SR-EMERALD-2024-31 Page 3 of 155

1. <u>Text of the Proposed Rule Change</u>

(a) MIAX Emerald, LLC ("MIAX Emerald" or "Exchange"), pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² proposes to amend the Exchange's Fee Schedule ("Fee Schedule") to establish fees for Industry Members³ related to reasonably budgeted CAT costs of the National Market System Plan Governing the Consolidated Audit Trail (the "CAT NMS Plan" or "Plan") for 2025. These fees would be payable to Consolidated Audit Trail, LLC ("CAT LLC" or the "Company") and referred to as CAT Fee 2025-1, and would be described in a section of the Exchange's fee schedule entitled "Consolidated Audit Trail Funding Fees." The fee rate for CAT Fee 2025-1 would be \$0.000022 per executed equivalent share. CAT Executing Brokers will receive their first monthly invoice for CAT Fee 2025-1 in February 2025 calculated based on their transactions as CAT Executing Brokers for the Buyer ("CEBB") and/or CAT Executing Brokers for the Seller ("CEBS") in January 2025. As described further below, CAT Fee 2025-1 is anticipated to be in place for six months, and is anticipated to recover approximately one-half of the costs set forth in the reasonably budgeted CAT costs for 2025. CAT LLC intends for CAT Fee 2025-1 to replace CAT Fee 2024-1 (which has a fee rate of \$0.000035), as discussed herein.⁴

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

An "Industry Member" is defined as "a member of a national securities exchange or a member of a national securities association." See Miami International Securities Exchange, LLC ("MIAX Rule") Rule 1701(u). The Exchange notes that MIAX Chapter XVII is incorporated by reference into the Exchange's rulebook. As such, MIAX Chapter XVII also applies to the Exchange. See also Section 1.1 of the CAT NMS Plan. Unless otherwise specified, capitalized terms used in this rule filing are defined as set forth in the CAT NMS Plan and/or the CAT Compliance Rule. See MIAX Rule 1701.

See paragraph (a)(3) of Consolidated Audit Trail Funding Fees. See MIAX Fee Schedule, Section 9)a). See also Securities Exchange Act Rel. No. 100825 (Aug. 27, 2024) 89 Fed. Reg. 71524 (Sept. 3, 2024) (SR-EMERALD-2024-23) ("Fee Filing for CAT Fee 2024-1").

SR-EMERALD-2024-31 Page 4 of 155

A notice of the proposed rule change for publication in the <u>Federal Register</u> is attached hereto as <u>Exhibit 1</u>, and a copy of the applicable section of the Fee Schedule is attached hereto as <u>Exhibit 5</u>.

- (b) Inapplicable.
- (c) Inapplicable.

2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved by the Chief Executive Officer of the Exchange or his designee pursuant to authority delegated by the Exchange Board of Directors on January 19, 2024. Exchange staff will advise the Board of Directors of any action taken pursuant to delegated authority. No other action by the Exchange is necessary for the filing of the proposed rule change.

Questions and comments on the proposed rule change may be directed to Tanya Kitaigorovski, AVP, Associate Counsel, at (609) 413-5787.

3. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis</u> for, the Proposed Rule Change

(a) Purpose

On July 11, 2012, the Commission adopted Rule 613 of Regulation NMS, which required the self-regulatory organizations ("SROs") to submit a national market system ("NMS") plan to create, implement and maintain a consolidated audit trail that would capture customer and order event information for orders in NMS securities across all markets, from the time of order inception through routing, cancellation, modification or execution.⁵ On November 15, 2016, the

⁵ Securities Exchange Act Rel. No. 67457 (July 18, 2012), 77 Fed. Reg. 45722 (Aug. 1, 2012).

SR-EMERALD-2024-31 Page 5 of 155

Commission approved the CAT NMS Plan.⁶ Under the CAT NMS Plan, the Operating Committee has the discretion to establish funding for CAT LLC to operate the CAT, including establishing fees for Industry Members to be assessed by CAT LLC that would be implemented on behalf of CAT LLC by the Participants.⁷ The Operating Committee adopted a revised funding model to fund the CAT ("CAT Funding Model"). On September 6, 2023, the Securities and Exchange Commission ("SEC" or "Commission") approved the CAT Funding Model after concluding that the model was reasonable and that it satisfied the requirements of Section 11A of the Exchange Act and Rule 608 thereunder.⁸

The CAT Funding Model provides a framework for the recovery of the costs to create, develop and maintain the CAT, including providing a method for allocating costs to fund the CAT among Participants and Industry Members. The CAT Funding Model establishes two categories of fees: (1) CAT fees assessed by CAT LLC and payable by certain Industry Members to recover a portion of historical CAT costs previously paid by the Participants ("Historical CAT Assessment" fees); and (2) CAT fees assessed by CAT LLC and payable by Participants and Industry Members to fund prospective CAT costs ("CAT Fees"). 9

Under the CAT Funding Model, Participants, CEBBs and CEBSs are subject to fees designed to cover the ongoing budgeted costs of the CAT, as determined by the Operating

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

⁷ Section 11.1(b) of the CAT NMS Plan.

