Appendix B of the CAT NMS Plan. This fee schedule is discussed in Section A.5 of this filing.
- Additional Changes from Original Funding Model: CAT LLC discusses additional proposed revisions to Article XI of the CAT NMS Plan to implement the change from the Original Funding Model to the Funding Proposal in Section A.6 of this filing.
- Billing and Collection of CAT Fees: The billing and collection of CAT fees are discussed in Section A.7 of this filing.
- Illustrative Example of Funding Proposal: CAT LLC provides an illustrative example of how a Historical CAT Assessment would be calculated pursuant to the Funding Proposal in Section A.8 of this filing. The illustrative example is set forth in detail in Exhibit C to this filing.
- Advantages of and Support for Funding Proposal: CAT LLC proposes to adopt the Funding Proposal as it provides a variety of advantages over the Original Funding Model. CAT LLC discusses the advantages of the Funding Proposal in Section A.9 of this filing.
- Alternative Funding Models Considered: CAT LLC discusses the advantages and disadvantages of a variety of alternative funding models to the Funding Proposal in Section A.10 of this filing.
- Satisfaction of Exchange Act and CAT NMS Plan Requirements: CAT LLC discusses how the Funding Proposal satisfies each of the funding principles and other requirements of the CAT NMS Plan, as proposed to be revised herein, as well as the applicable requirements of the Exchange Act in Section A.11 of this filing.

## **1. Definition of CAT Executing Broker**

Under the Funding Proposal, each Industry Member that is a 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”) would be required to pay CAT Fees and Historical CAT Assessments. Accordingly, 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 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.

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.”<sup>10</sup> 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 would indicate the CAT Executing Brokers for the transactions executed on an exchange.

#### Equity Order Trade (EOT)<sup>11</sup>

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

<sup>10</sup> 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, Version 4.1.0-r17 (Feb. 21, 2023), <https://www.catnmsplan.com/sites/default/files/2023-02/02.21.2023-CAT-Reporting-Technical-Specifications-for-Participants-4.1.0-r17.pdf>.

<sup>11</sup> See Table 23, Section 4.7 (Order Trade Event) of the CAT Reporting Technical Specifications for Plan Participants, Version 4.1.0-r17 (Feb. 21, 2023), <https://www.catnmsplan.com/sites/default/files/2023-02/02.21.2023-CAT-Reporting-Technical-Specifications-for-Participants-4.1.0-r17.pdf>.

			This must be provided if orderID is provided.	
--	--	--	---	--

#### Option Trade (OT) <sup>12</sup>

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

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”)).<sup>13</sup> 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.

#### TRF/ORF/ADF Transaction Data Event (TRF)<sup>14</sup>

#	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.	C

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

<sup>12</sup> See Table 51, Section 5.2.5.1 (Simple Option Trade Event) of the CAT Reporting Technical Specifications for Plan Participants (Feb. 21, 2023).

<sup>13</sup> See Section 6.1 of the CAT Reporting Technical Specifications for Plan Participants (Feb. 21, 2023).

<sup>14</sup> See Table 61, Section 6.1 (TRF/ORF/ADF Transaction Data Event) of the CAT Reporting Technical Specifications for Plan Participants (Feb. 21, 2023).

Broker for over-the-counter transactions is not determined based on a non-tape report (e.g., a regulatory report or a clearing report), which are not publicly disseminated.<sup>15</sup>

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.<sup>16</sup>

CAT LLC proposes to make use of the defined term “CAT Executing Broker” in Proposed Section 11.3 in describing the Funding Proposal. CAT LLC believes the proposed definition of CAT Executing Broker and the use of the defined term in Article XI would set forth clearly when and in what situations an Industry Member would be considered a CAT Executing Broker for purposes of the Funding Proposal.

**a. Treatment of ATSS**

The Funding Proposal would describe how CAT fees would be assessed with regard to transactions executed on ATSS, including clarification as to which party to an ATS transaction would be treated as the CAT Executing Broker for purposes of the Funding Proposal. 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 Funding Proposal. 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.

---

<sup>15</sup> 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”.

<sup>16</sup> 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.

**b. Treatment of Fractional Shares**

The Funding Proposal also would address how transactions in fractional shares would be treated. 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 components of executed orders.<sup>17</sup>

**c. Non-Industry Members on Transaction Reports**

The Funding Proposal also would address 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 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.”<sup>18</sup> 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

---

<sup>17</sup> 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.

<sup>18</sup> FINRA Trade Reporting FAQ 202.1.



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.”

#### **d. Cancellations and Corrections**

The Funding Proposal also would provide for 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,<sup>19</sup> 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 inform Industry Members and other market participants of these policies and procedures via FAQs, CAT Alerts and/or other appropriate methods.

## **2. CAT Budget**

Section 11.1(a) of the CAT NMS Plan describes the requirement for the Operating Committee to approve an operating budget for CAT LLC on an annual basis. It requires the budget to “include the projected costs of the Company, including the costs of developing and operating the CAT for the upcoming year, and the sources of all revenues to cover such costs, as well as the funding of any reserve that the Operating Committee reasonably deems appropriate for prudent operation of the Company.” CAT LLC proposes to provide additional detail regarding the CAT LLC operating budget by adding proposed subparagraphs (i) and (ii) to Section 11.1(a) of the CAT NMS Plan. Such detailed information would provide Participants, Industry Members and other interested parties with a clear understanding of the CAT budget, and, in turn, the calculation of the CAT Fees.

#### **a. Budgeted CAT Costs**

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

---

<sup>19</sup> Section 11.1(d) of the CAT NMS Plan.

Because technology costs account for more than 90% of CAT costs, CAT LLC proposes to provide more granular information about such costs. Specifically, CAT LLC proposes to require the inclusion of five subcategories of technology costs in the budget: (1) cloud hosting services, (2) operating fees, (3) Customer and Account Information System (“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.<sup>20</sup> CAT LLC currently does not propose to require the disclosure of additional subcategories of cost information, such as a further breakdown of the category of cloud hosting services into production costs, including linker costs and storage costs. 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, CAT LLC notes 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.

CAT LLC also intends to determine costs for the operating budget for the CAT in a reasonable manner. Accordingly, CAT LLC proposes to amend Section 11.1(a) of the CAT NMS Plan to refer to a “reasonable” operating budget for CAT LLC.<sup>21</sup> Specifically, the first sentence of Section 11.1(a) of the CAT NMS Plan would be revised to read: “On an annual basis the Operating Committee shall approve a reasonable operating budget for the Company.” In addition, CAT LLC proposes to include the term “reasonably” in proposed paragraph (a)(i) of Section 11.1 of the CAT NMS Plan. Specifically, CAT proposes to introduce the term “reasonably” to the following proposed provision of the CAT NMS Plan: “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.”

---

<sup>20</sup> The CAT LLC budgets are available on the CAT website at <https://www.catnmsplan.com/cat-financial-and-operating-budget>.

<sup>21</sup> As highlighted in Exhibit B, this proposed revision of Section 11.1(a) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

Finally, CAT LLC proposes to amend Section 11.1(b) of the CAT NMS Plan. Currently, Section 11.1(b) of the CAT NMS Plan states that:

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.”

CAT LLC proposes to amend Section 11.1(b) to include a reference to Section 11.1 as well as Section 11.2 in the “subject to” clause at the beginning of the provision.<sup>22</sup> CAT LLC believes this reference is relevant because Section 11.1 sets forth requirements related to the budget, and the budget is used in calculating CAT Fees.

**b. Reserve**

Section 11.1(a) of the CAT NMS Plan states that the budget shall include “the funding of any reserve that the Operating Committee reasonably deems appropriate for prudent operation of the Company.” In addition, Proposed Section 11.1(a)(i) of the CAT NMS Plan would state that the budgeted CAT costs shall include a reserve. Section 11.1(c) of the CAT NMS Plan states that “[a]ny surplus of the Company’s revenues over its expenses shall be treated as an operational reserve to offset future fees.” CAT LLC proposes to add subparagraph (ii) to Section 11.1(a) of the CAT NMS Plan to provide additional details regarding the size and use of the reserve.

To provide additional clarity regarding the size of the reserve, CAT LLC proposes to add proposed paragraph (ii) to Section 11.1(a) of the CAT NMS Plan to set forth the parameters for the size of the reserve. An analysis of budgeted CAT costs and actual CAT costs for 2020, 2021 and the first nine months of 2022 demonstrates that actual CAT costs were approximately 20% higher than budgeted amounts over this period on a cumulative average basis. Based on the magnitude of historical budget to actual variances as well as the difficulty in accurately predicting various variable CAT costs, CAT LLC believes that a 25% reserve would appear to be reasonable. Accordingly, Proposed Section 11.1(a)(ii) of the CAT NMS Plan would state that “[f]or the reserve referenced in paragraph (a)(i) of this Section, the budget will include an amount reasonably necessary to allow the Company to maintain a reserve of not more than 25% of the annual budget.” CAT LLC also intends to include a reserve in the CAT budget that is reasonably necessary to allow the CAT LLC to maintain a reserve of not more than 25% of the annual budget. Accordingly, CAT LLC proposes to include the term “reasonably” in this sentence. Moreover, CAT LLC would calculate the reserve based on the amount of the budget other than the reserve, as the reserve is intended to provide funds for CAT LLC to pay its bills if

---

<sup>22</sup> As highlighted in Exhibit B, this proposed revision to Section 11.1(b) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

necessary. Accordingly, Proposed Section 11.1(a)(ii) of the CAT NMS Plan would state that “[f]or the avoidance of doubt, the calculation of the amount of the reserve would exclude the amount of the reserve from the budget.”<sup>23</sup>

CAT LLC also believes that it is reasonable to base the reserve on a percentage of the budget. First, CAT LLC believes that setting the reserve at 25% of the budget is appropriate in light of the timeline for the collection of CAT fees.<sup>24</sup> Many of CAT LLC’s bills must be paid on a monthly basis. However, CAT fees will be collected approximately three months after the activity on which a CAT fee is based – that is, 25% of the year. For example, activity in January would be subject to a bill in February, which would be required to be paid within 30 days,<sup>25</sup> which would be in March. Accordingly, the reserve would be available to address the funding needs related to the delay in CAT LLC’s receipt of the CAT fees.

Second, CAT LLC has established a number of measures for establishing a reasonable budget for the CAT, thereby providing a reasonable starting point for the reserve calculation. For example, the CAT NMS Plan would require the budget to be “reasonable.”<sup>26</sup> The Fee Rate established at the beginning of the year would be adjusted mid-year to address changes in the actual or budgeted costs or changes in the actual or projected executed equivalent share volume. CAT LLC has established a variety of cost management measures, as discussed in detail in Section A.9.bb of this filing, and has and would provide substantial cost transparency as discussed in detail in Section A.9.1 of this filing. The CAT fee filings pursuant to Section 19(b) of the Exchange Act would provide a description how the budget is reconciled to the collected fees.

CAT LLC proposes to provide additional clarification regarding the collection of the reserve by providing additional information as to how budget surpluses would be treated for purposes of the reserve. CAT LLC proposes to clarify how CAT fees collected in excess of CAT costs, including the reserve, would be used. Specifically, proposed subparagraph (ii) of Section 11.1(a) of the CAT NMS Plan would state that “[t]o the extent collected CAT fees exceed CAT costs, including the reserve of 25% of the annual budget, such surplus will be used to offset future fees.” In addition, CAT LLC further proposes to state in Proposed 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 examples 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

<sup>23</sup> As highlighted in Exhibit B, this proposed revision to Section 11.1(a)(ii) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

<sup>24</sup> For a discussion of the billing and collection of CAT fees, *see* Section A.7 of this filing.

<sup>25</sup> *See* Sections 3.7(b) and 11.4 of the CAT NMS Plan.

<sup>26</sup> *See* Proposed Section 11.1(a) of the CAT NMS Plan.

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 a 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 entire 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.

### **c. Publicly Available Budgets**

CAT LLC publicly provides the annual operating budget for the Company as well as updates to the budget that occur during the year.<sup>27</sup> This publicly available budget information describes in detail the budget for the Company. For example, among other things, the budget provides specific budgeted technology costs (including cloud hosting services, operating fees, CAIS operating fees and change request fees) and general and administrative costs (including legal, consulting, insurance, professional and administration, and public relations). The Company provides such budget information on a dedicated webpage on the CAT NMS Plan website to make it readily accessible to CAT Reporters and others.

### **3. CAT Fees related to Prospective CAT Costs**

CAT LLC proposes to describe CAT Fees related to Prospective CAT Costs in Section 11.3(a) of the CAT NMS Plan. Proposed Section 11.3(a) of the CAT NMS Plan would describe that the CAT Fees related to Prospective CAT Costs apply to both Participants and Industry Members, the manner of calculating the Fee Rate for CAT Fees, the description of the calculation of the Participant CAT Fees, a description of the calculation of the Industry Member CAT Fees, a description of the fee filings under Section 19(b) of the Exchange Act for Industry Member CAT Fees, and details regarding the calculation of the CAT Fees that are available upon

---

<sup>27</sup> To address potential changes related to the CAT during the year, the Operating Committee may adjust the budgeted CAT costs for the year as it reasonably deems appropriate for the prudent operation of the Company. For example, the Operating Committee may determine that an adjustment to the budget is necessary if actual costs during the year are more or less than the budget, or if unanticipated expenditures are necessary. To the extent that the Operating Committee adjusts the budgeted CAT costs during the year and determines to adjust the Fee Rate, the adjusted budgeted CAT costs would be used in calculating the new Fee Rate for the remaining months of the year.

request or publicly available. The following describes Proposed Section 11.3(a) of the CAT NMS Plan in detail.

**a. Introductory Statement**

CAT LLC proposes to revise Section 11.3(a) of the CAT NMS Plan to address CAT Fees related to Prospective CAT Costs for both Participants and Industry Members. Accordingly, CAT LLC proposes to revise the introductory statement in Proposed Section 11.3(a) of the CAT NMS Plan to state that “[t]he 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:”.

**b. Fee Rate for CAT Fees**

CAT LLC proposes to describe the timing and method for calculating the Fee Rate for the CAT Fees related to Prospective CAT Costs in Proposed Section 11.3(a)(i) of the CAT NMS Plan, and to provide additional detail regarding the Fee Rate in that provision. Proposed Section 11.3(a)(i) of the CAT NMS Plan would state that CAT Fees related to Prospective CAT Costs would be calculated twice a year. Specifically, this proposed provision would state that “[t]he 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.” CAT LLC recognizes the need to align CAT Fees with CAT costs. Requiring the adjustment of the Fee Rate both at the beginning of the year and once mid-year in response to changes in the budgeted or actual costs or projected or actual total executed equivalent share volume during the year would likely lead to the greater alignment of CAT Fees and CAT costs, thereby potentially avoiding the collection of CAT Fees in excess of CAT costs or CAT Fees that are insufficient to cover CAT costs. Accordingly, CAT LLC proposes to require both an annual and a mid-year adjustment of the Fee Rate for the CAT Fee.

**i. General**

CAT LLC proposes to provide details regarding the calculation of the Fee Rate for the CAT Fees in Proposed Section 11.3(a)(i) of the CAT NMS Plan. The detail provided in Proposed Section 11.3(a)(i) of the CAT NMS Plan would include a description of the calculation of the Fee Rate at the beginning of the year and during the year, the counting method for executed equivalent shares, the budgeted CAT costs, and the projected total executed equivalent share volume of transactions in Eligible Securities for the relevant period. Each of these aspects of the CAT Fees are discussed in more detail below.

**A. Annual Calculation of Fee Rate**

Proposed Section 11.3(a)(i)(A)(I) of the CAT NMS Plan would describe the annual calculation of the Fee Rate and the requirement for Participants to file a fee filing for CAT Fees to be charged Industry Members calculated using the Fee Rate. This proposed provision also

would state that Participants and Industry Members would be required to pay such CAT Fees once the CAT Fees are in effect with regard to Industry Members. Specifically, this proposed provision would state:

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 reasonably 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.

CAT LLC proposes to clarify that the annual calculation of CAT Fees would be performed using reasonably budgeted CAT costs and reasonably projected total executed equivalent share volume.<sup>28</sup> Accordingly, CAT LLC proposes to use the term “reasonably” twice in 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 reasonably projected total executed equivalent share volume of all transactions in Eligible Securities for the year.”

## **B. Mid-Year Calculation of Fee Rate**

Proposed Section 11.3(a)(i)(A)(II) of the CAT NMS Plan describes the mandatory mid-year calculation of a new Fee Rate. This proposed provision would describe the mid-year calculation of the Fee Rate and the requirement for Participants to file a fee filing for CAT Fees to be charged Industry Members calculated using the Fee Rate. This proposed provision also would state that Participants and Industry Members would be required to pay such CAT Fees once the CAT Fees are in effect with regard to Industry Members. Specifically, this proposed provision would state:

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 reasonably 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

---

<sup>28</sup> As highlighted in Exhibit B, this proposed revision to add the term “reasonably” before “projected total executed equivalent share volume” in Proposed Section 11.3(a)(i)(A)(I) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

such CAT Fees are in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act.

CAT LLC proposes to clarify that CAT Fees would be calculated during the year using reasonably budgeted CAT costs and reasonably projected total executed equivalent share volume.<sup>29</sup> Accordingly, CAT LLC proposes to use the term “reasonably” twice in 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 reasonably projected total executed equivalent share volume of all transactions in Eligible Securities for the remainder of the year.”

### **C. Continuing CAT Fee**

CAT LLC also proposes to add Section 11.3(a)(i)(A)(III) to the CAT NMS Plan to clarify that CAT Fees related to Prospective CAT Costs do not sunset automatically; such CAT Fees would remain in place until new CAT Fees are in place with a new Fee Rate. The Funding Proposal is designed to collect CAT fees continuously so as to provide uninterrupted revenue to pay CAT bills. Specifically, this proposed provision would state:

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 this 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.

### **D. Commencement of CAT Fee**

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 (due to, for example, mid-year approval of the CAT Fee by the SEC), 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.”

---

<sup>29</sup> As highlighted in Exhibit B, this proposed revision to add the term “reasonably” before “projected total executed equivalent share volume” in Proposed Section 11.3(a)(i)(A)(II) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.



## **ii. Executed Equivalent Shares**

CAT LLC proposes to describe in Proposed Section 11.3(a)(i)(B) of the CAT NMS Plan how executed equivalent shares would be counted for purposes of calculating CAT Fees. Under the Funding Proposal, a CAT Fee would be charged with regard to each transaction in Eligible Securities as reported in CAT Data. As set forth in Section 1.1 of the CAT NMS Plan, “Eligible Securities” are defined to include all NMS Securities and all OTC Equity Securities. Section 1.1 of the CAT NMS Plan, in turn, defines an “NMS Security” as “any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in Listed Options.” In addition, Section 1.1 of the CAT NMS Plan defines an “OTC Equity Security” as “any equity security, other than an NMS Security, subject to prompt last sale reporting rules of a registered national securities association and reported to one of such association’s equity trade reporting facilities.” A CAT Fee would be imposed with regard to transactions in Eligible Securities in the CAT Data regardless of whether the trade is executed on an exchange or otherwise than on an exchange.

The Funding Proposal uses the concept of executed equivalent shares as the transactions subject to a CAT Fee involve NMS Stocks, Listed Options and OTC Equity Securities, each of which have different trading characteristics.

*NMS Stocks.* Under the Funding Proposal, each executed share for a transaction in NMS Stocks would be counted as one executed equivalent share. Accordingly, Proposed Section 11.3(a)(i)(B)(I) of the CAT NMS Plan would state that “[f]or purposes of calculating CAT Fees, executed equivalent shares in a transaction in Eligible Securities will be reasonably counted as follows: (I) each executed share for a transaction in NMS Stocks will be counted as one executed equivalent share.”

*Listed Options.* Recognizing that Listed Options trade in contracts rather than shares, each executed contract for a transaction in Listed Options will be counted using the contract multiplier applicable to the specific Listed Option in the relevant transaction. Typically, a Listed Option contract represents 100 shares; however, it may also represent another designated number of shares. Accordingly, Proposed Section 11.3(a)(i)(B)(II) of the CAT NMS Plan would state that “[f]or purposes of calculating CAT Fees, executed equivalent shares in a transaction in Eligible Securities will be reasonably counted as follows: . . . (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).”

*OTC Equity Securities.* Similarly, in recognition of the different trading characteristics of OTC Equity Securities as compared to NMS Stocks, the Funding Proposal would discount the share volume of OTC Equity Securities when calculating CAT Fees. Many OTC Equity Securities are priced at less than one dollar – and a significant number are priced at less than one penny – per share and low-priced shares tend to trade in larger quantities. Accordingly, a disproportionately large number of shares are involved in transactions involving OTC Equity

Securities versus NMS Stocks.<sup>30</sup> Because the Funding Proposal would calculate CAT Fees based on executed share volume, CAT Reporters trading OTC Equity Securities would likely be subject to higher fees than their market activity may warrant. To address this potential concern, the Funding Proposal would count each executed share for a transaction in OTC Equity Securities as 0.01 executed equivalent shares. Accordingly, Proposed Section 11.3(a)(i)(B)(III) of the CAT NMS Plan would state that “[f]or purposes of calculating CAT Fees, executed equivalent shares in a transaction in Eligible Securities will be reasonably counted as follows: . . . (III) each executed share for a transaction in OTC Equity Securities shall be counted as 0.01 executed equivalent share.”

The discount to 1% was selected based on a reasoned analysis of a variety of different metrics for comparing the markets for OTC Equity Securities and NMS Stocks, rather than a simple calculation. For example, using 2021 data, the Operating Committee calculated the following metrics: (1) the ratio of total notional dollar value traded for OTC Equity Securities to OTC Equity Securities and NMS Stocks was 0.051%; (2) the ratio of total trades in OTC Equity Securities to total trades in OTC Equity Securities and NMS Stocks was 0.90%; and (3) the ratio of average share price per trade of OTC Equity Securities to average share price per trade for OTC Equity Securities and NMS Stocks was 0.065%. In recognition of the fact that these calculations involve averages and for ease of application, the Operating Committee determined to round these metrics to 1%.

In calculating CAT Fees, CAT LLC intends for executed equivalent shares in a transaction in Eligible Securities to be reasonably counted. Accordingly, CAT LLC proposes to include the term “reasonably” in the following sentence in Proposed Section 11.3(a)(i)(B) of the CAT NMS Plan: “For purposes of calculating CAT Fees, executed equivalent shares in a transaction in Eligible Securities will be reasonably counted as follows:”.

### **iii. Budgeted CAT Costs**

The calculation of the Fee Rate for CAT Fees related to Prospective CAT Costs requires the determination of the budgeted CAT costs for the year or other relevant period. Proposed Section 11.3(a)(i)(C) of the CAT NMS Plan would describe the budgeted CAT costs for calculating CAT Fees. It would state the following:

The budgeted CAT costs for the year shall be comprised of all reasonable fees, costs and expenses reasonably budgeted to be incurred by or for the Company in connection with the development, implementation and operation of the CAT as set forth in the annual operating budget approved by the Operating Committee pursuant

---

<sup>30</sup> For example, based on data from 2021, (1) the average price per executed share of OTC Equity Securities was \$0.072 and the average price per executed share for NMS Stocks was \$49.51; and (2) the average trade size for OTC Equity Securities was 63,474 and the average trade size for NMS Stocks was 166 shares. Trades in OTC Equity Securities accounted for 77% of the number of all equity shares traded, but only 0.51% of the notional value of all equity shares traded.

to Section 11.1(a) of the CAT NMS Plan, or as adjusted during the year by the Operating Committee.

As discussed above, CAT LLC also proposes to provide additional details regarding what is included in the annual operating budget approved by the Operating Committee pursuant to Section 11.1(a) of the CAT NMS Plan in proposed paragraphs (i) and (ii) of Section 11.1(a) of the CAT NMS Plan.

Moreover, CAT LLC proposes to clarify that CAT Fees must be calculated using reasonably budgeted CAT costs.<sup>31</sup> Accordingly, CAT proposes to include the terms “reasonably” and “reasonable” the following sentence: “The budgeted CAT costs for the year shall be comprised of all reasonable fees, costs and expenses reasonably budgeted to be incurred by or for the Company in connection with the development, implementation and operation of the CAT as set forth in the annual operating budget approved by the Operating Committee pursuant to Section 11.1(a) of the CAT NMS Plan, or as adjusted during the year by the Operating Committee.”

#### **iv. Projected Total Executed Equivalent Share Volume**

The calculation of the Fee Rate for CAT Fees also requires the determination of the projected total executed equivalent share volume of transactions in Eligible Securities for each relevant period. Each year, the Operating Committee would determine this projection based on the total executed equivalent share volume of transactions in Eligible Securities from the prior twelve months. Therefore, Proposed Section 11.3(a)(i)(D) of the CAT NMS Plan would state that “[t]he 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.” CAT LLC determined that the use of the data from the prior twelve months provides an appropriate balance between using data from a period that is sufficiently long to avoid short term fluctuations while providing data close in time to the upcoming relevant period. In addition, CAT LLC proposes to allow the Operating Committee to base its projection on the prior twelve months, but to use its discretion to analyze the likely volume for the upcoming year. As set forth in Proposed Section 11.3(a)(iii)(B), Participants will be required to provide a description of the calculation of the projection in their fee filings pursuant to Section 19(b) of the Exchange Act. Furthermore, CAT LLC intends to calculate the CAT Fees based on a reasonable determination of the projected total executed equivalent share volume of transactions in Eligible Securities. Accordingly, CAT LLC propose to include the term “reasonably” in the Proposed Section 11.3(a)(i)(D) of the CAT NMS Plan to indicate that the Operating Committee will “reasonably determine the projected total executed equivalent share volume.”

---

<sup>31</sup> As highlighted in Exhibit B, this proposed revision to add the term “reasonable” before “fees, cost and expenses” in Proposed Section 11.3(a)(i)(C) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

**c. Participant CAT Fees for Prospective CAT Costs**

CAT LLC proposes to describe the Participant CAT Fees related to Prospective CAT Costs in Proposed Section 11.3(a)(ii) of the CAT NMS Plan. Proposed Section 11.3(a)(ii) of the CAT NMS Plan would have two paragraphs (A) and (B), where paragraph (A) would describe the CAT Fee obligation for Participants and paragraph (B) would clarify that Participants would only be required to pay CAT Fees when Industry Members are required to pay CAT Fees.

**i. CAT Fee Obligation of the Participants**

CAT LLC proposes to add paragraph (A) to Proposed Section 11.3(a)(ii) of the CAT NMS Plan to describe the CAT Fee obligation of the Participants. Specifically, proposed paragraph (A) of Proposed Section 11.3(a)(ii) of the CAT NMS Plan would state the following:

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 determined pursuant to paragraph (a)(i) of this Section 11.3.

CAT LLC intends for the Participant CAT Fee to be calculated using the Fee Rate reasonably determined pursuant to Proposed Section 11.3(a)(i) of the CAT NMS Plan. Accordingly, CAT LLC proposes to include the term “reasonably” in the following sentence: “[t]he 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.”

**ii. Effectiveness of Participant CAT Fees**

CAT LLC also proposes to include proposed paragraph (B) of Proposed Section 11.3(a)(ii) of the CAT NMS Plan to clarify that Participants would only be required to pay CAT Fees when Industry Members are required to pay CAT Fees. Under the Funding Proposal, CAT Fees are designed to cover 100% of CAT costs by allocating costs between and among Participants and Industry Members. However, the CAT Fees charged to Participants are implemented via a different process than CAT Fees charged to Industry Members. CAT Fees charged to Participants are implemented via an approval of the CAT Fees by the Operating Committee in accordance with the requirements of the CAT NMS Plan. In contrast, CAT Fees charged to Industry Members may only become effective in accordance with the requirements of Section 19(b) of the Exchange Act. Accordingly, proposed paragraph (B) of Proposed Section 11.3(a)(ii) of the CAT NMS Plan would state that “[e]ach 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.” CAT LLC intends for the Participant CAT Fee to be calculated using the Fee Rate reasonably determined pursuant to Proposed Section 11.3(a)(i) of the CAT NMS Plan. Accordingly, CAT LLC proposes to include the term “reasonably” in the phrase “the Fee Rate reasonably determined” in this provision.

**d. Industry Member CAT Fees for Prospective CAT Costs**

CAT LLC proposes to describe the Industry Member CAT Fees related to Prospective CAT Costs in Proposed Section 11.3(a)(iii) of the CAT NMS Plan. Proposed Section 11.3(a)(iii) of the CAT NMS Plan would have three paragraphs, (A), (B) and (C), where paragraph (A) would describe the CAT Fee obligation for Industry Members, paragraph (B) would describe the required content of the fee filings required to be filed pursuant to Section 19(b) of the Exchange Act regarding the CAT Fees for Industry Members, and paragraph (C) would clarify that Participants would not make CAT fee filings regarding CAT Fees until the Financial Accountability Milestone related to Period 4 as described in Section 11.6 of the CAT NMS Plan has been satisfied.

**i. Industry Member CAT Fee Obligation**

CAT LLC proposes to describe the CAT Fees related to Prospective CAT Costs that would be charged to Industry Members in Proposed Section 11.3(a)(iii)(A) of the CAT NMS Plan. Accordingly, Proposed Section 11.3(a)(iii)(A) of the CAT NMS Plan would state the following:

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.

CAT LLC intends for the Participant CAT Fee to be calculated using the Fee Rate reasonably determined pursuant to Proposed Section 11.3(a)(i) of the CAT NMS Plan. Accordingly, CAT LLC proposes to include the phrase “the Fee Rate reasonably determined pursuant to paragraph (a)(i) of this Section 11.3” in this provision.

**ii. Fee Filings under Section 19(b) of the Exchange Act for Industry Member CAT Fees**

CAT LLC proposes to describe the information that Participants would be required to include in their fee filings to be made pursuant to Section 19(b) of the Exchange and Rule 19b-4 thereunder for Industry Member CAT Fees in proposed paragraph (B) of Proposed Section 11.3(a)(iii) of the CAT NMS Plan.<sup>32</sup> Specifically, such filings would be required to include with regard to the CAT Fee: (A) the Fee Rate; (B) the budget for the upcoming year (or remainder of the year, as applicable), including a brief description of each line item in the budget, including (1) technology line items of cloud hosting services, operating fees, CAIS operating fees, change request fees and capitalized developed technology costs, (2) legal, (3) consulting, (4) insurance, (5) professional and administration, and (6) public relations costs, a reserve and/or such other categories as reasonably determined by the Operating Committee to be included in the budget and the reason for changes in each such line item from the prior CAT Fee filing;<sup>33</sup> (C) a discussion of how the budget is reconciled to the collected fees; and (D) the projected total executed equivalent share volume of all transactions in Eligible Securities for the year (or remainder of the year, as applicable), and a description of the calculation of the projection. This detail would describe how the Fee Rate is calculated, and explain how the budget used in the calculation is reconciled to the collected fees. Such detailed information would provide Industry Members and other interested parties with a clear understanding of the calculation of the CAT Fees and their relationship to CAT costs.<sup>34</sup>

In addition, CAT LLC proposes 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.”

**iii. Financial Accountability Milestone**

CAT LLC recognizes that the collection of CAT Fees from Industry Members is 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 fee filings pursuant to Section 19(b) of the Exchange Act regarding CAT Fees until the Financial Accountability Milestone related to Period 4 described in Section 11.6 of the CAT NMS Plan has been satisfied.

---

<sup>32</sup> CAT LLC expects the fee filings required to be made by the Participants pursuant to Section 19(b) of the Exchange Act with regard to CAT Fees to be filed pursuant to Section 19(b)(3)(A) of the Exchange Act and Rule 19b-(f)(2) thereunder. In accordance with Section 19(b)(3)(A) of the Exchange Act and Rule 19b-4(f)(2) thereunder, such fee filings would be effective upon filing.

<sup>33</sup> CAT LLC intends to include any other categories as reasonably determined by the Operation Committee. Accordingly, this provision refers to “such other categories as reasonably determined by the Operating Committee to be included in the budget.”

<sup>34</sup> As a practical matter, the fee filing would provide the exact fee per executed equivalent share to be paid for the CAT Fees, by multiplying the Fee Rate by one-third and describing the relevant number of decimal places for the fee.

Specifically, CAT LLC proposes to add proposed paragraph (C) to Proposed Section 11.3(a)(iii) to the CAT NMS Plan to address the Financial Accountability Milestone. 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.”

#### **e. CAT Fee Details**

CAT LLC proposes to 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)(A) to the CAT NMS Plan to describe this disclosure. 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. At a minimum, such details would include each Participant or CAT Executing Broker’s executed equivalent share volume and corresponding fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.”<sup>35</sup> Such information would provide Participants and CAT Executing Brokers with the ability to understand the details regarding the calculation of their CAT Fees.

In addition, CAT LLC proposes to make certain aggregate statistics regarding the CAT Fees publicly available. Specifically, CAT LLC proposes to add Proposed Section 11.3(a)(iv)(B) to the CAT NMS Plan to describe this public disclosure. This provision would state that “[f]or each CAT Fee, at a minimum, CAT LLC will make publicly available the aggregate executed equivalent share volume and corresponding aggregate fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.”<sup>36</sup>

#### **4. Historical CAT Assessment**

CAT LLC proposes to describe Historical CAT Assessments related to Historical CAT Costs in Proposed Section 11.3(b) of the CAT NMS Plan. Proposed Section 11.3(b) of the CAT NMS Plan would describe that Historical CAT Assessments apply only to Industry Members (not to Participants), the manner of calculating the Historical Fee Rate for the Historical CAT Assessment, a description of the calculation of the Industry Member CAT Fees, a description of the fee filings under Section 19(b) of the Exchange Act for Historical CAT Assessments, and details regarding the calculation of the Historical CAT Assessments that are available upon request or publicly available. The following describes in detail Section 11.3(b) of the CAT NMS Plan.

---

<sup>35</sup> As highlighted in Exhibit B, this second sentence in Proposed Section 11.3(a)(iv)(A) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

<sup>36</sup> As highlighted in Exhibit B, Proposed Section 11.3(a)(iv)(B) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

**a. Introductory Statement**

CAT LLC proposes to revise Section 11.3(b) of the CAT NMS Plan to address Historical CAT Assessments related to Historical CAT Costs to be charged to Industry Members. Accordingly, CAT LLC proposes to revise the introductory statement in Proposed Section 11.3(b) of the CAT NMS Plan 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:”.<sup>37</sup> With the reference to “one or more” Historical CAT Fees, this provision also clarifies that there may be one or more Historical CAT Assessments.

**b. Calculation of Historical Fee Rate**

CAT LLC proposes to provide details regarding the calculation of the Historical CAT Assessment in Proposed Section 11.3(b)(i) of the CAT NMS Plan. These details would include a description of the calculation of the Historical Fee Rate, the counting method for executed equivalent shares, the Historical CAT Costs, the Historical Recovery Period, and the projected total executed equivalent share volume of transactions in Eligible Securities for the Historical Recovery Period.

**i. General**

Proposed paragraph (a) of Proposed Section 11.3(b)(i) of the CAT NMS Plan would describe the calculation of the Historical Fee Rate for each Historical CAT Assessment and the requirement for Participants to file a fee filing for each Historical CAT Assessment. This proposed provision also would state that Industry Members would be required to pay each Historical CAT Assessment once such Historical CAT Assessment is in effect in accordance with Section 19(b) of the Exchange Act. Specifically, this proposed provision would state that:

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

---

<sup>37</sup> Note that there may be one or more Historical CAT Assessments, depending upon the timing of any approval of the amendment to the CAT NMS Plan and the completion of the Financial Accountability Milestones. For a discussion of the Financial Accountability Milestones, see Section 11.6 of the CAT NMS Plan.



CAT LLC proposes to clarify that the calculation of each Historical Fee Rate would be performed using reasonably projected total executed equivalent share volume.<sup>38</sup> Accordingly, CAT LLC proposes to use the term “reasonably” to describe “projected total executed equivalent share volume” in this provision.

## **ii. Executed Equivalent Shares**

The Historical CAT Assessment would be calculated based on the same executed equivalent share calculation as CAT Fees related to Prospective CAT Costs. Accordingly, Proposed Section 11.3(b)(i)(B) of the CAT NMS Plan would make it clear that the calculation is the same for both types of fees. Specifically, Proposed Section 11.3(b)(i)(B) of the CAT NMS Plan would state that “[f]or 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.”

## **iii. Historical CAT Costs**

The calculation of the Historical CAT Assessment depends upon the determination of the Historical CAT Costs. Proposed Section 11.3(b)(i)(C) of the CAT NMS Plan would describe the Historical CAT Costs for calculating Historical CAT Assessments. The Operating Committee will reasonably determine the Past CAT Costs sought to be recovered through the Historical CAT Assessment. CAT LLC proposes to make this approach clear in the language of the CAT NMS Plan by adding Proposed Section 11.3(b)(i)(C) of the CAT NMS Plan, which would state that “[t]he Operating Committee will reasonably determine the Historical CAT Costs sought to be recovered by each Historical CAT Assessment, where the Historical CAT Costs will be Past CAT Costs minus Past CAT Costs reasonably excluded from Historical CAT Costs by the Operating Committee.”<sup>39</sup>

CAT LLC proposes to further clarify the amount to be collected via the Historical CAT Assessments in Proposed Section 11.3(b)(i)(C) of the CAT NMS Plan. Specifically, CAT LLC proposes to add the clarifying statement that “[e]ach Historical CAT Assessment will seek to recover from CAT Executing Brokers two-thirds of Historical CAT Costs incurred during the period covered by the Historical CAT Assessment.” This statement 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 one-third 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.

---

<sup>38</sup> As highlighted in Exhibit B, this proposed revision to add the term “reasonably” before “projected total executed equivalent share volume” in Proposed Section 11.3(b)(i)(A) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

<sup>39</sup> As highlighted in Exhibit B, this proposed revision to add the term “reasonably” before “excluded” in Proposed Section 11.3(b)(i)(C) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

CAT LLC also proposes to add the term “reasonably” to the following sentence in Section 11.1(c) of the CAT NMS Plan before the word “incurred”: “In determining fees on Participants and Industry Members the Operating Committee shall take into account fees, costs and expenses (including legal and consulting fees) *reasonably* incurred by the Participants on behalf of the Company prior to the Effective Date in connection with the creation and implementation of the CAT.”<sup>40</sup> The addition of the term “reasonably” would require such fees, costs and expenses to be reasonable.

#### **iv. Historical Recovery Period**

The calculation of the Historical CAT Assessment also depends upon the determination of the Historical Recovery Period. As the total amount of the Historical CAT Costs have not yet been determined because the CAT fee model has not yet been approved and CAT LLC continues to incur costs, CAT LLC has not determined the specific recovery period for any particular Historical CAT Assessment. Based on CAT costs incurred to date, however, CAT LLC believes that the Historical Recovery Period should not be less than 24 months or more than five years. In analyzing the potential Historical Recovery Periods, CAT LLC sought to weigh the need for a reasonable Historical Fee Rate that spreads the Historical CAT Costs over an appropriate amount of time and the need to repay the loan notes to the Participants in a timely fashion. CAT LLC analyzed potential recovery periods using the Historical CAT Costs through 2022 and the total executed equivalent share volume of transactions in Eligible Securities for 2021 to calculate the projected total executed equivalent share volume of transactions. Based on the variables in this analysis, CAT LLC determined that the Historical Fee Rate calculated using a Historical Recovery Period of two to five years would establish a reasonable Historical Fee Rate even if Industry Members were required to pay a Historical CAT Assessment and the ongoing CAT Fee at the same time. CAT LLC notes, however, that the actual Historical CAT Assessment would be calculated using up-to-date Historical CAT Costs and executed equivalent share volume.

Proposed Section 11.3(b)(i)(D)(I) of the CAT NMS Plan would describe the Historical Recovery Period used in calculating the Historical Fee Rate. This proposed provision would state that “[t]he 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.”<sup>41</sup> This proposed provision, however, would state that “no Historical Recovery Period used in calculating the Historical Fee Rate shall be less than 24 months or more than five years.” As discussed below, the Historical Recovery Period is used to calculate the Historical Fee Rate. The actual recovery period may be longer or shorter than the Historical Recovery Period depending on the actual executed equivalent share volumes during the time that the Historical CAT Assessment is in effect. Any Historical CAT Assessment would remain in effect until the relevant Historical CAT

---

<sup>40</sup> As highlighted in Exhibit B, this proposed revision to Section 11.1(c) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

<sup>41</sup> This provision would require that the Historical Recovery Period be “reasonably” established by the Operating Committee.

Costs are recovered, whether that time is shorter or longer than the Historical Recovery Period used in calculating the Historical Fee Rate.

Proposed Section 11.3(b)(i)(D)(II) of the CAT NMS Plan would describe the length of the time that the Historical CAT Assessment would be in effect, which may be greater than or less than the Historical Recovery Period, depending on the amount of the Historical CAT Assessments collected based on the actual volume during the time that the Historical Assessment is in effect. Any Historical CAT Assessment would remain in effect until the relevant Historical CAT Costs are collected, whether that time is shorter or longer than the Historical Recovery Period used in calculating the Historical Fee Rate. Accordingly, this provision states that “[n]otwithstanding 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.”

**v. Projected Total Executed Equivalent Share Volume**

The Historical Fee Rate for a Historical CAT Assessment would be calculated by using the projected total executed equivalent share volume of all transactions in Eligible Securities for the Historical Recovery Period for such Historical CAT Assessment. CAT LLC proposes to clarify the manner of calculating the projected total executed equivalent share volume for each Historical CAT Assessment in Proposed Section 11.3(b)(i)(E) to the CAT NMS Plan. CAT LLC proposes to state in this provision that the projection will be determined based on transactions in Eligible Securities for the prior twelve months. Accordingly, Proposed Section 11.3(b)(i)(E) of the CAT NMS Plan would state that “[t]he Operating Committee shall reasonably determine the projected total executed equivalent share volume of all transactions in Eligible Securities for each Historical Recovery Period based on the executed equivalent share volume of all transactions in Eligible Securities for the prior twelve months.” As with the calculation of the projections for CAT Fees, CAT LLC determined that the use of the data from the prior twelve months provides an appropriate balance between using data from a period that is sufficiently long to avoid short term fluctuations while providing data close in time to the upcoming relevant period. In addition, CAT LLC proposes to allow the Operating Committee to base its projection on the prior twelve months, but to use its discretion to analyze the likely volume for the upcoming year. As set forth in Proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan, Participants will be required to provide a description of the calculation of the projection in their fee filings pursuant to Section 19(b) of the Exchange Act for Historical Cat Assessments. As noted, this provision would require the Operating Committee to “reasonably” determine the projected total executed equivalent share volume.

**c. Past CAT Costs and Participants**

Proposed Section 11.3(b)(ii) of the CAT NMS Plan would clarify that the Participants would not be required to pay the Historical CAT Assessment as the Participants previously have paid all Past CAT Costs. It would state that, “[b]ecause Participants previously have paid Past CAT Costs via loans to the Company, Participants would not be required to pay any Historical

CAT Assessment.” In addition, Proposed Section 11.3(b)(ii) of the CAT NMS Plan would clarify that the Historical CAT fees collected from Industry Members would be allocated to Participants for repayment of the outstanding loan notes of the Participants to the Company on a pro rata basis; such fees would not be allocated to Participants based on the executed equivalent share volume of transactions in Eligible Securities. Specifically, Proposed Section 11.3(b)(ii) of the CAT NMS Plan would state that “[i]n lieu of a Historical CAT Assessment, the Participants’ one-third share of Historical CAT Costs and such other additional Past CAT Costs as reasonably determined by the Operating Committee will be paid by the cancellation of loans made to the Company on a pro rata basis based on the outstanding loan amounts due under the loans.” Furthermore, Proposed Section 11.3(b)(ii) of the CAT NMS Plan would emphasize that “[t]he Historical CAT Assessment is designed to recover two-thirds of the Historical CAT Costs.”<sup>42</sup>

**d. Historical CAT Assessment for Industry Members**

CAT LLC proposes to describe the Historical CAT Assessment for Industry Members in Proposed Section 11.3(b)(iii) of the CAT NMS Plan. Proposed Section 11.3(b)(iii) of the CAT NMS Plan would have two paragraphs, (A) and (B), where paragraph (A) would describe the Historical CAT Assessment for Industry Member, and paragraph (B) would describe the fee filings required to be filed pursuant to Section 19(b) of the Exchange Act regarding the Historical CAT Assessments.

**i. Industry Member Obligation for Historical CAT Assessment**

CAT LLC proposes to describe the Historical CAT Assessment charged to Industry Members in Proposed Section 11.3(b)(iii)(A) of the CAT NMS Plan. Specifically, this proposed paragraph would state that:

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.

As noted, this provision would require the Operating Committee to “reasonably” determine the Historical Fee Rate pursuant to Proposed Section 11.3(b)(i) of the CAT NMS Plan.

---

<sup>42</sup> As highlighted in Exhibit B, the sentence “In lieu of a Historical CAT Assessment, the Participants’ one-third share of Historical CAT Costs and such other additional Past CAT Costs as reasonably determined by the Operating Committee will be paid by the cancellation of loans made to the Company on a pro rata basis based on the outstanding loan amounts due under the loans” has been revised from the 2022 Funding Proposal. CAT LLC proposes to revise the phrase “cancellation of the loans made by the Company” to “cancellation of the loans made to the Company” as the loans were made to the Company, not by the Company. In addition, CAT LLC proposes to revise the sentence to clarify that Participants will remain responsible via the loan cancellations for one-third of Historical CAT Costs as well as 100% of certain other Past CAT Costs (e.g., the Excluded Costs discussed below).

## **ii. Historical CAT Assessment Fee Filings**

CAT LLC proposes to provide additional details regarding the fee filings to be filed by the Participants regarding each Historical CAT Assessment pursuant to Section 19(b) of the Exchange Act in Proposed Section 11.3(b)(iii)(B) of the CAT NMS Plan.<sup>43</sup> Specifically, this provision would describe that fee filings would be required for each Historical CAT Assessment, the content of such fee filings, and the effect of the Financial Accountability Milestones described in Section 11.6 of the CAT NMS Plan on the fee filings.

### **A. Number of Fee Filings for Historical CAT Assessments**

CAT LLC proposes to clarify how many fee filings pursuant to Section 19(b) of the Exchange Act Participants would be required to make with regard to 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.”