Securities Exchange Act Rel. No. 98290 (Sept. 6, 2023), 88 Fed. Reg. 62628 (Sept. 12, 2023) ("CAT Funding Model Approval Order").

Under the CAT Funding Model, the Operating Committee may establish CAT Fees related to CAT costs going forward. Section 11.3(a) of the CAT NMS Plan. This filing only establishes CAT Fee 2025-1 related to reasonably budgeted CAT costs for 2025 as described herein; it does not address any other potential CAT Fees related to CAT costs. Any such other CAT Fee will be subject to a separate fee filing. In addition, under the CAT Funding Model, the Operating Committee may establish one or more Historical CAT Assessments. Section 11.3(b) of the CAT NMS Plan. This filing does not address any Historical CAT Assessments.

SR-EMERALD-2024-31 Page 6 of 155

Committee. "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')."¹⁰ In establishing a CAT Fee, the Operating Committee will calculate a "Fee Rate" for the relevant period. Then, for each month in which a CAT Fee is in effect, each CEBB and CEBS would be required to pay the 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 fee for each transaction will be calculated by multiplying the number of executed equivalent shares in the transaction by one-third and by the Fee Rate.¹¹

The CAT Fees to be paid by CEBBs and CEBSs are designed to contribute toward the recovery of two-thirds of the budgeted CAT costs for the relevant period. ¹² The CAT Funding Model is designed to require that the Participants contribute to the recovery of the remaining one-third of the budgeted CAT costs. ¹³ Participants would be subject to the same Fee Rate as CEBBs and CEBSs. ¹⁴ While CAT Fees charged to Industry Members become effective in accordance with the requirements of Section 19(b) of the Exchange Act, ¹⁵ 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. ¹⁶ Accordingly, this filing does not address Participant CAT fees as they are described in the CAT NMS Plan. ¹⁷

Section 11.3(a) of the CAT NMS Plan.

In approving the CAT Funding Model, the Commission stated that, "[t]he proposed recovery of Prospective CAT Costs is appropriate." CAT Funding Model Approval Order at 62651.

Section 11.3(a)(iii)(A) of the CAT NMS Plan.

Section 11.3(a)(ii)(A) of the CAT NMS Plan.

Section 11.3(a)(ii) of the CAT NMS Plan.

Section 11.3(a)(i)(A)(I) of the CAT NMS Plan.

¹⁶ CAT Funding Model Approval Order at 62659.

See Section 11.3(a)(ii) and Appendix B of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 7 of 155

CAT LLC proposes to charge CEBBs and CEBSs (as described in more detail below)

CAT Fee 2025-1 to recover the reasonably budgeted CAT costs for 2025 in accordance with the

CAT Funding Model. To implement this fee on behalf of CAT LLC, the CAT NMS Plan

requires the Participants to "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.'"

The Plan further states that "[o]nce 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."

Accordingly, the purpose of this filing is to
implement a CAT Fee on behalf of CAT LLC for Industry Members, referred to as CAT Fee

(1) CAT Executing Brokers

CAT Fee 2025-1 will be charged to each CEBB and CEBS for each applicable transaction in Eligible Securities.²⁰ The CAT NMS Plan defines a "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

Section 11.1(b) of the CAT NMS Plan.

Section 11.3(a)(i)(A)(I) of the CAT NMS Plan.

In its approval of the CAT Funding Model, the Commission determined that charging CAT fees to CAT Executing Brokers was reasonable. In reaching this conclusion, the Commission noted that the use of CAT Executing Brokers is appropriate because the CAT Funding Model is based upon the calculation of executed equivalent shares, and, therefore, charging CAT Executing Brokers would reflect their executing role in each transaction. Furthermore, the Commission noted that, because CAT Executing Brokers are already identified in transaction reports from the exchanges and FINRA's equity trade reporting facilities recorded in CAT Data, charging CAT Executing Brokers could streamline the billing process. CAT Funding Model Approval Order at 62629.

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 contraside executing broker in the TRF/ORF/ADF transaction data event or no contraside executing broker is identified in the TRF/ORF/ADF transaction data event, then the Industry Member identified as the executing broker in the TRF/ORF/ADF transaction data event would be treated as CAT Executing Broker for the Buyer and for the Seller.²¹

The following fields of the Participant Technical Specifications indicate the CAT

Executing Brokers for the transactions executed on an exchange:

Equity Order Trade (EOT)²²

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

Option Trade (OT)²³

#	Field	Data Type	Description	Include
	Name			Key

Section 1.1 of the CAT NMS Plan. Note that CEBBs and CEBSs may, but are not required to, pass-through their CAT Fees to their clients, who may, in turn, pass their fees to their clients until they are imposed ultimately on the account that executed the transaction. See CAT Funding Model Approval Order at 62649.