### **B. Content of Fee Filings for Historical CAT Assessments**

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

---

<sup>43</sup> CAT LLC expects the fee filings required to be made by the Participants pursuant to Section 19(b) of the Exchange Act with regard to Historical CAT Assessments to be filed pursuant to Section 19(b)(3)(A) of the Exchange Act. In accordance with Section 19(b)(3)(A) of the Exchange Act, fee filings made pursuant to Section 19(b)(3)(A) of the Exchange Act would be effective upon filing.

other interested parties with a clear understanding of the calculation of each Historical CAT Assessment and its relationship to Historical CAT Costs.<sup>44</sup>

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

### **C. Financial Accountability Milestones**

CAT LLC recognizes that the collection of Historical CAT Assessments from Industry Members is 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 pursuant to Section 19(b) of the Exchange Act regarding a Historical CAT Assessment until any applicable Financial Accountability Milestone has been satisfied. Specifically, 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.”

#### **e. Historical CAT Assessment Details**

CAT LLC proposes to provide CAT Executing Brokers with details regarding the calculation of their Historical CAT Assessments upon request. Specifically, CAT LLC proposes to add Proposed Section 11.3(b)(iv)(A) to the CAT NMS Plan, which 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. At a minimum, such details would include each CAT Executing Broker’s executed equivalent share volume and corresponding fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.”<sup>45</sup> Such information would provide CAT Executing Brokers with the ability to understand the details regarding the calculation of their Historical CAT Assessments.

In addition, CAT LLC proposes to make certain aggregate statistics regarding Historical CAT Assessments publicly available. Specifically, CAT LLC proposes to add Proposed Section 11.3(b)(iv)(B) to the CAT NMS Plan. This provision would state that “[f]or each Historical CAT Assessment, at a minimum, CAT LLC will make publicly available the aggregate executed

---

<sup>44</sup> As a practical matter, the fee filing would provide the exact fee per executed equivalent share to be paid for the Historical CAT Assessment, by multiplying the Historical Fee Rate by one-third and describing the relevant number of decimal places for the fee.

<sup>45</sup> As highlighted in Exhibit B, the second sentence of Proposed Section 11.3(b)(iv)(A) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

equivalent share volume and corresponding aggregate fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.”<sup>46</sup>

## **5. CAT Fee Schedule for Participants**

To implement the Participant CAT fees, CAT LLC proposes to add a fee schedule, entitled “Consolidated Audit Trail Funding Fees,” to Appendix B of the CAT NMS Plan. Proposed paragraph (a) of the fee schedule would describe the CAT Fees to be paid by the Participants under the Funding Proposal. Specifically, paragraph (a) of the Participant fee schedule would state that “[e]ach Participant shall pay the CAT Fee set forth in Section 11.3(a) of the CAT NMS Plan to Consolidated Audit Trail, LLC in the manner prescribed by Consolidated Audit Trail, LLC on a monthly basis based on the Participant’s transactions in Eligible Securities in the prior month.”

## **6. Additional Changes from Original Funding Model**

CAT LLC proposes certain revisions to Article XI of the CAT NMS Plan to implement the Funding Proposal. CAT LLC proposes to make the following changes to the CAT NMS Plan in addition to the proposed changes to the CAT NMS Plan discussed above.

### **a. Elimination of Definition of “Execution Venue”**

Section 1.1 of the CAT NMS Plan defines the term “Execution Venue” to mean “a Participant or an alternative trading system (‘ATS’) (as defined in Rule 300 of Regulation ATS) that operates pursuant to Rule 301 of Regulation ATS (excluding any such ATS that does not execute orders).” Currently, the term “Execution Venue” is used in Sections 11.2 and 11.3 of the CAT NMS Plan to describe how CAT costs would be allocated among CAT Reporters under the Original Funding Model. The Original Funding Model would have imposed fees based on market share to CAT Reporters that are Execution Venues, including ATSSs, and fees based on message traffic for Industry Members’ non-ATS activities. In contrast, the Funding Proposal would impose fees based on the executed equivalent shares of transactions in Eligible Securities for three categories of CAT Reporters: Participants, CEBBs and CEBSSs. Accordingly, as the concept for an “Execution Venue” would not be relevant for the Funding Proposal, CAT LLC proposes to delete this term and its definition from Section 1.1 of the CAT NMS Plan.

### **b. Use of Executed Equivalent Share Volume under Funding Proposal**

The Original Funding Model set forth in the CAT NMS Plan requires Participants and Execution Venue ATSSs to pay CAT fees based on market share and Industry Members (other than Execution Venue ATSSs) to pay CAT fees based on message traffic. The CAT NMS Plan

---

<sup>46</sup> As highlighted in Exhibit B, Section 11.3(b)(iv)(B) of the CAT NMS Plan was not included in the proposed revisions related to the 2022 Funding Proposal.

also describes how the market share-based fee would be calculated for Participants and other Execution Venue ATSS and how the message traffic-based fee would be calculated for Industry Members (other than Execution Venue ATSS). CAT LLC proposes to amend the CAT NMS Plan to require Participants, CEBBs and CEBSSs to pay CAT fees based on the number of executed equivalent shares in a transaction in Eligible Securities, rather than based on market share and message traffic. Accordingly, the Operating Committee proposes to amend Section 11.2(b) and (c) and Section 11.3(a) and (b) of the CAT NMS Plan to reflect the proposed use of the number of executed equivalent shares in transactions in Eligible Securities in calculating CAT fees.

Section 11.2(b) of the CAT NMS Plan states that “[i]n establishing the funding of the Company, the Operating Committee shall seek . . . (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.” CAT LLC proposes to delete the requirement to take into account “distinctions in the securities trading operations of Participants and Industry Members and their relative impact upon Company resources and operations.” This requirement related to using message traffic and market share in the calculation of CAT fees, as message traffic and market share were metrics related to the impact of a CAT Reporter on the Company’s resources and operations. With the proposed move to the use of the executed equivalent shares metric instead of message traffic and market share, the requirement is no longer relevant.

Section 11.2(c) of the CAT NMS Plan states that “[i]n establishing the funding of the Company, the Operating Committee shall seek . . . (c) to establish a tiered fee structure in which the fees charged to: (i) CAT Reporters that are Execution Venues, including ATSS, are based upon the level of market share; (ii) Industry Members’ non-ATS activities are based upon message traffic.” CAT LLC proposes to delete subparagraphs (i) and (ii) and replace these subparagraphs with the requirement that the fee structure in which the fees charged to “Participants and Industry Members are based upon the executed equivalent share volume of transactions in Eligible Securities.”<sup>47</sup>

In addition, CAT LLC proposes to amend the CAT funding principles to clarify that CAT Fees and the Historical CAT Assessments are intended to be cost-based fees – that is, the fees are designed to recover the cost of the creation, implementation and operation of the CAT. CAT LLC proposes to amend the funding principle set forth in Section 11.2(c) by making a specific reference to the costs of the CAT. With this proposed change, Proposed Section 11.2(c) would state that “[i]n establishing the funding of the Company, the Operating Committee shall seek: . . . to establish a fee structure in which the fees charged to Participants and Industry Members are based upon the executed equivalent share volume of transactions in Eligible Securities, and the costs of the CAT.”

---

<sup>47</sup> As discussed in the next section, the Operating Committee also proposes to delete the reference to a “tiered” fee structure.



Section 11.3(a) of the CAT NMS Plan provides additional detail regarding the market share-based fees to be paid by Participants and Execution Venue ATSS under the Original Funding Model. Specifically, Section 11.3(a) of the CAT NMS Plan states:

(a) The Operating Committee will establish fixed fees to be payable by Execution Venues as provided in this Section 11.3(a):

(i) Each Execution Venue that: (A) executes transactions; or (B) 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.

CAT LLC proposes to delete Section 11.3(a) of the CAT NMS Plan and replace this paragraph with a description of the CAT Fees related to Prospective CAT Costs, as described above.

Section 11.3(b) of the CAT NMS Plan provides additional detail regarding the message traffic-based CAT fees to be paid by Industry Members (other than Execution Venue ATSS) under the Original Funding Model. Specifically, Section 11.3(b) of the CAT NMS Plan states:

The Operating Committee will establish fixed fees to be payable by Industry Members, 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.

CAT LLC proposes to delete Section 11.3(b) of the CAT NMS Plan and replace this paragraph with a description of the Historical CAT Assessments, as described above.

**c. Elimination of Tiered Fees**

CAT LLC proposes to eliminate the use of tiered fees that were included in the Original Funding Model. Instead, under the Funding Proposal, each Participant, CEBB or CEBS would pay a fee based solely on its transactions in Eligible Securities. The Operating Committee therefore proposes to amend Sections 11.1(d), 11.2(c), 11.3(a) and 11.3(b) of the CAT NMS Plan to eliminate tiered fees and related concepts.

Utilizing a tiered fee structure, by its nature, would create certain inequities among the CAT fees paid by CAT Reporters. For example, two CAT Reporters with comparable executed equivalent share volume may pay notably different fees if one falls in a higher tier and the other falls within a lower tier. Correspondingly, a tiered fee structure generally would reduce fees for CAT Reporters with higher executed share volume in one tier, while increasing fees for Industry Members with lower executed share volume in the same tier, as compared to a non-tiered fee. Furthermore, CAT Reporters in lower tiers potentially pay more than they would without the use of tiers. While tiering appropriately exists in various other self-regulatory fee programs, CAT LLC proposes to eliminate the tiering concept for the Funding Proposal.

By charging each Participant, CEBB and CEBS a CAT fee directly based on its own executed equivalent share volume, rather than charging a tiered fee, the Funding Proposal would result in a CAT fee being tied more directly to the CAT Reporter's executed share volume. In contrast, with a tiered fee, CAT Reporters with different levels of executed equivalent share volume that are placed in the same tier would all pay the same CAT fee, thereby limiting the correlation between a CAT Reporter's activity and its CAT fee.

The proposed non-tiering approach is simpler and more objective to administer than the tiering approach. With a tiering approach, the number of tiers for Participants, CEBBs and CEBSs, the boundaries for each tier and the fees assigned to each tier must be established. In the absence of clear groupings of CAT Reporters, selecting the number of, boundaries for, and the fees associated with each tier would be subject to some level of subjectivity. Furthermore, the establishment of tiers would need to be continually reassessed based on changes in the executed equivalent share volume of transactions in Eligible Securities, thereby requiring regular subjective assessments. Accordingly, the removal of tiering from the Funding Proposal eliminates a variety of subjective analyses and judgments from the model and simplifies the determination of CAT fees.

Section 11.1(d) of the CAT NMS Plan states that "[c]onsistent 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.” With the elimination of tiered fees, the reference to the “assignment of tiers” would no longer be relevant for the Funding Proposal. Therefore, CAT LLC proposes to delete the reference to “assignment of tiers” from Section 11.1(d).

Section 11.1(d) of the CAT NMS Plan also states that:

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.

As noted above, unlike the Original Funding Model, the Funding Proposal would not utilize tiered fees. Accordingly, these two sentences would not be applicable to the Funding Proposal. Therefore, CAT LLC proposes to delete these two sentences from Section 11.1(d) of the CAT NMS Plan.

CAT LLC proposes to delete the reference to “tiered” fees from Section 11.2(c) of the CAT NMS Plan. Section 11.2(c) of the CAT NMS Plan states that “[i]n establishing the funding of the Company, the Operating Committee shall seek: . . . (c) to establish a tiered fee structure . . .” CAT LLC propose to delete the word “tiered” from this provision as the CAT fees would not be tiered under the Funding Proposal.

CAT LLC also proposes to delete paragraph (iii) of Section 11.2(c) of the CAT NMS Plan. Paragraph (iii) of Section 11.2(c) of the CAT NMS Plan states that the Operating Committee shall seek to establish a tiered fee structure in which fees charged to:

the CAT Reporters with the most CAT-related activity (measured by market share and/or message traffic, as applicable) be 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).

Under the Original Funding Model, the comparability provision was an important factor in determining the tiers for Industry Members and Execution Venues. In determining the tiers, the Operating Committee sought to establish comparable fees among the CAT Reporters with the most Reportable Events.<sup>48</sup> Under the Funding Proposal, however, the comparability provision is no longer necessary, as a tiered fee structure would not be used for Industry Members or Participants.

---

<sup>48</sup> See, e.g., Securities Exchange Act Rel. No. 82451 (Jan. 5, 2018), 83 Fed. Reg. 1399, 1406-07 (Jan. 11, 2018) (“2018 Fee Proposal Release”).

As discussed above, the Operating Committee proposes to replace the language in Sections 11.3(a) and (b) of the CAT NMS Plan with language implementing the Funding Proposal. These proposed changes would remove the references to tiers in Sections 11.3(a)(i) and (ii) and 11.3(b) of the CAT NMS Plan, along with the other proposed changes. Specifically, Section 11.3(a)(i) of the CAT NMS Plan states that the Operating Committee, when establishing fees for Execution Venues for NMS Stocks and OTC Equity Securities, will establish “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.” Similarly, Section 11.3(a)(ii) of the CAT NMS Plan states that the Operating Committee, when establishing fees for Execution Venues that execute transactions in Listed Options, will establish “at least two and no more than five tiers of fixed fees, based on an Execution Venue’s Listed Options market share.” Section 11.3(b) of the CAT NMS Plan states that the Operating Committee, when establishing fees to be payable by Industry Members, will establish “at least five and no more than nine tiers of fixed fees, based on message traffic.” CAT LLC proposes to delete each of these references to tiers from the CAT NMS Plan.

**d. No Fixed Fees**

As discussed above, CAT LLC proposes to replace the language in Sections 11.3(a) and (b) of the CAT NMS Plan with language implementing the Funding Proposal. These proposed changes also would remove the references to “fixed fees” in Sections 11.3(a), 11.3(a)(i), 11.3(a)(ii) and 11.3(b) and replaced them with references to “fees.” Under the Funding Proposal, the CAT fees to be paid by Participants, CEBBs and CEBs will vary in accordance with their executed equivalent share volume of transactions in Eligible Securities, although the Fee Rate will be fixed for a relevant period. Therefore, the concept of a fixed fee – that is, a fee that does not vary depending on circumstances – is not relevant under the Funding Proposal.

**7. Billing and Collection of CAT Fees**

Consistent with Section 11.1(d) of the CAT NMS Plan, CAT LLC will adopt policies, procedures and practices regarding the billing and collection of fees. In addition, pursuant to Section 11.4 of the CAT NMS Plan, CAT LLC will establish a system for the collection of CAT fees from Participants and Industry Members. As set forth in Section 11.4 of the CAT NMS Plan, each Participant would be required to pay its CAT fees authorized under the CAT NMS Plan as required by Section 3.7(b) of the CAT NMS Plan.<sup>49</sup> Section 3.7(b) of the CAT NMS Plan provides the following:

Each Participant shall pay all fees or other amounts required to be paid under this Agreement within thirty (30) days after receipt of an invoice or other notice indicating payment is due (unless a longer payment period is otherwise indicated) (the “Payment Date”). The Participant shall pay interest on the outstanding balance from the Payment Date until such fee or amount is paid at a per annum rate equal

---

<sup>49</sup> Participants and CAT Executing Brokers would be responsible for a fee each month in which they are a CAT Reporter. If a Participant or CAT Executing Broker ceases to meet the definition of a CAT Reporter during a month, the Participant or CAT Executing Broker would still be responsible for CAT fees associated with its transactions during that month.

to the lesser of: (i) the Prime Rate plus 300 basis points; or (ii) the maximum rate permitted by applicable law. If any such remaining outstanding balance is not paid within thirty (30) days after the Payment Date, the Participants shall file an amendment to this Agreement requesting the termination of the participation in the Company of such Participant, and its right to any Company Interest, with the SEC. Such amendment shall be effective only when it is approved by the SEC in accordance with SEC Rule 608 or otherwise becomes effective pursuant to SEC Rule 608.

Section 11.4 of the CAT NMS Plan also addresses the payment of CAT fees by Industry Members. Section 11.4 of the CAT NMS Plan states:

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). If an Industry Member fails to pay any such fee when due (as determined in accordance with the preceding sentence), such Industry Member shall pay interest on the outstanding balance from such due date until such fee is paid at a per annum rate equal to the lesser of: (a) the Prime Rate plus 300 basis points; or (b) the maximum rate permitted by applicable law.

## **8. Illustrative Example of the Funding Proposal**

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 filing. Note that the calculation of any actual Historical CAT Assessment for Historical CAT Costs would differ from this example in various ways, as described in more detail in Exhibit C.

## **9. Advantages of and Support for the Funding Proposal**

CAT LLC proposes to adopt the Funding Proposal as it provides a variety of advantages over the Original Funding Model. CAT LLC discusses these advantages in this section of the filing.

### **a. Comparable to Existing Fee Precedent**

The Funding Proposal would operate in a manner similar to other funding models employed by the SEC and the Participants, including the SEC's Section 31 fees, FINRA's trading activity fee ("FINRA TAF") and the options regulatory fee ("ORF") utilized by options exchanges. The SEC previously has determined that the Participants' sales value fees related to Section 31, the FINRA TAF and the ORF are consistent with the Exchange Act.

**i. Section 31 Fees**

Pursuant to Section 31 of the Exchange Act, a national securities exchange must pay the Commission a fee based on the aggregate dollar amount of sales of securities transacted on the exchange, and a national securities association must pay the Commission a fee based on the aggregate dollar amount of sales of securities transacted by or through any member of the association otherwise than on a national securities exchange (collectively, “covered sales”). The SEC calculates the amount of Section 31 fees due from each exchange or FINRA by multiplying the aggregate dollar amount of its covered sales by the fee rate set by the Commission in a procedure set forth in Section 31(j) of the Exchange Act. These fees are designed to recover the costs related to the government’s supervision and regulation of the securities markets and securities professionals. Section 31 requires the SEC to make annual and, in some cases, mid-year adjustments to the fee rate. These adjustments are necessary to make the SEC’s total collection of transaction fees in a given year as close as possible to the amount of the regular appropriation to the Commission by Congress for that fiscal year.

To recover the costs of their Section 31 fee obligations, each of the national securities exchanges and FINRA have adopted, and the SEC has approved, rules assessing a regulatory transaction fee on their members, the amount of which is set in accordance with Section 31 of the Exchange Act.<sup>50</sup> Broker-dealers, in turn, often impose fees on their customers that provide the funds to pay the fees owed to the exchanges and FINRA.

Like the well-known, longstanding and accepted Section 31-related fee model, the Funding Proposal would use a predetermined fee rate for the calculation of the fees, seek to recover designated regulatory costs (as CAT provides a solely regulatory function), and allow for the adjustment of the fee rate during the year to seek to match regulatory costs with fees collected. The Funding Proposal, however, would impose fees based on executed equivalent share volume rather than the sales values of certain transactions. Despite the different calculation metric, the Funding Proposal is similar to a model well known, long accepted and justified under the Exchange Act the purpose of which is also to cover costs associated with the regulation of securities markets and securities professionals.

**ii. FINRA Trading Activity Fee**

The transaction-based fees charged under the Funding Proposal also would be similar to FINRA’s transaction-based trading activity fee,<sup>51</sup> which was modeled on the Commission’s Section 31 fee.<sup>52</sup> Although the FINRA TAF is designed to cover a subset of the costs of FINRA services (*e.g.*, costs to FINRA of the supervision and regulation of members, including performing examinations, financial monitoring, and policy, rulemaking, interpretive, and enforcement activities) rather than all of FINRA’s costs like the CAT, the transaction-based calculation of the FINRA TAF and the proposed CAT fees are similar. With the FINRA TAF,

---

<sup>50</sup> See, *e.g.*, Section 3 of Schedule A of FINRA’s By-Laws.

<sup>51</sup> Section 1 of Schedule A of FINRA’s By-Laws.

<sup>52</sup> See Securities Exchange Act Rel. No. 46416 (Aug. 23, 2002), 67 Fed. Reg. 55901 (Aug. 30, 2002).

FINRA members on the sell-side of a transaction are required to pay a per share fee for each sale of covered securities, which includes exchange registered securities, equity securities traded otherwise than on an exchange, security futures, TRACE-Eligible Securities and municipal securities, subject to certain exceptions. In approving the FINRA TAF, the SEC stated that the implementation of the FINRA TAF “is consistent with section 15A(b)(5) of the Act, in that the proposal is reasonably designed to recover NASD costs related to regulation and oversight of its members.”<sup>53</sup> The SEC further stated that “[t]he Commission recognizes the difficulties inherent in restructuring the NASD’s regulatory fees, and believes that the NASD has done so in a manner that is fair and reasonable.”<sup>54</sup> The CAT fees calculated under the Funding Proposal would be similar to the FINRA TAF in that they would be transaction-based fees intended to provide funding for regulatory costs.

### **iii. Options Regulatory Fee**

The fees charged under the Funding Proposal also would be similar to the ORF charged by the options exchanges.<sup>55</sup> The ORF is a per contract fee charged by an options exchange for certain options transactions to options members of the relevant exchange. The ORF is collected indirectly from exchange members through their clearing firms by the Options Clearing Corporation on behalf of the Exchange. Revenue generated from the ORF is designed to recover a material portion of an options exchange’s regulatory costs related to the supervision and regulation of its members’ options business, including performing routine surveillance, investigations, examinations and financial monitoring as well as policy, rulemaking, interpretive, and enforcement activities. Exchange members generally pass-through the ORF to their customers in the same manner that firms pass-through to their customers the fees charged by self-regulatory organizations (“SROs”) to help the SROs meet their obligations under Section 31 of the Exchange Act.<sup>56</sup> The CAT fees calculated under the Funding Proposal would be similar to the ORF in that they would be transaction-based fees intended to provide funding for regulatory costs.

### **b. Fee Metric: Executed Equivalent Share Volume**

CAT LLC proposes to use the executed equivalent share volume of transactions in Eligible Securities as the means for allocating CAT costs among Participants and Industry Members. The use of executed equivalent share volume would replace the use of message traffic for allocating costs among Industry Members and the use of market share for allocating costs among Participants as set forth in the Original Funding Model. The use of executed equivalent share volume is a reasonable and equitable method for allocating costs for a variety of reasons, and CAT LLC believes it improves upon the use of message traffic.

---

<sup>53</sup> Securities Exchange Act Rel. No. 47946 (May 30, 2003), 68 Fed. Reg. 34021, 34023 (June 6, 2003) (“TAF Release”).

<sup>54</sup> *Id.*

<sup>55</sup> *See, e.g.*, Cboe Fee Schedule, MIAX Fee Schedule, and NYSE Arca Fee Schedule.

<sup>56</sup> *See, e.g.*, Securities Exchange Act Rel. No. 58817 (Oct. 20, 2008), 73 Fed. Reg. 63744, 63745 (Oct. 27, 2008).

The proposed use of CAT-reported message traffic as set forth in the Original Funding Model raised a variety of issues for allocating CAT costs. First, based on a subsequent study of cost drivers for the CAT, it was determined that message traffic may be a factor in the CAT costs, but it is not the primary factor. CAT costs are dominated by technology costs, and the predominant technology costs are data processing (*e.g.*, linker) and storage costs.<sup>57</sup> The data processing and storage costs are related to the level of message traffic, but such costs also relate to other factors. The data processing and storage costs also are directly related to the complexity of the reporting requirements for the market activity. For example, in light of the complexity of market activity, the CAT's order reporting and linkage scenarios document for Industry Members is over 800 pages in length, addressing nearly 200 scenarios.<sup>58</sup> The processing and storage of such a large number of complex reporting scenarios requires very complex algorithms, which, in turn, lead to significant data processing and storage costs. The data processing and storage costs also are driven by the stringent performance, timelines and operational requirements for processing CAT Data. For example, the CAT NMS Plan requires that CAT order events be processed within established timeframes to ensure data can be made available to Participants' regulatory staff and the SEC in a timely manner. Accordingly, a CAT Reporter's message traffic may be a factor, but not a primary factor, in terms of the costs of the CAT.

Second, in general, Industry Member revenue, including revenue derived from fees Industry Members charge their clients, is often driven by transactions. Because message traffic is separate from whether or not a transaction occurs, fees based on message traffic may not correlate with common revenue or fee models. As a result, CAT fees based on message traffic could impose an outsized adverse financial impact on certain Industry Members.

Third, imposing CAT fees on each CAT Reporter based on its message traffic may have an adverse effect on competition, liquidity or other aspects of market structure, and may increase model complexity. For example, the number of messages for any given order, whether or not ultimately executed, could vary depending on how a given order is processed, leading to a lack of predictability on the applicable cost to process any given order or executions for broker-dealers or non-broker-dealer customers.<sup>59</sup> As one example, discussed in the context of the previously proposed funding models,<sup>60</sup> market makers in Eligible Securities may have very high levels of message traffic due to their quoting obligations. Such high levels of message traffic may lead to outsized fees for market makers in comparison to their transaction activity, thereby placing an excessive financial burden on market makers. This, in turn, may lead to a decrease in the number of market makers, resulting in a decrease in liquidity and a reduction in market quality. To address this effect on market makers, CAT LLC proposed to discount the fees that market makers would need to pay. However, such a discount adds complexity to the message

---

<sup>57</sup> For a detailed discussion of cost drivers of the CAT, *see* CAT LLC Webinar, CAT Costs (Sept. 21, 2021), <https://www.catnmsplan.com/events/cat-costs-september-21-2021>.

<sup>58</sup> CAT Industry Member Reporting Scenarios, Version 4.10 (Oct. 21, 2022), [https://www.catnmsplan.com/sites/default/files/2022-10/10.21.22\\_Industry\\_Member\\_Tech\\_Specs\\_Reporting\\_Scenarios\\_v4.10\\_CLEAN.pdf](https://www.catnmsplan.com/sites/default/files/2022-10/10.21.22_Industry_Member_Tech_Specs_Reporting_Scenarios_v4.10_CLEAN.pdf).

<sup>59</sup> The predictability of fees is discussed further below in Section A.9.u of this filing.

<sup>60</sup> *See* 2018 Fee Proposal Release.



traffic approach, as the model must determine when a discount is necessary and how much the discount should be.

The use of executed equivalent share volume to allocate CAT costs addresses each of these concerns. The fees are not divorced from transactions, the traditional source of revenue for Industry Members; fees based on executed equivalent share volume would not adversely impact certain market participants to the detriment of the markets, and the model is simple to understand and implement. Moreover, in addition to these benefits, the executed equivalent share volume is related to, but not precisely linked to, the CAT Reporter's burden on the CAT. In light of the many inter-related cost drivers of the CAT (*e.g.*, storage, message traffic, processing), determining the precise cost burden imposed by each individual CAT Reporter on the CAT is not feasible. Accordingly, CAT LLC has determined that trading activity provides a reasonable proxy for cost burden on the CAT, and therefore is an appropriate metric for allocating CAT costs among CAT Reporters. This conclusion is consistent with the SEC's prior recognition of the use of transaction volume in setting regulatory fees. For example, in approving the FINRA TAF, the SEC recognized that transaction volume was closely enough connected to FINRA's regulatory responsibilities to satisfy the statutory standard in the Exchange Act.<sup>61</sup>

**c. CAT Executing Brokers**

**i. Charging CAT Executing Brokers**

CAT LLC proposes to charge CAT fees to CAT Executing Brokers. CAT LLC believes that such an approach is consistent with the requirements of the Exchange Act for a variety of reasons, including the following reasons.

First, the proposal to charge executing brokers is broadly supported by the industry.<sup>62</sup> For example, SIFMA has supported charging executing brokers, and continues to support charging executing brokers, rather than clearing brokers.<sup>63</sup> In one of its comment letters on the 2022 Funding Proposal, SIFMA stated that "we support the Participants' decision to allocate CAT costs to executing brokers rather than clearing brokers."<sup>64</sup>

Second, the proposal to rely on executing brokers, rather than clearing brokers, was proposed in direct response to comments raised by SIFMA and other commenters on the 2022 Funding Proposal regarding the cost burden that clearing firms may experience if clearing

---

<sup>61</sup> TAF Release at 34024.

<sup>62</sup> See Partial Amendment I at 74185; February 2023 Proposed Partial Amendment at 5.

<sup>63</sup> See Letter from Ellen Greene, Managing Director, Equities and Options Market Structure, SIFMA, to Vanessa Countryman, Secretary, SEC (Dec. 14, 2022) ("December 2022 SIFMA Letter") at 2; Letter from Ellen Greene, Managing Director, Equities and Options Market Structure, SIFMA, to Vanessa Countryman, Secretary, SEC (Oct. 7, 2022) at 4-5.

<sup>64</sup> 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) at 7. See also December 2022 SIFMA Letter at 2 ("[W]e support changing the payment obligation to executing brokers.").

brokers were charged CAT fees.<sup>65</sup> 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 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 CAT 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, the proposal to charge CAT Executing Brokers CAT fees as set forth in the Funding Proposal 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.

## **ii. Effect on Net Capital of CAT Executing Brokers**

CAT fees do not raise new or different issues for CAT Executing Brokers with respect to net capital requirements 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)." With respect to net capital requirements, 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.

---

<sup>65</sup> See Partial Amendment I at 74185; February 2023 Proposed Partial Amendment at 5.

**d. Cost Allocation**

**i. One-Third/One-Third/One-Third Allocation of Prospective CAT Costs between CEBS, CEBB and Participant**

When calculating the CAT Fees related to Prospective CAT Costs under the Funding Proposal, CAT LLC proposes to allocate one-third of Prospective CAT Costs to Participants, one-third of Prospective CAT Costs to CEBSs and one-third of Prospective CAT Costs to CEBBs. CAT LLC believes that this proposed allocation satisfies the requirements of the Exchange Act and Rule 608 of Regulation NMS under the Exchange Act.

The proposed 1/3, 1/3, 1/3 allocation of Prospective CAT Costs 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 TAF, ORF 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.

One of the factors driving CAT costs is the complexity of the Industry Members' CAT reporting requirements, which are driven by the inherent complexity of Industry Members' chosen business models. For example, in light of the complexity of market activity, the CAT's reporting scenarios document for Industry Members is over 800 pages in length, addressing almost 200 scenarios, 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.<sup>66</sup> The processing and storage of 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. As a result, the technical specifications for the Participants are far less complex than for Industry Members. For example, the technical

---

<sup>66</sup> CAT Industry Member Reporting Scenarios, Version 4.10 (Oct. 21, 2022), [https://www.catnmsplan.com/sites/default/files/2022-10/10.21.22\\_Industry\\_Member\\_Tech\\_Specs\\_Reporting\\_Scenarios\\_v4.10\\_CLEAN.pdf](https://www.catnmsplan.com/sites/default/files/2022-10/10.21.22_Industry_Member_Tech_Specs_Reporting_Scenarios_v4.10_CLEAN.pdf).

specifications for Participants have 13 reporting events for stock exchanges compared to 36 equity reporting events in the technical specifications for Industry Members, and the technical specifications for Participants have 14 reporting events for options exchanges compared to 43 reporting options events in the technical specifications for Industry Members.<sup>67</sup> Since the complexity of Industry Members' chosen business models contribute substantially to the costs of the CAT, it is reasonable and equitable to require that Industry Members pay a substantial portion of those costs.

Participant activity does not impact CAT costs in the same way that Industry Member activity impacts CAT costs. The analysis regarding the complexity of Industry Member activity 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.

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.<sup>68</sup> 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.<sup>69</sup> In addition, various individual Industry Members have revenue in excess of some or 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.

Finally, CAT LLC analyzed a variety of alternative allocations of CAT costs and continues to support the proposed one-third, one-third, one-third allocation as consistent with the requirements of the Exchange Act and the CAT NMS Plan. Alternative allocations considered by CAT LLC are discussed in detail below in Section A.10 of this filing.

## **ii. 1/3, 1/3 Allocation for Historical CAT Assessment**

Under the Funding Proposal, the CEBS and the CEBB would each pay one-third of the fee obligation for each transaction related to Historical CAT Costs. Because the Participants have already paid for Past CAT Costs via loans to CAT LLC, the Participants would not be required to pay any Historical CAT Assessment. As stated in Proposed Section 11.3(b)(ii) of the

---

<sup>67</sup> Compare CAT Reporting Technical Specifications for Plan Participants, Version 4.1.0-r17 (Feb. 21, 2023), <https://www.catnmsplan.com/sites/default/files/2023-02/02.21.2023-CAT-Reporting-Technical-Specifications-for-Participants-4.1.0-r17.pdf>, with CAT Reporting Technical Specifications for Industry Members, Version 4.0.0 r18 (Dec. 16, 2022), [https://www.catnmsplan.com/sites/default/files/2022-12/12.16.2022\\_CAT\\_Reporting\\_Technical\\_Specifications\\_for\\_Industry\\_Members\\_v4.0.0r18\\_CLEAN.pdf](https://www.catnmsplan.com/sites/default/files/2022-12/12.16.2022_CAT_Reporting_Technical_Specifications_for_Industry_Members_v4.0.0r18_CLEAN.pdf).

<sup>68</sup> An average of 1,124 unique CAT Reporters sent transaction data to the CAT from July 1, 2022 to August 8, 2022.

<sup>69</sup> See Securities Exchange Act Rel. No. 91555 (Apr. 14, 2021), 86 Fed. Reg. 21050, 20155 (Apr. 21, 2021) ("2021 Fee Proposal Release"). 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.

CAT NMS Plan, “[i]n lieu of a Historical CAT Assessment, the Participants’ one-third share of Historical CAT Costs and such other additional Past CAT Costs as reasonably determined by the Operating Committee will be paid by the cancellation of loans made to the Company on a pro rata basis based on the outstanding loan amounts due under the loans.” Furthermore, Proposed Section 11.3(b)(ii) of the CAT NMS Plan would emphasize that “[t]he Historical CAT Assessment is designed to recover two-thirds of the Historical CAT Costs.” Like with the allocation of Prospective CAT Costs discussed above, CAT LLC believes that the proposed allocation of the Historical CAT Costs is consistent with the requirements of the Exchange Act and the CAT NMS Plan,

### **iii. Internal Cost of Compliance by Industry Members**

CAT LLC does not propose 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. 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 Funding Proposal is intended to charge fees to pay for the direct costs of the CAT, not for ancillary compliance costs of Industry Members.<sup>70</sup> 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.

Likewise, the substantial internal compliance costs of the Participants are not taken into consideration in the Funding Proposal. Each Participant incurs its own internal costs 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 cost allocation under the Funding Proposal.

### **iv. Alternative Approach based on Individualized CAT Reporter Cost to CAT**

CAT LLC has determined not to propose a funding approach for the CAT in which a CAT Reporter’s fees would be based on each CAT Reporter’s exact cost burden on the CAT. In light of the many inter-related cost drivers of the CAT (*e.g.*, storage, message traffic, processing), determining the precise cost burden imposed by each individual CAT Reporter on the CAT is not feasible. Moreover, trading activity provides a reasonable proxy for cost burden on the CAT, and therefore is an appropriate metric for allocating CAT costs among CAT Reporters. CAT LLC emphasizes that the Exchange Act requires CAT fees to be fair, reasonable and equitably allocated, and CAT LLC believes that the use of executed equivalent share volume

---

<sup>70</sup> 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.”).

satisfies these requirements. The Exchange Act does not require each CAT Reporter's fees to be a proxy for that CAT Reporter's cost burden on the CAT, let alone an exact proxy.

**A. Difficulty in Determining Individual CAT Reporter Costs due to Inter-related Cost Drivers**

CAT LLC has analyzed the cost drivers for the CAT, and has concluded that determining the precise cost burden imposed by each individual CAT Reporter on the CAT is not feasible. The computation of a specific CAT Reporter's burden on the CAT is complicated by the many inter-related factors that contribute to CAT costs, including message traffic, data processing, storage, the complexity of reporting requirements, reporting timelines, infrastructure, connectivity and more. The use of executed equivalent share volume as the metric for the funding model is an improvement over the message traffic model. CAT LLC analyzed the cost drivers of CAT and determined that, although message traffic is one factor in CAT costs, it is not the primary factor. CAT costs are dominated by technology costs, and the predominant technology costs are data processing (*e.g.*, linker) and storage costs. Compute costs represent more than half of all technology costs. While such costs are related in part to message traffic, they are driven by the stringent performance timelines, data complexity and operational requirements in the CAT NMS Plan. The Plan requires that order events be processed, corrected, and made available to regulatory users within established timeframes, including a four-hour window for initial linkage processing. For this reason, among other issues with the message traffic model and other considerations discussed herein, CAT LLC determined to shift its focus to the new metric of executed equivalent share volume from the message traffic and market share metrics set forth in the CAT NMS Plan as approved.

**B. Trading Activity as Reasonable Proxy for Cost Burden**

CAT LLC determined that trading activity provides a reasonable proxy for cost burden on the CAT, and therefore is an appropriate metric for allocating CAT costs among CAT Reporters. CAT LLC analyzed reasonable metrics for determining CAT fees, and determined that, although executed equivalent share volume is not an exact proxy for the cost burden (nor need it be), trading activity provides a reasonable proxy for cost burden on the CAT. Increased trading activity impacts message traffic, data processing, storage and other factors, and thus necessarily correlates with increased cost burden on the CAT. Moreover, Industry Member activity in the market generally is engaged in for the purpose of effecting transactions, and, as a result, it is common for Participants to use transaction-based fees. Therefore, executed share volume is an appropriate metric for allocating CAT costs among CAT Reporters.

This conclusion is consistent with the SEC's prior recognition of the use of transaction volume in setting regulatory fees. For example, in approving FINRA's TAF, the SEC recognized that transaction volume was closely enough connected to FINRA's broad regulatory responsibilities to satisfy the statutory standard in the Exchange Act.<sup>71</sup> FINRA proposed a transaction-based TAF to fund its member regulatory activities in a variety of areas such as

---

<sup>71</sup> TAF Release at 34023.

“sales practices, routine examinations, financial and operational reviews, new member applications, enforcement \* \* \* . . . wherever such member activity occurs.”<sup>72</sup> The SEC noted that “[a]ssessing fees in relation to transactions correlates to heightened NASD responsibilities regarding firms that engage in the trading,” but the fees were not an exact proxy for the costs of such regulatory responsibilities.<sup>73</sup> The SEC noted this lack of a precise correlation:

In most cases, the NASD has direct responsibility to oversee the firm’s dealing with the public in effecting the transactions; the NASD may also have responsibility to oversee the impact of the trading on the firm’s financial condition. In most cases, where responsibility for certain member activities has been allocated to other SROs, the NASD retains responsibility for other member functions.<sup>74</sup>

Nevertheless, the SEC concluded that “while trading activity is not wholly correlated to the full range of NASD responsibility for members in all instances, the Commission believes that they are closely enough connected to satisfy the statutory standard.”<sup>75</sup> CAT LLC believes that this same logic is applicable to the Funding Proposal.

**v. Alternative Approach: 50-50 Allocation between Industry Members and Participant Exchanges**

CAT LLC has considered and rejected allocating 50% of CAT costs to the Participants and 50% to Industry Members under the Funding Proposal. Although a 50-50 allocation between Industry Members and Participants would provide a mathematically equal split between two groups, 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.

**e. Fee Pass-Throughs**

**i. General**

CAT LLC acknowledges that CAT Executing Brokers may choose to pass the CAT fees through to their clients, who, in turn, may pass their CAT fees through to their clients, until the fees are imposed on the account that executed the transaction. Although the Funding Proposal does not require such fee pass-throughs, CAT LLC continues to support the concept of the potential pass-through of fees for various reasons.

First, the SEC specifically contemplated and accepted the concept of cost pass-throughs from Participants to their members when it adopted Rule 613:

---

<sup>72</sup> *Id.*  
<sup>73</sup> *Id.*  
<sup>74</sup> *Id.*  
<sup>75</sup> *Id.* at 34024.

There also would be costs associated with establishing and operating the central repository that will be jointly owned by the plan sponsors. The Commission believes it is important to understand how the plan sponsors plan to allocate such costs among themselves to help inform the Commission's decision regarding the possible economic or competitive impact of the NMS plan amongst the SROs. In addition, although the plan sponsors likely would initially incur the costs to establish and fund the central repository directly, they may seek to recover some or all of these costs from their members. If the plan sponsors seek to recover costs from their members, the Commission believes that it is important to understand the plan sponsors' plans to allocate costs between themselves and their members, to help inform the Commission's decision regarding the possible economic or competitive impact of the NMS plan.<sup>76</sup>

Second, CAT LLC does not take a position on whether Industry Members, in turn, should pass CAT fees on to their clients. However, in adopting the CAT NMS Plan, the Commission specifically contemplated and accepted that "broker-dealers may seek to pass on to investors their costs to build and maintain the CAT, which may include their own costs and any costs passed on to them by Participants," noting that the "extent to which these costs are passed on to investors depends on the materiality of the costs and the ease with which investors can substitute away from any given broker-dealer."<sup>77</sup>

Third, CAT LLC notes that the use of pass-through fees is a commonly accepted practice that has been approved by the SEC in the securities markets in some cases. For example, the practice of passing through fees to broker-dealers and their customers is used in the context of Section 31 fees. Section 31 of the Exchange Act places obligations only on national securities exchanges, national securities associations, and the Commission. National securities exchanges and national securities associations must pay certain fees and assessments to the Commission. The Commission is required by Section 31 of the Exchange Act to collect such fees and assessments. Section 31 of the Exchange Act, however, does not address the manner or extent to which covered SROs may seek to recover the costs of their Section 31 obligations from their members. Nor does Section 31 of the Exchange Act address the manner or extent to which members of covered SROs may seek to pass any such charges on to their customers. However, as the SEC noted, "[i]n practice, the covered SROs obtain the funds for these fees and assessments by assessing charges on their members, and the members in turn pass these charges to their customers."<sup>78</sup> Likewise, in adopting the CAT NMS Plan, the Commission explained that under Section 31, "Participants are required to pay transaction fees and assessments to the Commission," that "Participants, in turn, may collect their Section 31 fees and assessments from

---

<sup>76</sup> See generally Securities Exchange Act Rel. No. 67457 (Jul. 18, 2012), 77 Fed. Reg. 45722, 45795 (Aug. 1, 2012) ("Rule 613 Adopting Release") (emphasis added).

<sup>77</sup> CAT NMS Plan Approval Order at 84992.

<sup>78</sup> Securities Exchange Act Rel. No. 49928 (June 28, 2004), 69 Fed. Reg. 41060, 41072 (July 7, 2004). See also SEC, Section 31 Transaction Fees, Fast Answers, <https://www.sec.gov/fast-answers/answerssec31.htm> (noting that the "[t]he SROs have adopted rules that require their broker-dealer members to pay a share of these fees. Broker-dealers, in turn, impose fees on their customers that provide the funds to pay the fees owed to their SROs.")



their broker-dealer members,” and, that “broker-dealers may pass on regulatory charges that support Participant supervision, such as with respect to Section 31 fees.”<sup>79</sup>

Indeed, the language of certain exchange rules regarding Section 31 specifically describe the pass-through process related to Section 31 fees.<sup>80</sup> For example, NYSE Arca Rule 2.18.01 states the following:

Pursuant to Rule 2.18, the Exchange makes an assessment on ETP Holders that the Exchange uses to pay fees owing to the SEC in accordance with Section 31 of the Exchange Act (“the Rule 2.18 assessment”). The Section 31 fees payable by the Exchange to the SEC is determined based on the aggregate dollar amount of “covered sales,” as defined by SEC Rule 31, effected on the Exchange by or through any ETP Holder. ETP Holders, in some cases, have passed along the Rule 2.18 assessment on a trade-by-trade basis to their customers or correspondent firms.”

The pass-through concept also is applied in the context of other SRO regulatory fees applicable to the SROs’ members. For example, “it is regular practice among some clearing and trading firms to ‘pass through’ the TAF to the underlying firm executing the trade. Further, FINRA understands that the executing firms commonly pass the TAF directly on to their customers. Typically, TAF fees are reflected on the confirmation statement received by customers.”<sup>81</sup> Similarly, the pass-through process is used for ORFs as well. ORFs are collected indirectly from members through their clearing firms by OCC on behalf of the respective options exchange. As noted in rule filings related to ORFs, “[t]he Exchange expects that [members] will pass through the ORF to their customers in the same manner that firms pass-through to their customers the fees charged by Self-Regulatory Organizations (‘SROs’) to help the SROs meet their obligations under Section 31 of the Exchange Act.”<sup>82</sup>

Fourth, commenters on prior CAT funding proposals have commented in favor of a model similar to the Section 31 fees in which the fee could be passed through to Industry Members and ultimate customers.<sup>83</sup> For example, one commenter noted the benefits of a model similar to the Section 31 fees, arguing that “[i]t would also provide transparency into the fees which seek to recoup costs and a vehicle to pass-thru fees to the ultimate beneficiary of each

---

<sup>79</sup> CAT NMS Plan Approval Order at 84992.

<sup>80</sup> See, e.g., NYSE American Rule 393.01; and NYSE Rule 440H.03.

<sup>81</sup> Securities Exchange Act Rel. No. 90176 (Oct. 14, 2020), 85 Fed. Reg. 66592, 66603 (Oct. 20, 2020).

<sup>82</sup> Securities Exchange Act. Rel. No. 67596 (Aug. 6, 2012), 77 Fed. Reg. 47902, 47903 (Aug. 10, 2012). See also Securities Exchange Act Rel. No. 61133 (Dec. 9, 2009), 74 Fed. Reg. 66715, 66716 (Dec. 16, 2009) (noting that “[t]he Exchange expects that member firms will pass-through the ORF to their customers in the same manner that firms pass-through to their customers the fees charged by SROs to help the SROs meet their obligation under Section 31 of the Exchange Act”); Securities Exchange Act Rel. No. 83878 (Aug. 17, 2018), 83 Fed. Reg. 42715, 42717 (Aug. 23, 2018) (noting that “by collecting the ORF in this manner Members and non-Members could more easily pass-through the ORF to their customers”).

<sup>83</sup> See, e.g., Letter from Michael Blaugrund, Chief Operating Officer, NYSE, to Vanessa Countryman, Secretary, SEC (May 10, 2021) at 3; Letter from Andrew Stevens, General Counsel, IMC Chicago, LLC, to Vanessa Countryman, Secretary, SEC (May 20, 2021) at 3.

trade.”<sup>84</sup> Another commenter similarly advocated for a Section 31-type model, noting that “SROs already have a well-established model for recouping their Section 31 fees by passing them through to their members.”<sup>85</sup>

Finally, the proposed pass-through process for CAT fees, like the pass-through process for other regulatory fees, recognizes the reality that regulatory costs incurred to maintain and enhance the quality of the markets will necessarily increase costs for all market participants, including the ultimate investor. Even if such pass-throughs were limited or prohibited, CAT costs would be distributed in other ways. A member of the Advisory Committee for the CAT and the former Chief Economist of the Commission, emphasized that “[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.”<sup>86</sup> This commenter reasoned that:

In highly competitive markets, prices reflect the costs of doing business in the long run. If those costs rise, they ultimately pass through to the customers. For example, if the Participants (primarily exchanges) were required to fund CAT NMS fully, they will raise their fees (or fail to lower them when costs are falling) to recover their funding costs. And if brokers’ business models require that they pay exchange fees on behalf of their clients, the brokers will raise their commission rates to the customers. And if their business models require zero commissions, brokers will provide fewer services or charge more for non-transaction services to cover their increased costs.<sup>87</sup>

## **ii. Effect of Allocation on Fee Pass-Throughs**

CAT LLC determined not to allocate all CAT costs to Participants under the Funding Proposal. Under the Funding Proposal, CEBBs would be allocated one-third of the CAT costs, CEBSs would be allocated one-third of the CAT costs and Participants would be allocated one-third of the CAT costs. Under the Funding Proposal, Industry Members may determine to pass their CAT fees on to their clients at their discretion. Participants also may determine to pass their CAT fees on to their members, or to pay the CAT fees charged to the Participant through other means. If Participants were to determine to pass CAT fees on to their members, they may choose to adopt a CAT-specific fee that directly passes the CAT fee through to their members, in whole or in part, or they may choose to increase other fees charged to members (*e.g.*, transaction fees). Participants would need to file any such fee proposals with the SEC in accordance with Section 19(b) of the Exchange Act.

---

<sup>84</sup> Letter from James Toes, President and CEO, and Andre D’Amore, Chairman of the Board, Securities Trader Association, to Vanessa Countryman, Secretary, SEC (June 10, 2021) at 4.

<sup>85</sup> Letter from Joanna Mallers, Secretary, FIA Principal Traders Group, to Vanessa Countryman, Secretary, SEC (May 12, 2021) at 4.

<sup>86</sup> Letter from Larry Harris, Fred V. Keenan Chair in Finance, USC Marshal School of Business, to Vanessa Countryman, Secretary, SEC (June 21, 2022) (“Harris Letter”) at 2.

<sup>87</sup> *Id.*

If all CAT costs were allocated to Participants, however, Participants would have the same options for covering the costs of the CAT fees. They may choose to adopt a CAT-specific fee that directly passes through the CAT fee through to their members, in whole or in part, or they may choose to increase other fees charged to members (*e.g.*, transaction fees). Participants would need to file any such fee proposals with the SEC in accordance with Section 19(b) of the Exchange Act. For any fee charged to Industry Members, Industry Members may determine to pass their CAT fees on to their clients at their discretion, as with the CAT fees under the Funding Proposal.

**f. 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 CAT 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. CAT LLC believes that the proposed CAT fees for FINRA are consistent with the Exchange Act and the CAT NMS Plan. CAT LLC does not believe that the assessment of a CAT fee on FINRA in the same manner as other Participants would result in a burden on competition for FINRA or for Industry Members engaging in activity otherwise than on an exchange.

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.<sup>88</sup> 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

---

<sup>88</sup> These figures for executed equivalent share volume for 2021 are set forth in the illustrative example in the notice of the 2022 Funding Proposal. *See* 2022 Funding Proposal Release at 33246.

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 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.”<sup>89</sup>

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. 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.<sup>90</sup> 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 on the 2022 Funding Proposal, a former member of the Advisory Committee for the CAT and the former Chief Economist of the Commission, 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.”<sup>91</sup>

Finally, CAT LLC does not believe that FINRA should not be treated as a market center for CAT funding purposes merely because FINRA is not treated as a market center for governance purposes under the National Market System Plan Regarding Consolidated Equity Market Data (“CT Plan”). 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.”<sup>92</sup> In addition, the purpose of the CAT is solely for regulatory purposes; it provides a regulatory system to facilitate the performance of the self-regulatory obligations of all the Participants, including the exchanges and FINRA. In contrast,

---

<sup>89</sup> CAT NMS Plan Approval Order at 84794.

<sup>90</sup> See 2021 FINRA Annual Financial Report at 43.

<sup>91</sup> Harris Letter at 2.

<sup>92</sup> See also Sections 11.2 and 11.3 of the CAT NMS Plan.

the CT Plan governs the public dissemination of real-time consolidated equity market data for NMS stocks.

**g. 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. CAT LLC does not believe that the Funding Proposal would burden inappropriately efficiency, competition or capital formation in how it treats equities and options. As a preliminary matter, unlike other previously proposed fee models,<sup>93</sup> 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. In addition, 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).

**h. Sell-Side and Buy-Side**

CAT LLC proposes to charge both the buy-side and sell-side of a transaction in Eligible Securities a CAT fee. The proposal to charge both the buy-side and the sell-side of a transaction is consistent with other types of fees charged to both the buyer and the seller that are common in the industry. As such, CAT LLC believes that the proposal would comply with the requirements of the Exchange Act. For example, the ORF, a fee common to the options exchanges, is one example of a regulatory fee charged to both the buy-side and sell-side of the transaction. For example, the MIAX fee schedule lists the options regulatory fee as applying “per executed contract side.”<sup>94</sup> Similarly, under its pricing schedule, Nasdaq PHLX charges an options regulatory fee “per contract side.”<sup>95</sup> As set forth in its fee schedule, CBOE EDGX also charges an options regulatory fee to each side of the contract.<sup>96</sup> In addition, the industry is familiar with transaction-based fees charged to both the buyer and the seller by the exchanges and FINRA.<sup>97</sup>

**i. Fee Rate Changes Twice Per Year for CAT Fees related to Prospective CAT Costs**

CAT LLC proposes to require the calculation of the Fee Rate for CAT Fees related to Prospective CAT Costs twice a year. CAT LLC believes that the proposal to adjust the Fee Rate twice a year, once at the beginning of the year and once during the year, appropriately balances

---

<sup>93</sup> See, *e.g.*, 2018 Fee Proposal Release at 1400.

<sup>94</sup> MIAX Options Exchange, Fee Schedule, as of Mar. 3, 2023.

<sup>95</sup> Nasdaq PHLX Rules, Options 7, Section 6(D).

<sup>96</sup> Cboe EDGX Fee Schedule, effective Mar. 1, 2023.

<sup>97</sup> See, *e.g.*, NYSE Price List 2023 for fees charged to both sides.

the need to coordinate the Fee Rate with potential changes in the costs and projections with the cost and effort to the industry related to more frequent fee changes.

CAT LLC believes its proposal is in keeping with views expressed by the industry in other contexts regarding the appropriate frequency of regulatory rate changes. For example, in the ORF context, the industry requested that rate changes be limited to twice per year. SIFMA stated in a comment letter on one of the ORF fee proposals that “[r]ates should only be changed two times per year to reduce operational complexity and reduce risk.”<sup>98</sup> The exchanges with ORF fees noted that the possibility for fee rate changes only twice per year would also “better enable [their members] to properly account for ORF charges among their customers.”<sup>99</sup> In light of these views on the frequency of the rate changes, exchanges with an ORF have limited the fee rate changes to twice a year.<sup>100</sup>

#### **j. Plan Amendment Process for Fee Rate Changes**

Under the Funding Proposal, once any Fee Rate has been established by a majority vote of the Operating Committee in accordance with the Funding Proposal set forth in the CAT NMS Plan,<sup>101</sup> each Participant would be required to pay the applicable CAT Fee calculated in accordance with the requirements set forth in the CAT NMS Plan (subject to the requirement for the Industry Member CAT Fee to be in effect). CAT LLC does not plan to submit an amendment to the CAT NMS Plan each time that the Fee Rate for the CAT Fee is established or adjusted because of the length of time and burden required to amend the CAT NMS Plan for each adjustment to the Fee Rate. Moreover, CAT LLC believes that it is unnecessary to file a new separate amendment for the Participant CAT Fees each time a new Fee Rate is approved because the CAT NMS Plan would set forth in detail the manner in which the CAT fees are established and the inputs for calculating the specific CAT Fees would be published on the CAT website and included in the Participant fee filings under Section 19(b) of the Exchange Act for Industry Member CAT fees. Therefore, the amendments to the Plan for a fee rate change would be redundant and impractical in terms of timing.

CAT LLC proposes to amend the CAT NMS Plan to describe in detail how CAT Fees would be calculated, including the formula for the calculation and the methods for determining the inputs for the calculation (*i.e.*, the budget, projected executed equivalent share volume, executed equivalent shares per transaction). As such, the Participants would be required to calculate the Fee Rate and the related CAT Fees using the proposed formula; this process would be mandatory, including the mid-year Fee Rate change. Moreover, the budgetary and projection inputs to the calculation would be public, including in public fee filings pursuant to Section 19(b)

---

<sup>98</sup> See, e.g., Letter from Ellen Greene, Managing Director, SIFMA to Vanessa Countryman, Secretary, SEC, re: SIFMA Comment Letter on the Options Regulatory Fee Filings by SR-EMERALD-2019-01 (Apr. 10, 2019) at 5, <https://www.sifma.org/wp-content/uploads/2019/04/MIAX-Emerald-ORF.pdf>.

<sup>99</sup> See, e.g., Securities Exchange Act Rel. 93667 (Oct. 15, 2021).

<sup>100</sup> See, e.g., Cboe BZX Fee Schedule (“The Exchange may only increase or decrease the ORF semi-annually”); MIAX Fee Schedule (The Exchange may only increase or decrease the ORF semi-annually); and BOX Fee Schedule (“The Exchange may only increase or decrease the ORF semi-annually”).

<sup>101</sup> Participants would be required to pay the CAT Fee once the CAT Fee is in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act.

of the Exchange. Accordingly, CAT LLC does not believe that a Plan amendment would be necessary each time a new Fee Rate is calculated in accordance with the Plan.

The CAT NMS Plan would require each Participant to pay the proposed CAT Fees determined in accordance with the Funding Proposal. Proposed Section 11.3(a)(ii)(A) sets forth the requirement for Participants to pay the CAT fees. It states that “[e]ach 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,” and that “[e]ach 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.” It further states that “[t]he 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.” In addition, proposed paragraph (a) of the Participant fee schedule would state that “[e]ach Participant shall pay the CAT Fee set forth in Section 11.3(a) of the CAT NMS Plan to Consolidated Audit Trail, LLC in the manner prescribed by Consolidated Audit Trail, LLC on a monthly basis based on the Participant’s transactions in the prior month.”

The Participants would be required to follow the requirements set forth in the CAT NMS Plan for establishing and calculating CAT Fees and requiring the payment of the CAT Fees as both a regulatory and contractual matter. Rule 613(h)(1) of Regulation NMS under the Exchange Act states that “[e]ach national securities exchange and national securities association shall comply with the provisions of the national market system plan approved by the Commission,” that is, the CAT NMS Plan. Rule 613(h)(2) of Regulation NMS under the Exchange Act states that “[a]ny failure by a national securities exchange or national securities association to comply with the provisions of the national market system plan approved by the Commission shall be considered a violation of this section.” Similarly, Rule 608(c) of Regulation NMS under the Exchange Act states that “[e]ach self-regulatory organization shall comply with the terms of any effective national market system plan of which it is a sponsor or a participant.” Section 3.11 of the CAT NMS Plan reiterates this requirement, stating that “[e]ach Participant shall comply with . . . the provisions of SEC Rule 613 and of this Agreement, as applicable, to the Participant.” In addition, each Participant is a signatory to the CAT NMS Plan as a member of the limited liability company. Accordingly, a failure to comply with the requirements of the CAT NMS Plan related to the CAT fees would be a violation of the regulatory obligation to comply with the CAT NMS Plan and a breach of contractual requirements of the CAT NMS Plan.

**k. Executed Equivalent Shares for NMS Stocks, Listed Options and OTC Equity Securities**

The Funding Proposal uses the concept of executed equivalent shares as the metric for calculating CAT fees for transactions in NMS Stocks, Listed Options and OTC Equity Securities, each of which have different trading characteristics. Under the Funding Proposal, each executed share for a transaction in NMS Stocks would be counted as one executed equivalent share, each executed contract for a transaction in Listed Options would be counted

using the contract multiplier applicable to the specific Listed Option in the relevant transaction, and each executed share for a transaction in OTC Equity Securities would be counted as 0.01 executed equivalent shares. CAT LLC believes that the proposed counting methods for each category of security are appropriate, as discussed in detail above in Section A.3.b.ii of this filing.

## **I. Cost Transparency**

### **i. Cost Transparency and Level of Detail of CAT Costs**

CAT LLC provides substantial cost transparency for Past CAT Costs and Prospective CAT Costs, including transparency above and beyond what is required under the CAT NMS Plan, and more than other national market system plans. Such transparency would include cost descriptions in the fee filings made pursuant to Section 19(b) of the Exchange Act and Rule 19b-4(f)(2) thereunder, as well as the public availability of CAT financial and budget information.

CAT LLC proposes to require substantial transparency for CAT costs in the fee filings to be made pursuant to Section 19(b) of the Exchange Act. For example, Proposed Section 11.3(a)(iii)(B) of the CAT NMS Plan would require such filings for CAT Fees to include, among other things, 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; and a discussion of how the budget is reconciled to the collected fees. Similarly, Proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan would require such filings for Historical CAT Assessments to include, among other things, a brief description of the amount and type of Historical CAT Costs, 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.

CAT LLC provides substantial additional financial information regarding the operation of the CAT as required by the CAT NMS Plan. For example, CAT LLC currently makes detailed financial information about the CAT publicly available. Section 9.2(a) of the CAT NMS Plan requires CAT LLC to maintain a system of accounting established and administered in accordance with GAAP and requires “all financial statements or information that may be supplied to the Participants shall be prepared in accordance with GAAP (except that unaudited statements shall be subject to year-end adjustments and need not include footnotes).” Section 9.2(a) of the CAT NMS Plan also requires the Company to prepare and provide to each Participant “as soon as practicable after the end of each Fiscal Year, a balance sheet, income statement, statement of cash flows and statement of changes in equity for, or as of the end of, such year, audited by an independent public accounting firm.” The CAT NMS Plan requires that this audited balance sheet, income statement, statement of cash flows and statement of changes in equity be made publicly available. Among other things, these financial statements provide



operating expenses, including technology, legal, consulting, insurance, professional and administration and public relations costs. CAT LLC also maintains a dedicated web page on the CAT NMS Plan website that consolidates its annual financial statements in a public and readily accessible place.<sup>102</sup> The Company's annual financial statements from inception in 2017 through 2021 are currently available on the CAT website.

In addition to providing financial information required under the CAT NMS Plan and otherwise, CAT LLC also has voluntarily determined to provide more financial transparency to the public regarding its costs. For example, CAT LLC publicly provides its annual operating budget as well as periodically provides updates to the budget that occur during the year. CAT LLC includes such budget information on a dedicated web page on the CAT NMS Plan website to make it readily accessible to the public, like the CAT financial statements. CAT LLC also has held webinars providing additional detail about CAT costs and about potential alternative funding models for the CAT, and commenters submitted questions and comments on the webinars.<sup>103</sup>

## **ii. Composition and Transparency of Past CAT Costs**

CAT LLC also provides detailed disclosures regarding Past CAT Costs. The Historical Fee Rate for the Historical CAT Assessment would be calculated based on actual past costs incurred by the CAT (except for certain costs that CAT LLC has determined to exclude from the calculation), rather than budgeted costs. The actual costs for prior to 2022 are set forth in detail in the audited financial statements for the Company and its predecessor CAT NMS, LLC, which are available on the CAT website.<sup>104</sup> In addition, the following describes in detail the Historical CAT Costs for prior to 2022. These Historical CAT Costs figures are being provided in this filing for transparency purposes only. The Participants expect to describe these costs in the relevant fee filings that the Participants submit pursuant to Section 19(b) under the Exchange Act and Rule 19b-4(f)(2) thereunder regarding Historical CAT Assessments.

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

The Participants expect to propose that 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). The Participants expect to propose that the Historical CAT Costs would include costs for the period prior to June 22, 2020 of \$143,919,521. The Participants expect to propose that 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 CEBBs paying one-third

<sup>102</sup> See CAT Audited Financial Statements, <https://www.catnmsplan.com/audited-financialstatements>.

<sup>103</sup> See, e.g., CAT LLC Webinar, CAT Costs (Sept. 21, 2021), <https://www.catnmsplan.com/events/catcostsseptember-21-2021>; CAT LLC Webinar, CAT Funding (Sept. 22, 2021), <https://www.catnmsplan.com/events/catfundingseptember-22-2021>; and CAT LLC Webinar, CAT Funding (Apr. 6, 2022), <https://www.catnmsplan.com/events/cat-funding>.

<sup>104</sup> The audited financial statements for CAT NMS, LLC and Consolidated Audit Trail, LLC are available at <https://www.catnmsplan.com/audited-financial-statements>.

(\$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.

<b>Operating Expense</b>	<b>Historical CAT Costs for Period Prior to June 22, 2020</b>
Capitalized Developed Technology Costs and Transition Fee*	\$71,475,941
<b><i>Technology Costs:</i></b>	<b>\$33,568,579</b>
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
Professional and administration	\$1,082,036
Public relations	\$224,669
<b>Total Operating Expenses</b>	<b>\$143,919,521</b>

\* 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**

The Participants expect to propose that 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 Participants expect to propose that the Historical CAT Costs for Period 1 are \$6,377,343. The Participants expect to propose that 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 CEBs 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.

<b>Operating Expense</b>	<b>Historical CAT Costs for Period 1</b>
Capitalized Developed Technology Costs*	\$1,684,870
<b><i>Technology Costs:</i></b>	<b>\$3,996,800</b>
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
<b>Total Operating Expenses</b>	<b>\$6,377,343</b>

\* 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

The Participants expect to propose that 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 Participants expect to propose that the Historical CAT Costs for Period 2 are \$42,976,478. The Participants expect to propose that 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 CEBSSs 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.

<b>Operating Expense</b>	<b>Historical CAT Costs for Period 2</b>
Capitalized Developed Technology Costs*	\$6,761,094
<b>Technology Costs:</b>	<b>\$31,460,033</b>
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
<b>Total Operating Expenses</b>	<b>\$42,976,478</b>

\* 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**

The Participants expect to propose that 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 Participants expect to propose that the Historical CAT Costs for Period 3 are \$144,415,268. The Participants expect to propose that 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 CEBBs 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.

<b>Operating Expense</b>	<b>Historical CAT Costs for Period 3</b>
Capitalized Developed Technology Costs*	\$10,763,372
<b><i>Technology Costs:</i></b>	<b>\$123,639,402</b>
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
<b>Total Operating Expenses</b>	<b>\$144,415,268</b>

\* 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**

The Participants expect to propose that Historical CAT Costs would not include two categories of CAT costs (“Excluded Costs”): (1) \$48,874,937, which are all CAT costs incurred from November 15, 2017 through November 15, 2018, and (2) \$14,749,362 of costs related to the termination of the relationship with the Initial Plan Processor. The Participants expect to propose that 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 previously expressed by commenters about costs incurred related to the period of the operation of the Initial Plan Processor.

First, the Participants expect to propose that Historical CAT Costs would exclude 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. The Participants expect to propose that these costs are \$48,874,937. The Participants expect to propose that the Participants would remain responsible for 100% of this \$48,874,937 in costs. The following table breaks down these costs into the categories set forth in Proposed Section 11.3(b)(iii)(B)(II) of the CAT NMS Plan.

<b>Operating Expense</b>	<b>Excluded Costs for November 15, 2017 – November 15, 2018</b>
Capitalized Developed Technology Costs	\$37,852,083
<b><i>Technology Costs:</i></b>	-
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
<b>Total Operating Expenses</b>	<b>\$48,874,937</b>

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

Accordingly, the Participants expect to propose that 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.

### **iii. Alternative Transparency Proposals**

CAT LLC believes that its proposed methods of cost transparency will provide Industry Members and other interested parties with detailed information about the CAT and the CAT fees. CAT LLC does not believe that additional transparency measures, such as a mechanism to allow for the review of budget information prior to a fee filing, or an independent cost review mechanism, are necessary or appropriate.

**A. Budget Disclosure Prior to Fee Filings**

CAT LLC does not believe that it is necessary to add a requirement to the CAT NMS Plan to 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. CAT LLC is currently providing CAT budget information to the public on a continuing basis. CAT LLC publicly provides the annual operating budget for the CAT LLC as well as regular 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 the fee filings; it also provides other 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. Moreover, the fee filing process under Section 19(b) of the Exchange Act provides the public with the opportunity to review the budgeted CAT costs that CAT LLC would seek to recover via the CAT Fees.

**B. Independent Cost Review Mechanism**

CAT LLC also does not believe that it would be necessary or appropriate to include an independent review mechanism for the cost of proposed CAT expenditures. 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 under the Exchange Act 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.

**m. Allocation of Past CAT Costs to Participants: Pro Rata versus Use of Funding Proposal**

The Participants have been responsible for all costs related to the CAT to date, and Industry Members have not paid any of the costs to date. Accordingly, under the Funding Proposal, the Participants would not be required to pay a CAT fee related to Past CAT Costs in addition to prior payments. The two-thirds of the Historical CAT Costs collected from Industry Members would be allocated to the Participants pro rata, based on the outstanding amounts due under the notes to the Participants for repayment of outstanding loan notes to the Company. The one-third of Historical CAT Costs that are not allocated to Industry Members would not be allocated to the Participants pursuant to the Funding Proposal based on executed equivalent

shares. Instead, such Historical CAT Costs would be allocated to the Participants pro rata based on the outstanding amounts due under the notes (as discussed further below in Section A.9.n of this filing). CAT LLC entered into the loans with the Participants pursuant to its authority under the CAT NMS Plan as approved by the SEC to pay for CAT costs, and, as such, the loans and their repayment terms are consistent with the Exchange Act and Rule 608 of Regulation NMS. The terms of the loans do not need to satisfy the requirements of the funding model set forth in Article XI of the CAT NMS Plan.

Section 3.9 of the CAT NMS Plan states that “[i]f the Company requires additional funds to carry out its purposes, to conduct its business, to meet its obligations, or to make any expenditure authorized by this Agreement, the Company may borrow funds from such one or more of the Participants, or from such third party lender(s), and on such terms and conditions, as may be approved by a Supermajority Vote of the Operating Committee.” As the Company – CAT LLC – did not have a source of revenue to fund its activities without a funding model approved by the SEC, CAT LLC determined to borrow funds from the Participants on terms approved by a Supermajority Vote of the Operating Committee. After this vote, CAT LLC entered into loan agreements with the Participants to cover CAT costs. The terms of the loan agreements dictate that repayment of the notes will be pro rata, based on the outstanding amounts loaned to CAT LLC. Accordingly, CAT LLC is obligated by contract, approved in accordance with the terms of the CAT NMS Plan, to repay the notes pro rata, not by another method.

Moreover, Section 3.8 of the CAT NMS Plan states that “[e]xcept as may be determined by the unanimous vote of all the Participants or as may be required by applicable law, no Participant shall be obligated to contribute capital or make loans to the Company.” The Participants voluntarily have agreed to provide loans to CAT LLC under the agreed upon terms to fund the CAT until a funding model is approved. Without a unanimous vote of the Participants, however, CAT LLC cannot require the Participants to make a new loan to CAT LLC. Accordingly, without the agreement of the Participants, the loans must be repaid in accordance with their terms.

**n. Sufficient Detail regarding Pro Rata Allocation of Past CAT Costs to Participants**

Further with regard to the pro rata allocation of Past CAT Costs, the manner in which the loans are repaid are governed by the loan agreements between CAT LLC and the Participants, as approved by CAT LLC. The following provides additional detail as to the allocation of Past CAT Costs to Participants in accordance with the loans to CAT LLC.

Pending SEC approval of CAT fees to fund the CAT, the Participants voluntarily determined to fund the development and operation of the CAT through quarterly loans to CAT LLC. The Participants determined to use the market share, tier-based funding model applicable to Execution Venues described in the proposed amendment to the CAT NMS Plan submitted to the SEC on December 11, 2017 (without including ATSS as Equity Execution Venues) to

allocate loan amounts among Participants (“Tiered Market Share Proposal”).<sup>105</sup> As described in that proposal, each Equity Execution Venue is placed in one of four tiers of fixed fees based on market share, and each Options Execution Venue is placed in one of two tiers of fixed fees based on market share. Equity Execution Venue market share is determined by calculating each Equity Execution Venue’s proportion of the total volume of NMS Stock and OTC Equity shares reported by all Equity Execution Venues during the relevant time period. For purposes of calculating market share, the OTC Equity Securities market share of Execution Venue ATSS trading OTC Equity Securities as well as the market share of the FINRA OTC reporting facility are discounted. Similarly, market share for Options Execution Venues is determined by calculating each Options Execution Venue’s proportion of the total volume of Listed Options contracts reported by all Options Execution Venues during the relevant time period. The tiers are refreshed on a quarterly basis in accordance with the Tiered Market Share Proposal.

Each of the Participants voluntarily have loaned CAT LLC funds in amounts in accordance with the Tiered Market Share Proposal to cover Past CAT Costs. Accordingly, under the Funding Proposal, the Participants propose to be reimbursed for two-thirds of the Historical CAT Costs pro rata based on the outstanding amounts loaned to CAT LLC pursuant to the Tiered Market Share Proposal, as this is what is required under the loan contract between CAT LLC and the Participants. Correspondingly, for the remaining one-third of the Historical CAT Costs that are not reimbursed via the Historical CAT Assessment, the Participants propose to remain responsible for the amounts loaned to CAT LLC pursuant to the Tiered Market Share Proposal. The Participants’ one-third share of the Historical CAT Costs would be paid by the cancellation of the loans on a pro rata basis. In addition, for any Past CAT Costs that are excluded from Historical CAT Costs, the Participants propose to remain responsible for the amounts loaned to CAT LLC pursuant to the Tiered Market Share Proposal as well. These excluded costs also would be paid by cancellation of the loans on a pro rata basis.

**o. Past CAT Costs: Collected from Current versus Past Industry Members and Use of Prior Month’s Transactions**

CAT LLC believes that Historical CAT Assessments are appropriately assessed to current Industry Members based on current market activity. CAT LLC does not believe that Historical CAT Assessments should be charged to 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.

CAT LLC believes that it is appropriate to collect the Historical CAT Assessments 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,<sup>106</sup> and, therefore, current Industry Members are benefitting from the efforts to create and operate the CAT.

---

<sup>105</sup> See 2018 Fee Proposal Release.

<sup>106</sup> See generally Rule 613 Adopting Release.



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 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.<sup>107</sup> However, the number of current Industry Members has greatly diminished from these early estimates to approximately 1100.<sup>108</sup> 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.<sup>109</sup>

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, particularly small CAT Reporters, may not be in a position to pay a fee related to earlier market activity.<sup>110</sup>

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.<sup>111</sup> As a result, a new participant would be required to pay a fee for costs incurred in the past by the

---

<sup>107</sup> CAT NMS Plan Approval Order at 84862.

<sup>108</sup> An average of 1,124 unique CAT Reporters sent transaction data to the CAT from July 1, 2022 to August 8, 2022.

<sup>109</sup> See, e.g., Rule 613(a)(1)(vii)(D) of Regulation NMS under the Exchange Act.

<sup>110</sup> CAT LLC notes, however, that there has been substantial continuity in the largest Industry Members over time. For the illustrative example, the top 10 firms in terms of equivalent executed shares in December 2022 are allocated more than half (52%) of the total Industry Member CAT costs; eight of those 10 firms were also ranked in the top 10 throughout 2021. The remaining two were ranked 14th and 15th, respectively. Similarly, of the top 30 firms in December 2022 (representing an allocation of 82% of the total Industry Member CAT costs), all but three ranked in the top 30 throughout 2021. The three exceptions were ranked at 31, 33 and 40 in 2021. Furthermore, of the top 10 firms by CAT record volume year to date in 2023, 7 were also top 10 reporters by message volume in 2020. The other three rose from ranks 17, 18, and 35. Of the top 30 firms by CAT record volume year to date in 2023, 25 were in the top 30 reporters of 2020.

<sup>111</sup> See, e.g., Section III(b) of the CTA Plan; Section VIII of the UTP Plan.

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 Initial Plan Processor were incurred in 2017 and before.<sup>112</sup> For example, a CAT Participant applicant in 2023 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.

**p. Budgeted versus Incurred Costs**

Under the Funding Proposal, the budgeted CAT costs set forth in the annual operating budget would be used to determine the Fee Rate for CAT Fees related to Prospective CAT Costs. The budgeted CAT costs would comprise estimated fees, costs and expenses to be reasonably incurred by the Company for the development, implementation and operation of the CAT during the year, which would include costs for the Plan Processor, insurance, and third-party support, as well as an operational reserve. CAT LLC does not propose to use costs already incurred in calculating the CAT Fees.

CAT LLC believes that using budgeted CAT costs, rather than CAT costs already incurred, is critical to "build[ing] financial stability to support the Company as a going concern."<sup>113</sup> Using budgeted CAT costs to determine the Fee Rate would allow CAT LLC to collect fees before bills become payable. If, however, CAT Fees are only collected after bills become payable, then the Participants would be required to continue to fund 100% of CAT costs to pay the bills as they come due. Making the Participants responsible for all of the CAT costs upfront, rather than one-third of the CAT costs, would change the proposed model in a significant manner.

Requiring the calculation of the Fee Rate based on incurred CAT costs, rather than budgeted CAT costs would only be necessary if budgeted and incurred CAT costs were likely to diverge. However, the Funding Proposal has been designed to address this concern. As proposed, CAT LLC would be required to calculate the Fee Rate each year based upon the budget for the upcoming year, and to adjust the fee rate mid-year to reflect changes in the

---

<sup>112</sup> 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).

<sup>113</sup> Section 11.2(f) of the CAT NMS Plan.

budgeted or actual CAT costs or the projected or actual executed equivalent share volume. Accordingly, CAT LLC would be required to adjust CAT Fees twice a year to ensure that they are closely aligned with CAT costs. Moreover, when establishing the annual budget or its mid-year adjustment, CAT LLC would adjust the budget to reflect any surplus or deficit in CAT Fees collected during the prior period.

In addition, the CAT NMS Plan requires that the Company operate on a “break-even” basis, with fees imposed to cover costs and an appropriate reserve. Any surpluses would be treated as an operational reserve to offset future fees and would not be distributed to the Participants as profits. To ensure that the Participants’ operation of the CAT will not contribute to the funding of their other operations, Section 11.1(c) of the CAT NMS Plan specifically states that “[a]ny surplus of the Company’s revenues over its expenses shall be treated as an operational reserve to offset future fees.” In addition, CAT LLC proposes to limit the size of the reserve to not more than 25% of the annual budget. To the extent that collected CAT fees exceed CAT costs, including the reserve of 25% of the annual budget, such surplus shall be used to offset future fees.<sup>114</sup> Furthermore, CAT LLC is set up as a business league to mitigate concerns that CAT LLC’s earnings could be used to benefit individual Participants.<sup>115</sup>

#### **q. Continuous Fees versus Sunsetting Fees**

CAT LLC does not propose to require the proposed CAT Fees related to Prospective CAT Costs to sunset automatically; instead, a CAT Fee would continue until a new CAT Fee is in place in accordance with the requirements of the CAT NMS Plan and Section 19(b) of the Exchange Act. CAT LLC believes that it is critical that a CAT Fee remain in place at all times. Accordingly, CAT LLC proposes to add Section 11.3(a)(i)(A)(III) of the CAT NMS Plan to clarify that CAT Fees related to Prospective CAT Costs do not sunset automatically; such CAT Fees would remain in place until new CAT Fees with a new Fee Rate is in effect.

The financial viability of the CAT would be put at risk without a constant source of revenue. CAT LLC pays various bills, including technology bills, on a monthly basis. Accordingly, even short delays in the implementation of new CAT Fees after the sunset of a prior CAT Fee may have a deleterious effect on the operation of the CAT. Indeed, adopting sunset fees would contradict the funding principle of seeking to “build financial stability to support the Company as a going concern.”<sup>116</sup>

Moreover, CAT LLC does not believe that a sunset requirement is necessary to ensure that the CAT Fees are closely coordinated with Prospective CAT costs. CAT LLC has proposed a comprehensive, multi-pronged approach to ensure that the CAT Fees are closely tied

---

<sup>114</sup> See Proposed 11.1(a)(ii) of the CAT NMS Plan.

<sup>115</sup> To qualify as a business league under Section 501(c)(6) of the Internal Revenue Code, an organization must “not [be] organized for profit and no part of the net earnings of [the organization can] inure[ ] to the benefit of any private shareholder or individual.” As the SEC stated when approving the CAT NMS Plan, “the Commission believes that the Company’s application for Section 501(c)(6) business league status addresses issues raised by commenters about the Plan’s proposed allocation of profit and loss by mitigating concerns that the Company’s earnings could be used to benefit individual Participants.” CAT NMS Plan Approval Order at 84793.

<sup>116</sup> Section 11.2(f) of the CAT NMS Plan.

to CAT costs. First, CAT LLC will be required to calculate the Fee Rates for the CAT Fees based on budgeted CAT costs. In addition, CAT LLC will be required to calculate the Fee Rate twice a year to determine whether the Fee Rate has changed due to changes in the budgeted or actual costs or actual or projected executed equivalent share volume, and to make a fee filing twice a year to reflect this calculation. Accordingly, the Fee Rate would be required to be updated twice a year, thereby ensuring the CAT Fees are closely tied to CAT costs.

Second, the CAT NMS Plan requires that the Company operate on a “break-even” basis, with fees imposed to cover costs and an appropriate reserve. Any surpluses would be treated as an operational reserve to offset future fees and would not be distributed to the Participants as profits. To ensure that the Participants’ operation of the CAT will not contribute to the funding of their other operations, Section 11.1(c) of the CAT NMS Plan specifically states that “[a]ny surplus of the Company’s revenues over its expenses shall be treated as an operational reserve to offset future fees.” Moreover, CAT LLC proposes to amend the CAT NMS Plan to limit the reserve to no more than 25% of the annual budget and to clarify that CAT fees collected in excess of the CAT costs, including the reserve, will be used to offset future fees.<sup>117</sup>

Third, CAT LLC proposes to amend the CAT NMS Plan to require Participants to provide significant details in their fee filings regarding Industry Member CAT Fees. Proposed paragraph (a)(iii)(B) of Section 11.3 of the CAT NMS Plan would state that, “[w]hen 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 would be required to include (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. This detail would describe how the Fee Rate was calculated and explain how the budget used in the calculation is reconciled to the collected fees. Such detailed information would provide Industry Members and other interested parties with a clear understanding of the calculation of the CAT fees and their relationship to CAT costs.

#### **r. Conflicts of Interest**

CAT LLC believes that the current process for developing the CAT funding model appropriately addresses potential conflicts of interest related to CAT fees. The CAT NMS Plan, as approved by the SEC, adopts various measures to protect against potential conflicts issues

---

<sup>117</sup> See Proposed Section 11.1(a)(i) and (ii) of the CAT NMS Plan.

raised by the Participants' fee-setting authority, including, but not limited to, the fee filing requirements under the Exchange Act and operating the CAT on a break-even basis. CAT LLC believes that these and other measures address potential conflicts of interest related to CAT fees.

**s. Effect on Efficiency, Competition or Capital Formation**

CAT LLC believes that the Funding Proposal would have a positive impact on efficiency, competition and capital formation. The Funding Proposal is designed to provide a predictable revenue stream sufficient to cover CAT costs each year. In doing so, the Funding Proposal would be designed to maintain the CAT as a going concern financially. By providing for the financial viability of the CAT, the Funding Proposal would allow the CAT to provide its intended benefits. For example, the CAT is intended to provide significant improvements in efficiency related to how regulatory data is collected and used. In addition, by providing enhanced regulatory oversight and surveillance, the CAT could result in improvements in market efficiency by deterring violative activity. Similarly, the CAT is intended improve capital formation by improving investor confidence in the market due to enhancements in surveillance.

In addition, the Funding Proposal would not impose an inappropriate burden on competition. The Funding Proposal would operate in a manner similar to the funding models employed by the SEC and the Participants related to Section 31 of the Exchange Act, the FINRA TAF and the ORF. These fees are long-standing and have been approved by the Commission as satisfying the requirements under the Exchange Act, including not imposing a burden on the competition that is not necessary or appropriate under the Exchange Act. In addition, the Funding Proposal avoids potentially burdensome fees for market makers or other market participants based on message traffic. Furthermore, the Funding Proposal addresses the specific trading characteristics of Listed Options and OTC Equity Securities to avoid adverse effects of the trading of those instruments. For example, the Funding Proposal includes the discounting of transactions involving OTC Equity Shares which, given the volume of shares typically involved in such securities transactions, otherwise may result in disproportionate fees to market participants engaging in transaction in these securities.

The Funding Proposal also would not unfairly burden FINRA or any of the exchanges. 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 responsibilities under the Exchange Act. Their usage of CAT Data will be for the same regulatory purposes. By treating each Participant the same, the CAT fees would not become a competitive issue by and among the Participants.

CAT LLC does not believe that this proposal would unfairly burden CEBBs and CEBSSs. Such a transaction-based fee is a type of fee that 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. Moreover, the CEBBs and CEBSSs could determine, but would not be required, to pass their CAT fees through to their customers, who, in turn, could pass their CAT

fees to their customers, until the fee is imposed on the ultimate participant in the transaction. With such a pass through, the CEBBs and CEBs would not ultimately incur the cost of all CAT fees related to their transactions.

**t. Straightforward Approach**

One advantage of the Funding Proposal is that the approach is simple, straightforward and easy to understand. Using the predetermined Fee Rate or Historical Fee Rate, CAT LLC would calculate CAT fees by multiplying the number of executed equivalent shares in each Participant, CEBB or CEBs's transactions in Eligible Securities by the Fee Rate or Historical Fee Rate (as applicable) and one-third. The values necessary for the calculation are readily available. The Fee Rates and Historical Fee Rates would be publicly available, and Participants, CEBBs and CEBs have easy access to their transaction data. Moreover, the two adjustments – one for Listed Options and one for OTC Equity Securities – are similarly straightforward calculations. The Funding Proposal does not include other complexities, such as tiered fees, minimum or maximum fees, excluded types of Eligible Securities or excluded transactions in Eligible Securities.

**u. Predictable Fees**

The Funding Proposal also provides CAT Reporters with predictable CAT fees. Because the fee rates would be established in advance, Participants, CEBBs and CEBs can calculate the CAT fee that applies to each transaction when it occurs. Accordingly, CAT Reporters with a CAT fee obligation may easily estimate and validate their applicable fees based on their own trading data. In addition, to the extent any CAT fees are passed on to customers, such customers also can calculate the applicable CAT fee for each transaction.

The predictability of CAT fees under the Funding Proposal improves upon the lack of fee predictability in the Original Funding Model and other message traffic-based models.<sup>118</sup> For example, with potential message traffic models,<sup>119</sup> CAT Reporters would not know the actual per message rate until after the end of the relevant reporting period for which they were assessed the fee and also could not determine in advance the number of messages that may be associated with a given order or the total number of messages, thereby making it difficult for a CAT Reporter to predict a CAT fee related to its market activity. In addition, this lack of predictability related to message-based fees also could complicate efforts by Industry Members to estimate, explain and directly pass message-based fees back to customers, particularly if no trade has occurred.

---

<sup>118</sup> See Securities Exchange Act Rel. No. 92451 (July 20, 2021), 86 Fed. Reg. 40114, 40122 (July 26, 2021) (“2021 Fee Proposal OIP”).

<sup>119</sup> Potential message traffic models, including the 2018 Fee Proposal and 2021 Fee Proposal, and the message traffic only model, are discussed further below in Section A.10 of this filing.

**v. Administrative Ease**

The Funding Proposal also would allow for “ease of billing and other administrative functions.”<sup>120</sup> As discussed above, the Funding Proposal relies upon a basic calculation using predetermined fee rate, thereby making the fee determination a straightforward process. In addition, the CAT fees will be collected in a manner similar to the collection process that Industry Members are already accustomed, thereby further reducing the administrative burden on the industry.

**w. Equal Treatment of Trading Venues**

The Funding Proposal also has the benefit of treating transactions in Eligible Securities equally regardless of the trading venue. The Fee Rate or Historical Fee Rate would be the same regardless of whether a trade was executed on an exchange or in the OTC market, or how the trade ultimately occurred more generally (*e.g.*, in a manner that generated more message traffic). As a result, it would not favor or unfairly burden any one type of trading venue or method.

**x. Equitable Treatment of Different Eligible Securities**

The Funding Proposal also recognizes and addresses 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). Similarly, in recognition of the different trading characteristics of OTC Equity Securities as compared to NMS Stocks, the Funding Proposal would discount the share volume of OTC Equity Securities when calculating the CAT fees. Specifically, each executed share for a transaction in OTC Equity Securities would be counted as 0.01 executed equivalent shares. As a result, the Funding Proposal would not favor or unfairly burden any one type of product or product type.

**y. Contributions by Both Industry Members and Participants**

The Funding Proposal would require both Participants and Industry Members to contribute to the funding of the CAT. To date, the Participants have paid the full cost of the creation, implementation and maintenance of the CAT since 2012, pending Commission approval of a fee model. The continued funding of the CAT solely by the Participants was and is not contemplated by the CAT NMS Plan, nor is it a financially sustainable approach. As noted by the SEC, the CAT “substantially enhance[s] the ability of the SROs and the Commission to oversee today’s securities markets,”<sup>121</sup> thereby benefiting all market participants. The Funding

---

<sup>120</sup> Section 11.2(d) of the CAT NMS Plan.

<sup>121</sup> Rule 613 Adopting Release at 45726.

Proposal would require both Participants and Industry Members to contribute to the cost of the CAT, as contemplated by Rule 613 and the CAT NMS Plan.

Rule 613(a)(1)(vii)(D) specifically contemplates Industry Members contributing to the payment of CAT costs. Specifically, this provision requires the CAT NMS Plan to address “[h]ow the plan sponsors propose to fund the creation, implementation, and maintenance of the consolidated audit trail, including the proposed allocation of such estimated costs among the plan sponsors, and between the plan sponsors and members of the plan sponsors.” In approving Rule 613, the SEC noted that “although the plan sponsors likely would initially incur the costs to establish and fund the central repository directly, they may seek to recover some or all of these costs from their members.”<sup>122</sup>

In addition, as approved by the SEC, the CAT NMS Plan specifically contemplates CAT fees to be paid by both Industry Members and Participants. Section 11.1(b) of the CAT NMS Plan states that “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 the Participants.”<sup>123</sup> The Commission stated in approving the CAT NMS Plan the following:

The Commission believes that the proposed funding model reflects a reasonable exercise of the Participants’ funding authority to recover the Participants’ costs related to the CAT. The CAT is a regulatory facility jointly owned by the Participants and, as noted above, the Exchange Act specifically permits the Participants to charge members fees to fund their self-regulatory obligations. The Commission further believes that the proposed funding model is designed to impose fees reasonably related to the Participants’ self-regulatory obligations because the fees would be directly associated with the costs of establishing and maintaining the CAT, and not unrelated SRO services.<sup>124</sup>

Likewise, the Commission stated that “the Participants are permitted to recoup their regulatory costs under the Exchange Act through the collection of fees from their members, as long as such fees are reasonable, equitably allocated and not unfairly discriminatory, and otherwise are consistent with Exchange Act standards,”<sup>125</sup> and noted that “Rule 613(a)(1)(vii)(D) requires the Participants to discuss in the CAT NMS Plan how they propose to fund the creation, implementation and maintenance of the CAT, including the proposed allocation of estimated costs among the Participants, and *between the Participants and Industry Members*.”<sup>126</sup>

In its amendments to the CAT NMS Plan regarding financial accountability, the SEC reaffirmed the ability for the Participants to charge Industry Members a CAT fee. Specifically,

---

<sup>122</sup> *Id.* at 45795.

<sup>123</sup> *See also* Sections 11.1(c), 11.2(c), and 11.3(a) and (b) of the CAT NMS Plan.

<sup>124</sup> CAT NMS Plan Approval Order at 84794.

<sup>125</sup> *Id.* at 84795.

<sup>126</sup> *Id.* at 84797 (emphasis added).



the SEC noted that the amendments were not intended to change the basic funding structure for the CAT, which may include fees established by the Operating Committee, and implemented by the Participants, to recover from Industry Members the costs and expenses incurred by the Participants in connection with the development and implementation of the CAT.<sup>127</sup>

**z. Use of CAT Data**

CAT Data would be used to calculate the CAT fees under the Funding Proposal. CAT Data would be used to identify each transaction in Eligible Securities for which a CAT fee would be collected. Specifically, CAT fees will be charged with regard to trades reported to CAT by FINRA via the ADF/ORF/TRF and by the exchanges. In addition, the same transaction data in the CAT Data would be used in the calculation of the projected total executed equivalent share volume for the Fee Rate. Furthermore, the transaction data in the CAT Data provides the identity of the relevant CAT Executing Brokers for each transaction for purposes of the CAT fees. Using CAT Data for the CAT fee calculations provides administrative efficiency, as the data will be accessible via the CAT.

**aa. Twelve Month Look Back for Projected Volume**

The calculation of the Fee Rate and the Historical Fee Rate requires the determination of the projected total executed equivalent share volume of transactions in Eligible Securities for the year. CAT LLC proposes to determine this projection based on the total executed equivalent share volume of transactions in Eligible Securities from the prior twelve months. CAT LLC determined that the use of the data from the prior twelve months provides an appropriate balance between using data from a period that is sufficiently long to avoid short term fluctuations while providing data close in time to the calculation of the Fee Rate or Historical Fee Rate. In addition, using twelve months, rather a period less than a year, would address the issue of potential seasonality. For example, if the projection were based on a period shorter than one year, the projection could be based on a period that typically has lighter trading volume than the other half of the year, thereby causing the projection to be too low.

**bb. Cost Discipline Mechanisms**

The reasonableness of the Funding Proposal and the fees calculated under the Funding Proposal are supported by key cost discipline mechanisms for the CAT – a cost-based funding structure, cost transparency, cost management efforts and oversight. Together, these mechanisms help ensure the ongoing reasonableness of the CAT's costs and the level of fees assessed to support those costs.

First, the CAT NMS Plan requires that the Company operate on a “break-even” basis, with fees imposed to cover costs and an appropriate reserve. Any surpluses would be treated as an operational reserve to offset future fees and would not be distributed to the Participants as

---

<sup>127</sup> Securities Exchange Act Rel. No. 88890 (May 15, 2020), 85 Fed. Reg. 31322, 31329 (May 22, 2020).

profits.<sup>128</sup> To ensure that the Participants' operation of the CAT will not contribute to the funding of their other operations, Section 11.1(c) of the CAT NMS Plan specifically states that "[a]ny surplus of the Company's revenues over its expenses shall be treated as an operational reserve to offset future fees." In addition, as set forth in Article VIII of the CAT NMS Plan, the Company "intends to operate in a manner such that it qualifies as a 'business league' within the meaning of Section 501(c)(6) of the [Internal Revenue] Code." To qualify as a business league, an organization must "not [be] organized for profit and no part of the net earnings of [the organization can] inure[] to the benefit of any private shareholder or individual."<sup>129</sup> As the SEC stated when approving the CAT NMS Plan, "the Commission believes that the Company's application for Section 501(c)(6) business league status addresses issues raised by commenters about the Plan's proposed allocation of profit and loss by mitigating concerns that the Company's earnings could be used to benefit individual Participants."<sup>130</sup> The Internal Revenue Service has determined that the Company is exempt from federal income tax under Section 501(c)(6) of the Internal Revenue Code.

Second, the CAT's commitment to reasonable funding in support of its regulatory obligations is further reinforced by the transparency it has committed to provide on an ongoing basis regarding its financial performance. The Company currently makes detailed financial information about the CAT publicly available. Section 9.2(a) of the CAT NMS Plan requires the Operating Committee to maintain a system of accounting established and administered in accordance with GAAP and requires "all financial statements or information that may be supplied to the Participants shall be prepared in accordance with GAAP (except that unaudited statements shall be subject to year-end adjustments and need not include footnotes)." Section 9.2(a) of the CAT NMS Plan also requires the Company to prepare and provide to each Participant "as soon as practicable after the end of each Fiscal Year, a balance sheet, income statement, statement of cash flows and statement of changes in equity for, or as of the end of, such year, audited by an independent public accounting firm." The CAT NMS Plan requires that this audited balance sheet, income statement, statement of cash flows and statement of changes in equity be made publicly available. Among other things, these financial statements provide operating expenses, including technology, legal, consulting, insurance, professional and administration and public relations costs. The Company also maintains a dedicated webpage on the CAT NMS Plan website that consolidates its annual financial statements in a public and readily accessible place.<sup>131</sup>

In addition, the Company publicly provides the annual operating budget for the Company as well as periodically provides updates to the budget that occur during the year. The Company includes such budget information on a dedicated webpage on the CAT NMS Plan website to make it readily accessible, like the CAT financial statements.

---

<sup>128</sup> CAT NMS Plan Approval Order at 84792.

<sup>129</sup> 26 U.S.C. 501(c)(6).

<sup>130</sup> CAT NMS Plan Approval Order at 84793.

<sup>131</sup> See CAT Audited Financial Statements, <https://www.catnmsplan.com/audited-financial-statements>.

CAT LLC also has held webinars providing additional detail about CAT costs and about potential alternative funding models for the CAT.<sup>132</sup> In addition, CAT LLC plans to offer additional webinars on cost and funding for the industry as appropriate going forward. Collectively, these reports and other efforts provide extensive and comprehensive information regarding the CAT's operations with respect to its budgets, revenues, costs, and financial reserves, among other information.

Third, CAT LLC regularly engages in and oversees efforts to reduce CAT costs responsibly while appropriately funding its regulatory obligations. CAT LLC's efforts to manage its expenses responsibly include oversight of the CAT's annual budget, including technology and other expenditures and initiatives. This oversight is informed by key CAT working groups, such as the Technology Working Group, Regulatory Working Group and Interpretive Working Group, each of which brings varied expertise to issues of responsible cost management. In particular, the Operating Committee currently utilizes a Cost Management Working Group to analyze opportunities to manage CAT costs responsibly. In addition, the Plan Processor regularly reviews options to lower compute and storage needs and works with CAT technology providers to provide services in a cost-effective manner. These collective efforts have led to a variety of technological changes to reduce costs.

Fourth, the CAT's funding and operations are subject to the oversight of the Commission. The CAT is extensively supervised by the Commission, including regular and continuous attendance at Operating Committee, Subcommittee and working group meetings. In addition, CAT fees as well as cost management efforts that require an amendment of the CAT NMS Plan are subject to review by the Commission's Division of Trading and Markets, as well as public comment.

## **10. Alternative Models Considered**

CAT LLC has determined to propose the Funding Proposal to fund the CAT for the reasons discussed above. In reaching this conclusion, CAT LLC considered the advantages and disadvantages of a variety of possible alternative funding and cost allocation models for the CAT in detail. After analyzing the various alternatives and considering comments on the previously proposed models, CAT LLC determined that, although various funding models may be reasonable and appropriate, the Funding Proposal provides a variety of advantages in comparison to the alternatives, and satisfies the requirements of the Exchange Act, including providing for an equitable allocation of reasonable fees among CAT Reporters, not being designed to permit unfair discrimination among CAT Reporters and not imposing any burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act.

---

<sup>132</sup> See, e.g., CAT LLC Webinar CAT Costs (Sept. 21, 2021), <https://www.catnmsplan.com/events/cat-costs-september-21-2021>; CAT LLC Webinar, CAT Funding (Sept. 22, 2021), <https://www.catnmsplan.com/events/cat-funding-september-22-2021>; and CAT LLC Webinar, CAT Funding (Apr. 6, 2022), <https://www.catnmsplan.com/events/cat-funding>.

**a. 2018 Fee Proposal**

CAT LLC previously filed a fee proposal in line with the CAT NMS Plan – the 2018 Fee Proposal.<sup>133</sup> Under that model, CAT LLC, among other things, proposed a 75%-25% allocation of CAT costs between Execution Venues (which included Participants and Execution Venue ATSS) and Industry Members (other than Execution Venue ATSS), and required Execution Venues to pay fees based on market share, and Industry Members (other than Execution Venue ATSS) to pay fees based on CAT message traffic.<sup>134</sup>

Each Industry Member (other than Execution Venue ATSS) would be placed into one of seven tiers of fixed fees, based on CAT message traffic in Eligible Securities. Options Market Maker and equity market maker quotes would be discounted when calculating message traffic.

CAT LLC determined to allocate 67% of Execution Venue costs recovered to Equity Execution Venues and 33% to Options Execution Venues. Each Equity Execution Venue would be placed in one of four tiers of fixed fees based on market share, and each Options Execution Venue would be placed in one of two tiers of fixed fees based on market share. Equity Execution Venue market share would be determined by calculating each Equity Execution Venue's proportion of the total volume of NMS Stock and OTC Equity shares reported by all Equity Execution Venues during the relevant time period. For purposes of calculating market share, the OTC Equity Securities market share of Execution Venue ATSS trading OTC Equity Securities as well as the market share of the FINRA OTC reporting facility would be discounted. Similarly, market share for Options Execution Venues would be determined by calculating each Options Execution Venue's proportion of the total volume of Listed Options contracts reported by all Options Execution Venues during the relevant time period.

The 2018 Fee Proposal was a very complex model with many interrelated parts, including allocation percentages, discounts for certain market behavior, and multiple tiered fees, and the complexity raised concerns from the Commission regarding its use as the CAT funding model. In addition, in response to the proposal, the industry provided a number of other comments related to the proposal, including comments regarding the proposed allocation of CAT costs between Participants and Industry Members, and the ability of certain market segments to afford the proposed CAT fee.<sup>135</sup>

---

<sup>133</sup> For a description of the 2018 Fee Proposal, *see* 2018 Fee Proposal Release. CAT LLC later withdrew this proposed amendment. Securities Exchange Act Rel. No. 82892 (Mar. 16, 2018), 83 Fed. Reg. 12633 (Mar. 22, 2018).

<sup>134</sup> In developing the 2018 Fee Proposal, CAT LLC considered many variations of different aspects of that model. For example, CAT LLC evaluated different cost allocations between Industry Members (other than Execution Venue ATSS) and Execution Venues, including 80%-20%, 75%-25%, 70%-30% and 65%-35% allocations, and different cost allocations between Equity and Options Execution Venues. CAT LLC also considered different discounts for equities and options market makers, different numbers of tiers of Industry Members and Execution Venues, different fee levels for each tier, and other aspects of the model.

<sup>135</sup> For a discussion of comments made regarding the Original Funding Model and the 2018 Fee Proposal, *see generally* 2018 Fee Proposal Release.

**b. 2021 Fee Proposal**

In response to the comments on the 2018 Fee Proposal, CAT LLC determined to revise various aspects of the proposed model, thereby developing the 2021 Fee Proposal.<sup>136</sup> The 2021 Fee Proposal would have continued to require many of the same elements as the 2018 model, including the bifurcated funding approach, and the use of market share and message traffic for allocating costs, as required by the current CAT NMS Plan. The 2021 Fee Proposal, however, proposed to revise the model in certain ways, including (1) dividing the CAT costs between Participants and Industry Members, rather than between Execution Venues and Industry Members (other than Execution Venue ATs); (2) eliminating the use of tiers in calculating CAT fees for Participants and Industry Members; (3) adopting certain minimum and maximum CAT fees for Industry Members and Participants; (4) revising the allocation between Equity Execution Venues and Options to be 60%-40%; and (5) excluding, rather than discounting, market share in OTC Equity Shares from the calculation of market share for FINRA.

Although the revisions of the 2021 Fee Proposal addressed certain comments on the prior 2018 Fee Proposal, commenters continued to raise issues regarding the proposal. For example, commenters provided feedback regarding the 75%-25% cost allocation between Industry Members and Participants, the 60%-40% cost allocation between Equity Participants and Options Participants, the use of market share and message traffic for allocating costs among Participants and Industry Members, respectively, and the proposed minimum and maximum fees. Noting these and other issues, the SEC determined to institute proceedings to determine whether to disapprove the 2021 Fee Proposal or to approve the proposal with any changes or subject to any conditions the SEC deemed necessary or appropriate after considering public comment.<sup>137</sup> Ultimately, the Operating Committee determined to withdraw the 2021 Fee Proposal.<sup>138</sup>

**c. Revenue Funding Model**

CAT LLC also considered a model in which all CAT Reporters, including both Industry Members and Participants, would pay fees based solely on revenue. The concept underlying this proposal is that CAT costs would be borne by CAT Reporters based on their ability to pay. Under this model, Industry Member revenue would be calculated based on revenue reported in FOCUS reports, and Participant revenue would be calculated based on revenue information in Form 1 amendments and other publicly reported figures.

CAT LLC did not select this model for various reasons. Under this approach, Participants as a group would only pay approximately 4% of the total CAT costs. Given their role as SROs and their use of the CAT, CAT LLC did not believe that such a small allocation of the CAT costs to the Participants was appropriate. Using revenue also raised a variety of practical issues. For example, questions were raised as to what revenue was appropriate to

<sup>136</sup> See 2021 Fee Proposal Release.

<sup>137</sup> See 2021 Fee Proposal OIP. See also Securities Exchange Act Rel. No. 93227 (Oct. 1, 2021), 86 Fed. Reg. 55900 (Oct. 7, 2021).

<sup>138</sup> Letter from Mike Simon, Chair, CAT NMS Plan Operating Committee, to Vanessa Countryman, Secretary, SEC (Dec. 8, 2021).

include in the calculation of revenue for Industry Members. The gross revenue set forth on FOCUS reports was proposed, as it was similar to an existing FINRA regulatory fee.<sup>139</sup> However, questions were raised as to whether revenue unrelated to NMS Securities or OTC Equity Securities, or otherwise unrelated to the CAT, should be included for calculation of the CAT fee. Eliminating revenue unrelated to CAT-related activity would have been difficult or impossible. In addition, the lack of a uniform approach to calculating revenue for the Participants could raise inequities in the collection of a CAT fee.

To address the issues regarding the 96%-4% allocation and the calculation of the Participant revenue in the straight revenue model described above, CAT LLC considered an alternative version of the revenue model in which the CAT costs would be allocated between Industry Members and Participants based on a set percentage (*e.g.*, 75%-25%) and the Industry Member allocation would be allocated among Industry Members based on revenue and the Participant allocation would be allocated among Participants based on market share. However, this alternative revenue model failed to address the issues regarding the appropriate revenue calculations for Industry Members.

**d. Message Traffic Only Model**

CAT LLC considered a funding model in which CAT costs were allocated across all CAT Reporters – both Industry Members and Participants – based on message traffic in the CAT. Specifically, CAT LLC considered eliminating the concepts of a Participant allocation and an Industry Member allocation entirely, and treating Participants and Industry Members the same under the model. The use of message traffic, however, raised issues regarding the predictability of fees. It also introduced complexity to the model, as discounts were necessary for certain types of activity to avoid fees that may adversely impact market making activity and other market activity.

**e. Alternative Allocation for the Funding Proposal**

The Operating Committee also discussed an alternative funding model that would calculate fees in a manner similar to the Funding Proposal, but would allocate the fee to one Industry Member, the CEBS, rather than allocating one-third of the fees each to the CEBS, the CEBB and the applicable Participant. This allocation would more closely parallel the existing Section 31 fee allocation structure that is already in place. This alternative allocation would eliminate complexity from the fee process, including the process of allocating fees among Industry Members and Participants that are likely to be passed through to the ultimate investors, and would provide for a more transparent funding process for investors. Instead of using this approach, CAT LLC determined to allocate costs among the main participants in a transaction and allow those participants to determine whether and how to recover the costs.

---

<sup>139</sup> See paragraphs (c) and (d) of Section 1 of Schedule A of FINRA's By-Laws regarding FINRA's annual Gross Income Assessment.

**f. Sales Value Model**

CAT LLC also considered a funding model in which fees would be calculated based on transaction sales values, similar to the method used in the Section 31/sales value fee programs. Under this model, the per sales value fee rate would be calculated by dividing the annual CAT budget by the projected annual total industry transaction sales values. The fee would be calculated by multiplying the sales value fee rate by a given trade's sales value. The CEBB, the CEBS and the relevant Participant would each be assessed one-third of the fee, or, in the alternative, the CEBS would be assessed two-thirds of the fee and the relevant Participants would be assessed one-third of the fee. The same rate would apply to all transactions equally, regardless of the type of product in the trade (*i.e.*, NMS Stocks, Listed Options or OTC Equity Securities). Based on an analysis of 2021 data, CAT LLC observed that the sales value model could potentially impose a disproportionate share of the CAT costs on Participants and Industry Members trading NMS Stocks versus Listed Options. In comparison, also based on an analysis of 2021 data, CAT LLC observed that the Funding Proposal would impose an equitable allocation of fees among Participants and Industry Members trading NMS Stocks and Listed Options, as well as OTC Equity Securities.

**g. Other Models**

CAT LLC also considered other possible funding models. For example, CAT LLC considered allocating the CAT costs equally among each of the Participants, and then permitting each Participant to charge its own members as it deems appropriate. CAT LLC determined that such an approach raised a variety of issues, including the likely inconsistency of the ensuing charges, potential for lack of transparency, and the impracticality of multiple SROs submitting invoices for CAT charges. CAT LLC also discussed the advantages and disadvantages of various alternative models during the development of the CAT NMS Plan, such as a cost allocation based on a strict pro-rata distribution, regardless of the type or size of the CAT Reporters.<sup>140</sup>

**11. Satisfaction of Exchange Act and CAT NMS Plan Requirements**

The Funding Proposal offers a variety of benefits over the Original Funding Model and satisfies each of the funding principles and other requirements of the CAT NMS Plan, as proposed to be revised herein, as well as the applicable requirements of the Exchange Act for the reasons discussed below and for the reasons discussed in more detail above.

**a. Funding Principle: Section 11.2(a) of the CAT NMS Plan**

The Funding Proposal satisfies the funding principles set forth in Section 11.2(a) of the CAT NMS Plan. Section 11.2(a) of the CAT NMS Plan requires the Operating Committee, in establishing the funding of the Company, to seek “to create transparent, predictable revenue

---

<sup>140</sup> For a discussion of alternatives considered in the drafting of the CAT NMS Plan, *see* Appendix C of the CAT NMS Plan at C-88-C-89.

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.”

First, by adopting a CAT-specific fee tied directly to CAT costs, CAT LLC would be fully transparent regarding the costs of the CAT and how those costs would be allocated among CAT Reporters. The CAT fees would be designed solely to cover CAT costs, and no other regulatory costs. In contrast, charging a general regulatory fee, which might otherwise be used to cover CAT costs as well as other regulatory costs, would be less transparent than the selected approach of charging a fee designated to cover CAT-related costs only. Such a general regulatory fee could cover a variety of regulatory costs without differentiating those costs related to the CAT.

Second, the Funding Proposal would provide a predictable revenue stream for the Company. The Funding Proposal is designed to collect the annual CAT costs each year, thereby providing for a predictable revenue stream. In addition, to address the possibility of some variability in the collected CAT fees, an unexpected increase in costs or variations from the budgeted costs or projected executed equivalent share volume of transactions in Eligible Securities, the CAT costs covered by the Funding Proposal would include an operational reserve. The operational reserve could be used in the event that the total CAT fees collected differ from the actual CAT costs. Moreover, the Funding Proposal includes a method for adjusting the calculation of the Fee Rate during the year if there are changes in the projected total volume of transactions in Eligible Securities or the CAT costs.

Third, the Funding Proposal provides for a revenue stream for the Company that is aligned with the anticipated costs to build, operate and administer the CAT and the other costs of the Company. The total CAT fees to be collected from CAT Reporters are designed to cover the CAT costs. Any surpluses collected would be treated as an operational reserve to offset future fees and would not be distributed to the Participants as profits.<sup>141</sup>

#### **b. Funding Principle: Section 11.2(b) of the CAT NMS Plan**

The Funding Proposal satisfies the funding principle set forth in Section 11.2(b) of the CAT NMS Plan, as proposed to be amended herein, which would require the Operating Committee to seek “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.” As discussed in detail above, the Funding Proposal establishes an allocation of CAT costs among Participants and Industry Members that is consistent with the Exchange Act. In addition, the Funding Proposal provides for an equitable allocation of reasonable dues, is not unfairly discriminatory and does not impose a burden on competition that is not necessary or appropriate in furtherance of the Exchange Act. In addition, the Funding Proposal takes into account the timeline for implementation of the CAT. The CAT fees are designed to cover the CAT costs for each relevant period.

---

<sup>141</sup> CAT NMS Plan Approval Order at 84792.



**c. Funding Principle: Section 11.2(c) of the CAT NMS Plan**

The Funding Proposal satisfies the funding principle set forth in Section 11.2(c) of the CAT NMS Plan, as proposed to be modified herein. Section 11.2(c), as proposed to be modified herein, requires the Operating Committee to seek “to establish a fee structure in which the fees charged to Participants and Industry Members are based upon the executed equivalent share volume of transactions in Eligible Securities, and the costs of the CAT.” The Funding Proposal requires Participants and Industry Members to pay fees based upon the executed equivalent share volume of transactions in Eligible Securities, and the costs of the CAT, as described above.

**d. Funding Principle: Section 11.2(d) of the CAT NMS Plan**

The Funding Proposal satisfies the funding principle set forth in Section 11.2(d) of the CAT NMS Plan, which requires the Operating Committee to seek “to provide for ease of billing and other administrative functions.” The Funding Proposal satisfies this principle in several ways. The Funding Proposal is modeled after the existing Section 31-related fee programs, with which the Participants and Industry Members have a longstanding familiarity. The Funding Proposal relies upon a basic calculation using a predetermined fee rate along with an Industry Member or Participant’s executed equivalent share volume, thereby making the fee determination a straightforward process.

Furthermore, the Funding Proposal provides CAT Reporters with predictable CAT fees. Because the Fee Rate is established in advance for a relevant time period, Participants, CEBBs and CEBs know the CAT fee that applies to each transaction when it occurs. Accordingly, Participants, CEBBs and CEBs are able to easily estimate and validate their applicable fees based on their own trading data. In addition, to the extent any CAT fees are passed on to customers, the customers, too, can calculate the applicable CAT fee for each transaction.

**e. Funding Principle: Section 11.2(e) of the CAT NMS Plan**

The Funding Proposal satisfies the funding principle set forth in Section 11.2(e) of the CAT NMS Plan, which requires the Operating Committee to seek “to avoid any disincentives such as placing an inappropriate burden on competition and a reduction in market quality.” The Funding Proposal would operate in a manner similar to the funding models employed by the SEC and the Participants related to Section 31 of the Exchange Act, the FINRA TAF and the ORF. These fees are long-standing, and have been approved by the Commission as satisfying the requirements under the Exchange Act, including not imposing a burden on competition that is not necessary or appropriate under the Exchange Act. In addition, the Funding Proposal avoids potentially burdensome fees for market makers or other market participants based on message traffic. Furthermore, the Funding Proposal addresses the specific trading characteristics of Listed Options and OTC Equity Securities to avoid adverse effects of the trading of those instruments. For example, the Funding Proposal includes the discounting of transactions involving OTC Equity Shares which, given the volume of shares typically involved in such securities transactions, otherwise may result in disproportionate fees to market participants transaction these securities.

The Funding Proposal also would not unfairly burden FINRA or any of the exchanges. 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 SROs that have the same regulatory responsibilities under the Exchange Act. Their usage of CAT Data will be for the same regulatory purposes. By treating each Participant the same, the CAT fees would not become a competitive issue by and among the Participants.

The Funding Proposal also would not unfairly burden CAT Executing Brokers. CAT LLC determined to charge CEBBs and CEBs because such a fee collection model is currently used and well-known in the securities markets. As a result, the CAT fees could be paid by Industry Members without requiring significant and potentially costly changes. Moreover, the CEBBs and CEBs would be permitted, but not required, to pass their CAT fees through to their customers, who, in turn, could pass their CAT fees to their customers, until the fee is imposed on the ultimate participant in the transaction. With such a pass through, the CEBBs and CEBs would not ultimately incur the cost of all CAT fees related to the transactions that they clear.

**f. Funding Principle: Section 11.2(f) of the CAT NMS Plan**

The Funding Proposal satisfies the funding principle set forth in Section 11.2(f) of the CAT NMS Plan, which requires the Operating Committee to seek “to build financial stability to support the Company as a going concern.” CAT LLC believes that the Funding Proposal is structured to collect sufficient funds to pay for the cost of the CAT going forward. In addition, the Funding Proposal would collect an operational reserve for the CAT. This operational reserve is intended to address potential shortfalls in collected CAT fees versus actual CAT costs. Moreover, the Funding Proposal includes a requirement to adjust the Fee Rate during the year in order to address any changes in the projected or actual total volume of transactions in Eligible Securities or the budgeted or actual CAT costs. Furthermore, the Funding Proposal is designed to collect CAT fees continuously so as to provide uninterrupted revenue to pay CAT bills; the CAT Fees related to Prospective CAT Costs are not designed to sunset.

**g. Section 11.1(c) of the CAT NMS Plan**

The Funding Proposal would satisfy the requirements in Section 11.1(c) of the CAT NMS Plan, as proposed to be modified herein. Section 11.1(c) of the CAT NMS Plan states that “[t]o 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.” The CAT fees are designed to cover the CAT costs for a relevant period. As such, on a going forward basis, they are designed to be imposed close in time to when costs are incurred. In addition, the Historical CAT Assessments are designed to “take into account fees, costs and expenses (including legal and consulting fees and expenses) reasonably incurred by the Participants on behalf of the Company prior to the Effective Date in connection with the

creation and implementation of the CAT, and such fees, costs and expenses shall be fairly and reasonably shared among the Participants and Industry Members.”

Section 11.1(c) of the CAT NMS Plan also requires that “[a]ny surplus of the Company’s resources over its expenses shall be treated as an operational reserve to offset future fees.” The Company would operate on a “break-even” basis, with fees imposed to cover costs and an appropriate reserve. Any surpluses would not be distributed to the Participants as profits. In addition, as set forth in Article VIII of the CAT NMS Plan, the Company “intends to operate in a manner such that it qualifies as a ‘business league’ within the meaning of Section 501(c)(6) of the [Internal Revenue] Code.” To qualify as a business league, an organization must “not [be] organized for profit and no part of the net earnings of [the organization can] inure[] to the benefit of any private shareholder or individual.”<sup>142</sup> As the SEC stated when approving the CAT NMS Plan, “the Commission believes that the Company’s application for Section 501(c)(6) business league status addresses issues raised by commenters about the Plan’s proposed allocation of profit and loss by mitigating concerns that the Company’s earnings could be used to benefit individual Participants.”<sup>143</sup> The Internal Revenue Service has determined that the Company is exempt from federal income tax under Section 501(c)(6) of the Internal Revenue Code.

#### **h. Equitable Allocation of Reasonable Fees**

The proposed CAT fees provide for the “equitable allocation of reasonable dues, fees, and other charges among its members and issuers and other persons using its facilities necessary or appropriate in furtherance of the purposes of this chapter,”<sup>144</sup> as required by the Exchange Act. CAT LLC believes that the CAT fees equitably allocate CAT costs between and among Participants and Industry Members. For the reasons discussed above, CAT LLC believes that the allocation of one-third of the CAT costs each to Participants, CEBBs and CEBs in the Funding Proposal as well as the use of the total equivalent share volume of transactions in Eligible Securities for allocating costs provide for an equitable allocation of CAT costs among CAT Reporters.

CAT LLC also believes that the Funding Proposal would provide for reasonable fees. The transaction-based fees contemplated by the Funding Proposal are a reasonable fee structure. The SROs have a long history of charging transaction-based fees, as transactions are the intended economic goal of the securities markets. In addition to the transaction-based regulatory fees discussed above (*e.g.*, the SROs’ Section 31-related fees, the FINRA TAF and the ORF), the SROs charge a variety of other types of transaction fees to fund their operations.<sup>145</sup> Indeed, each of the SROs collect transaction-based fees from their members.<sup>146</sup> In each case, the transaction-based fees charged by SROs have been subject to the fee filing process and found to satisfy the requirements of the Exchange Act. Not only is the type of fee reasonable, but the level of the fee

---

<sup>142</sup> 26 U.S.C. 501(c)(6).

<sup>143</sup> CAT NMS Plan Approval Order at 84793.

<sup>144</sup> Sections 6(b)(4) and 15A(b)(5) of the Exchange Act.

<sup>145</sup> The SEC has noted that SRO transaction fees account for a significant portion of SRO revenue. Securities Exchange Act Rel. No. 50700 (Nov. 18, 2004), 69 Fed. Reg. 71256, 71271 (Dec. 8, 2004).

<sup>146</sup> *See, e.g.*, NYSE Price List; Nasdaq Price List.

is reasonable as well. Although the exact Fee Rate or Historical Fee Rate to be paid for any particular period will be determined at a later date, the illustrative example provides a per-transaction fee rate that is not excessive in comparison to existing transaction fee rates.

**i. No Unfair Discrimination**

The Funding Proposal is “not designed to permit unfair discrimination between customers, issuers, brokers, or dealers,”<sup>147</sup> as required by the Exchange Act. In addition, the Funding Proposal does not unfairly discriminate between Industry Members and Participants, among Industry Members or among Participants. Both Participants and Industry Members would contribute to the cost of the CAT; Participants alone would no longer be required to shoulder the cost burden of the CAT without the contribution of Industry Members. In addition, both Participants and Industry Members would pay a fee based on the executed equivalent share volume of their transactions in Eligible Securities; the type of metric would not vary based on whether the CAT Reporter is an Industry Member or Participant.

Furthermore, the Fee Rate or Historical Fee Rate would be the same regardless of the type of venue a trade was executed on, or how the trade ultimately occurred more generally (*e.g.*, in a manner that generated more message traffic). In addition, the Funding Proposal recognizes the different trading characteristics of Listed Options and OTC Equity Securities as compared to NMS Stocks. The Funding Proposal recognizes that Listed Options trade in contracts rather than shares, and, therefore, counts the executed equivalent shares for Listed Options accordingly. Similarly, in recognition of the different trading characteristics of OTC Equity Securities as compared to NMS Stocks, the Funding Proposal would discount the share volume of OTC Equity Securities when calculating the CAT fees. As a result, the Funding Proposal would not favor or unfairly burden any one type of trading venue, product or product type.

With the elimination of tiers, fees for Industry Members and Participants are directly related to their executed equivalent share volume of their transactions. With tiers, the relationship between a CAT Reporter’s share volume and the CAT fee would not have been as direct.

**j. No Burden on Competition**

The Funding Proposal does “not impose any burden on competition not necessary or appropriate in furtherance of the purposes of this chapter,”<sup>148</sup> as required by the Exchange Act, and it fairly and equitably allocates costs among CAT Reporters. The Funding Proposal would operate in a manner similar to the funding model employed by the SEC and the Participants related to Section 31 of the Exchange Act as well as the FINRA TAF<sup>149</sup> and the ORF rules, and these long-standing fees to cover regulatory costs have been approved by the Commission as

---

<sup>147</sup> Sections 6(b)(5) and 15A(b)(6) of the Exchange Act.

<sup>148</sup> Sections 6(b)(8) and 15A(b)(9) of the Exchange Act.

<sup>149</sup> Although the FINRA TAF is designed to cover a subset of the costs of FINRA services (*e.g.*, costs to FINRA of the supervision and regulation of members, including performing examinations, financial monitoring, and policy, rulemaking, interpretive, and enforcement activities) rather than all of FINRA’s costs like the CAT, the transaction-based calculation of the FINRA TAF and the proposed CAT fees are similar.

satisfying the requirements under the Exchange Act, including not imposing a burden on the competition that is not necessary or appropriate under the Exchange Act. Furthermore, the Funding Proposal does not impose a burden on competition for the reasons set forth above, including in Sections A.9.s and A.11.e of this filing above.

**B. Governing or Constituent Documents**

Not applicable.

**C. Implementation of Amendment**

CAT LLC is filing this proposed amendment pursuant to Rule 608(b)(1) of Regulation NMS under the Exchange Act.<sup>150</sup>

**D. Development and Implementation Phases**

The Participants expect to implement the proposed CAT fees upon approval by the SEC, subject to applicable requirements for the implementation of the CAT fees, including the requirements of Section 19(b) of the Exchange Act with regard to Industry Member CAT Fees, the satisfaction of applicable Financial Accountability Milestones as set forth in Section 11.6 of the CAT NMS Plan, and the implementation of the billing and collection system for the CAT fees.

**E. Analysis of Impact on Competition**

CAT LLC does not believe that the proposed amendment would result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act. CAT LLC notes that the proposed amendment implements provisions of the CAT NMS Plan approved by the Commission, subject to proposed revisions to the CAT NMS Plan described above, and is designed to assist the Participants in meeting their regulatory obligations pursuant to the CAT NMS Plan. Because all Participants are subject to the Funding Proposal set forth in the proposed amendment, this is not a competitive filing that raises competition issues between and among the Participants. Furthermore, for the reasons discussed above, including in Sections A.11.e and A.11.j of this filing above, CAT LLC does not believe that the Funding Proposal would result in any burden on competition that is not necessary or appropriate in furtherance of the purpose of the Exchange Act.

**F. Written Understanding or Agreements Relating to Interpretation of, or Participation in, Plan.**

Not applicable.

---

<sup>150</sup> 17 CFR § 242.608(b)(1).

**G. Approval by Plan Sponsors in Accordance with Plan**

Section 12.3 of the CAT NMS Plan states that, subject to certain exceptions, the CAT NMS Plan may be amended from time to time only by a written amendment, authorized by the affirmative vote of not less than two-thirds of all of the Participants, that has been approved by the SEC pursuant to Rule 608 of Regulation NMS under the Exchange Act or has otherwise become effective under Rule 608 of Regulation NMS under the Exchange Act. In addition, Section 4.3(a)(vi) of the Plan requires the Operating Committee, by Majority Vote, to authorize action to determine the appropriate funding-related policies, procedures and practices-consistent with Article XI. The Operating Committee has satisfied both of these requirements. In addition, the Funding Proposal was discussed and voted on during the Operating Committee meetings.

**H. Description of Operation of Facility Contemplated by the Proposed Amendment**

Not applicable.

**I. Terms and Conditions of Access**

Not applicable.

**J. Method of Determination and Imposition, and Amount of, Fees and Charges**

Section A of this filing describes in detail how CAT LLC developed the Funding Proposal for the CAT.

**K. Method and Frequency of Processor Evaluation**

Not applicable.

**L. Dispute Resolution**

Section 11.5 of the CAT NMS Plan addresses the resolution of disputes regarding CAT fees charged to Participants and Industry Members. Specifically, Section 11.5 of the CAT NMS Plan states that

[d]isputes with respect to fees the Company charges Participants pursuant to Article XI of the CAT NMS Plan shall be determined by the Operating Committee or a Subcommittee designated by the Operating Committee. Decisions by the Operating Committee or such designated Subcommittee on such matters shall be binding on Participants, without prejudice to the rights of any Participant to seek redress from the SEC pursuant to Rule 608 of Regulation NMS under the Exchange Act or in any other appropriate forum.

Ms. Vanessa Countryman

March 13, 2023

Page 87

In addition, the Participants adopted rules to establish the procedures for resolving potential disputes related to CAT fees charged to Industry Members.<sup>151</sup>

\* \* \* \* \*

Thank you for your attention to this matter. If you have any questions or comments, please contact me at [branbecker@deloitte.com](mailto:branbecker@deloitte.com).

Respectfully submitted,

/s/ Brandon Becker

Brandon Becker

CAT NMS Plan Operating Committee Chair

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

---

<sup>151</sup> See Securities Exchange Act Rel. No. 81500 (Aug. 30, 2017), 82 Fed. Reg. 42143 (Sept. 6, 2017).

## **EXHIBIT A**

### **Proposed Revisions to CAT NMS Plan**

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.**

\* \* \* \* \*

**[“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] a reasonable** 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). For the avoidance of doubt, the calculation of the amount of the reserve would exclude the amount of the reserve from the budget.**

(b) Subject to **Section 11.1 and** 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) **reasonably** incurred by the Participants on behalf of the Company prior to the Effective Date in connection with the creation and implementation of the CAT, 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) **Prospective CAT Costs.** The Operating Committee will establish [fixed] fees ("**CAT Fees**") to be payable by [Execution Venues] **Participants and Industry Members with regard to CAT costs not previously paid by the Participants ("Prospective CAT Costs")** as follows [provided in this Section 11.3(a)]:

(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 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 reasonably 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 reasonably 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 reasonable fees, costs and expenses reasonably budgeted to be incurred by or for the Company in connection with the development, implementation and operation of the CAT as set forth in the annual operating budget approved by the Operating Committee pursuant to Section 11.1(a) of the CAT NMS Plan, or as adjusted during the year by the Operating Committee.

(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.**

**(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.

(A) 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. At a minimum, such details would include each Participant or CAT Executing Broker's executed equivalent share volume and corresponding fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.

(B) For each CAT Fee, at a minimum, CAT LLC will make publicly available the aggregate executed equivalent share volume and corresponding aggregate fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.

(i) Each Execution Venue that: (A) executes transactions; or (B) 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 reasonably 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 reasonably 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.

(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 any Historical CAT Assessment. In lieu of a Historical CAT Assessment, the Participants' one-third share of Historical CAT Costs and such other additional Past CAT Costs as reasonably determined by the Operating Committee will be paid by the



cancellation of loans made to the Company on a pro rata basis based on the outstanding loan amounts due under the loans. Historical CAT Assessments are designed to recover two-thirds of the Historical CAT Costs.

(iii) Historical CAT Assessment for Industry Members.

(A) Each month in which a Historical CAT Assessment is in effect, each CEBS and each CEBS shall pay a fee for each transaction in Eligible Securities executed by the CEBS 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) Historical CAT Assessment 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.

(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.**

**(A) Details regarding the calculation of a CAT Executing Broker's Historical CAT Assessment will be provided upon request to such CAT Executing Broker. At a minimum, such details would include each CAT Executing Broker's executed equivalent share volume and corresponding fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.**

**(B) For each Historical CAT Assessment, at a minimum, CAT LLC will make publicly available the aggregate executed equivalent share volume and corresponding aggregate fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.**

(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**

Ms. Vanessa Countryman  
March 13, 2023  
Page 99

**Consolidated Audit Trail, LLC on a monthly basis based on the Participant's transactions in Eligible Securities in the prior month.**

\* \* \* \* \*

## **EXHIBIT B**

### **Proposed Revisions to CAT NMS Plan as Proposed to be Revised in the February 2023 Proposed 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] a reasonable** 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). **For the avoidance of doubt, the calculation of the amount of the reserve would exclude the amount of the reserve from the budget.**

(b) Subject to **Section 11.1 and** 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) **reasonably** incurred by the Participants on behalf of the Company prior to the Effective Date in connection with the creation and implementation of the CAT, 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 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 reasonably 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 reasonably 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 **reasonable** fees, costs and expenses reasonably budgeted to be incurred by or for the Company in connection with the development, implementation and operation of the CAT as set forth in the annual operating budget approved by the Operating Committee pursuant to Section 11.1(a) of the CAT NMS Plan, or as adjusted during the year by the Operating Committee.

(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.

(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.

**(A) 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. At a minimum, such details would include each Participant or CAT Executing Broker's executed equivalent share volume and corresponding fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.**

**(B) For each CAT Fee, at a minimum, CAT LLC will make publicly available the aggregate executed equivalent share volume and corresponding aggregate fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.**

(b) Past CAT Costs. The 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:

(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 **reasonably** 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 **reasonably** 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.

(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 any Historical CAT Assessment. In lieu of a Historical CAT Assessment, the Participants' one-third share of **[Past] Historical CAT Costs and such other additional Past CAT Costs as reasonably determined by the Operating Committee** will be paid by the cancellation of loans made **to [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) Historical CAT Assessment for Industry Members.

(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) Historical CAT Assessment 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.

(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.

(A) Details regarding the calculation of a CAT Executing Broker's Historical CAT Assessment will be provided upon request to such CAT Executing Broker. **At a minimum, such details would include each CAT Executing Broker's executed equivalent share volume and corresponding fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.**

**(B) For each Historical CAT Assessment, at a minimum, CAT LLC will make publicly available the aggregate executed equivalent share volume and corresponding aggregate fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions.**

(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 "Aggregate Executed Equivalent Share Volume and Corresponding Aggregate Fee for December 2022 for Certain Categories," sets forth the aggregated amounts of executed equivalent share volume and corresponding fee for December 2022 for the categories set forth in Proposed Section 11.3(b)(iv) of the CAT NMS Plan, which include (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by buy-side transactions and sell-side transactions. The third 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.<sup>152</sup>

---

<sup>152</sup> Section A.1.d of this filing discusses how cancellations and corrections would be addressed under the Funding Proposal.

## CALCULATION OF HISTORICAL CAT ASSESSMENT

Item	Value	Calculation	Proposed Plan Provision
Actual Total Executed Equivalent Share Volume of Transactions in Eligible Securities for 2022	4,039,821,841,560.31 Executed Equivalent Shares	Calculated using actual transactions in Eligible Securities for 2022	Proposed Sections 11.3(a)(i)(B) and 11.3(b)(i)(B)
Historical Recovery Period	2 years	Length between 2 and 5 years as determined by Operating Committee	Proposed Section 11.3(b)(i)(D)(I)
Projected Total Executed Equivalent Share Volume of Transactions in Eligible Securities for 2023-2024	8,079,643,683,120.62 Executed Equivalent Shares	2*4,039,821,841,560.31 Executed Equivalent Shares  (Actual Executed Equivalent Share Volume of Transactions in Eligible Securities for 2022 multiplied by two)	Proposed Section 11.3(b)(i)(E)
Historical CAT Costs for Pre-2022	\$337,688,610	\$401,312,909 - \$63,624,299  (Past CAT Costs for pre-2022 minus CAT Costs excluded from Past CAT Costs for pre-2022)	Proposed Section 11.3(b)(i)(C)
Historical Fee Rate	\$0.0000417950 per Executed Equivalent Share	\$337,688,610/ 8,079,643,683,120.62  (Historical CAT Costs for pre-2022 divided by Projected Total Executed Equivalent Share Volume of Transactions in Eligible Securities for 2023-2024)	Proposed Section 11.3(b)(i)(A)
Historical CAT Assessment for CAT	See "Historical Fee Assessment for Each	Executed Equivalent Share Volume of	Proposed Section 11.3(b)(iii)(A)

Executing Brokers for pre-2022 Historical CAT Costs for December 2022	CAT Executing Broker” chart below	Transactions in Eligible Securities for December 2022 for each CAT Executing Broker multiplied by Historical Fee Rate multiplied by one-third <sup>153</sup>	
Total Amount to be Collected via Historical CAT Assessment for pre-2022 Historical CAT Costs	\$225,125,740	2/3 * \$337,688,610  (Two-thirds of Historical CAT Costs)	Proposed Sections 11.3(b)(i)(C) and 11.3(b)(iii)(A)

**AGGREGATE EXECUTED EQUIVALENT SHARE VOLUME AND CORRESPONDING AGGREGATE FEE FOR DECEMBER 2022 FOR CERTAIN CATEGORIES**

Category of Transaction	Aggregate Executed Equivalent Share Volume for December 2022	Aggregate Historical CAT Assessment for December 2022 (in Dollars)
Listed Options	171,596,408,600.00	2,390,623.27
NMS Stocks	455,096,327,128.00	6,340,248.50
OTC Equity Securities	2,835,446,929.62	39,502.49
Buy-Side Transactions	314,765,626,228.81	4,385,208.51
Sell-Side Transactions	314,762,556,428.81	4,385,165.75
Executed on BOX	11,476,557,600	159,887.53
Executed on Cboe BYX	5,010,889,784	69,810.03
Executed on Cboe BZX	28,387,794,900	395,489.18
Executed on Cboe EDGA	5,987,423,230	83,414.76
Executed on Cboe EDGX	35,456,933,206	493,974.03
Executed on Cboe C2	7,093,009,200	98,817.41
Executed on Cboe	31,832,709,200	443,482.57
Executed on IEX	10,534,111,236	146,757.68
Executed on LTSE	14,709,130	204.92
Executed on MEMX	13,471,198,984	187,676.20
Executed on MIAX	9,473,736,600	131,984.90
Executed on MIAX Emerald	4,451,989,200	62,023.61

<sup>153</sup> 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).



Executed on MIAX PEARL	13,382,643,690	186,442.48
Executed on Nasdaq BX	7,033,829,520	97,992.94
Executed on Nasdaq GEMX	2,750,988,600	38,325.85
Executed on Nasdaq ISE	8,771,296,800	122,198.75
Executed on Nasdaq MRX	2,373,050,600	33,060.54
Executed on Nasdaq PHLX	22,234,997,366	309,770.48
Executed on Nasdaq	84,953,835,448	1,183,548.17
Executed on NYSE	46,589,923,124	649,075.09
Executed on NYSE American	12,939,380,646	180,267.09
Executed on NYSE Arca	57,732,682,568	804,312.26
Executed on NYSE Chicago	1,851,452,536	25,793.81
Executed on NYSE National	2,482,827,634	34,589.92
Executed Otherwise than on an Exchange	203,240,211,856	2,831,474.07

#### **HISTORICAL FEE ASSESSMENT for EACH CAT EXECUTING BROKER <sup>154</sup>**

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
4	38,459,064,211.23	535,798.71
5	27,384,672,407.15	381,514.02
6	23,625,876,388.24	329,147.74

<sup>154</sup> 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](mailto: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 its executed equivalent share volume and corresponding fee by (1) Listed Options, NMS Stocks and OTC Equity Securities, (2) by transactions executed on each exchange and transactions executed otherwise than on an exchange, and (3) by 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)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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	-	-
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	-	-
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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	-	-
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



CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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	-	-
213	-	-
214	11,802,608.52	164.43
215	39,707,587.00	553.19

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
259	9,486,103.23	132.16
260	18,142,315.00	252.75
261	13,643,800.00	190.08
262	-	-
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
273	8,795,482.50	122.54
274	-	-
275	7,151,874.00	99.64
276	2,656,709.93	37.01
277	-	-
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



CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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	-	-
335	453,254.09	6.31
336	8,591,832.75	119.70
337	3,385,354.11	47.16
338	-	-
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
349	-	-
350	652,857.00	9.10
351	424,927.00	5.92
352	953,388.28	13.28
353	-	-
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
425	-	-
426	220,899.00	3.08
427	-	-
428	-	-
429	38,100.00	0.53
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	-	-



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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
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
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	-	-
500	4,165.29	0.06

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
501	7,100.00	0.10
502	-	-
503	-	-
504	5,582.00	0.08
505	-	-
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
520	257.00	0.00
521	13,387.78	0.19
522	1,313.00	0.02
523	-	-
524	23,714.00	0.33
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
539	1,047.00	0.01
540	1,507.00	0.02
541	-	-
542	2,183.01	0.03
543	973.00	0.01
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	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
558	-	-
559	164.00	0.00
560	-	-
561	-	-
562	-	-
563	-	-
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
577	-	-
578	-	-
579	54.00	0.00
580	26.00	0.00
581	34.00	0.00
582	423.55	0.01
583	6.00	0.00
584	-	-
585	91.00	0.00
586	43.00	0.00
587	-	-
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	-	-



CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
596	29.00	0.00
597	22.00	0.00
598	-	-
599	-	-
600	3.00	0.00
601	26.00	0.00
602	-	-
603	-	-
604	55.02	0.00
605	20.00	0.00
606	-	-
607	18.00	0.00
608	-	-
609	-	-
610	18.00	0.00
611	-	-
612	27.00	0.00
613	-	-
614	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
615	14.00	0.00
616	8.00	0.00
617	18.00	0.00
618	-	-
619	-	-
620	-	-
621	-	-
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

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
634	10.00	0.00
635	-	-
636	8.00	0.00
637	2.00	0.00
638	-	-
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	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
653	-	-
654	-	-
655	4.00	0.00
656	5.00	0.00
657	-	-
658	-	-
659	1.00	0.00
660	-	-
661	3.00	0.00
662	8.00	0.00
663	-	-
664	-	-
665	-	-
666	-	-
667	-	-
668	-	-
669	-	-
670	-	-
671	-	-

CAT Executing Broker	Executed Equivalent Share Volume of Transactions in Eligible Securities for December 2022	Historical CAT Assessment for December 2022 (in Dollars)
672	1.00	0.00
673	-	-
674	-	-
675	-	-
676	-	-
677	-	-
678	-	-
679	1.00	0.00
680	-	-
681	-	-
682	-	-
683	-	-