See Table 23, Section 4.7 (Order Trade Event) of the CAT Reporting Technical Specifications for Plan Participants, Version 4.1.0-r22 (Sept. 10, 2024), https://www.catnmsplan.com/sites/default/files/2024-09/9.10.2024-CAT-Reporting_Technical_Specifications_for_Participants_4.1.0-r22.pdf ("CAT Reporting Technical Specifications for Plan Participants").

²³ See Table 51, Section 5.2.5.1 (Simple Option Trade Event) of the CAT Reporting Technical Specifications for Plan Participants.

16. <i>n</i> .13 /	member	Member	The identifier for the member firm that	R
17. <i>n</i> .13		Alias	is responsible for the order	

In addition, the following fields of the Participant Technical Specifications would indicate the CAT Executing Brokers for the transactions executed otherwise than on an exchange:

TRF/ORF/ADF Transaction Data Event (TRF)²⁴

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

(2) Calculation of Fee Rate 2025-1

The Operating Committee determined the Fee Rate to be used in calculating CAT Fee 2025-1 ("Fee Rate 2025-1") by dividing the reasonably budgeted CAT costs for 2025 ("2025 Budgeted CAT Costs") by the reasonably projected total executed share volume of all transactions in Eligible Securities for 2025, as discussed in detail below. ²⁵ Based on this calculation, the Operating Committee has determined that Fee Rate 2025-1 would be \$0.00006682588642384252 per executed equivalent share. This rate is then divided by three and rounded to determine the fee rate of \$0.000022 per executed equivalent share that will be assessed to CEBBs and CEBSs, as also discussed in detail below.

(A) Beginning of Year 2025

CAT LLC proposes to implement CAT Fee 2025-1 as the second CAT Fee related to Prospective CAT Costs. CAT LLC proposes to commence CAT Fee 2025-1 at the beginning of the 2025 year. Accordingly, CAT Fee 2025-1 would be calculated as described in paragraph I of

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

Section 11.3(a)(i) of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 10 of 155

Section 11.3(a)(i)(A) of the CAT NMS Plan, which states that "[f]or 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." For CAT Fee 2025-1, the reasonably budgeted CAT costs for the year are the reasonably budgeted CAT costs as set forth in the annual budget for 2025 for CAT LLC approved by the Operating Committee in November 2024 ("2025 CAT Budget"). As described further below, following the implementation of CAT Fee 2024-1, the 2025 CAT Budget was prepared on the accrual basis of accounting, whereas prior CAT budgets were prepared on the cash basis of accounting.

(B) Executed Equivalent Shares for Transactions in Eligible Securities

Under 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: (1) each executed share for a transaction in NMS Stocks will be counted as one executed equivalent share; (2) each executed contract for a transaction in Listed Options will be counted based on the multiplier applicable to the specific Listed Options (*i.e.*, 100 executed equivalent shares or such other applicable multiplier); and (3) each executed share for a transaction in OTC Equity Securities will be counted as 0.01 executed equivalent share.²⁷

(C) 2025 Budgeted CAT Costs

The CAT NMS Plan states that "[t]he budgeted CAT costs for the year shall be comprised of all reasonable fees, costs and expenses reasonably budgeted to be incurred by or for

Section 11.3(a)(i)(A)(I) of the CAT NMS Plan.

Section 11.3(a)(i)(B) of the CAT NMS Plan. In approving the CAT Funding Model, the Commission concluded that "the use of executed equivalent share volume as the basis of the proposed cost allocation methodology is reasonable and consistent with the approach taken by the funding principles of the CAT NMS Plan." CAT Funding Model Approval Order at 62640.

SR-EMERALD-2024-31 Page 11 of 155

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." 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 the prudent operation of the Company." Section 11.1(a)(i) of the CAT NMS Plan further states 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 cost categories as reasonably determined by the Operating Committee to be included in the budget.

In accordance with the requirements under the CAT NMS Plan, the Operating Committee approved an annual budget for 2025 for CAT LLC in November 2024.²⁹ The 2025 CAT Budget includes estimated CAT costs for 2025.

As described in detail below, the 2025 Budgeted CAT Costs would be \$272,688,276. CEBBs collectively will be responsible for one-third of the 2025 Budged CAT Costs (which is \$90,896,092), and CEBSs collectively will be responsible for one-third of the 2025 Budgeted CAT Costs (which is \$90,896,092).

Section 11.3(a)(i)(C) of the CAT NMS Plan.

The 2025 CAT Budget is available on the CAT website (https://www.catnmsplan.com/sites/default/files/2024-11/11.20.24-CAT-LLC-2025-Financial and Operating-Budget.pdf).

The following describes in detail the 2025 Budgeted CAT Costs for CAT Fee 2025-1.

The following cost details are provided in accordance with the requirement in the CAT NMS

Plan to provide in the fee filing the following:

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.³⁰

Each of the costs described below are reasonable, appropriate and necessary for the creation, implementation and maintenance of CAT.

The following table breaks down the 2025 Budgeted CAT Costs into the categories set forth in Section 11.3(a)(iii)(B) of the CAT NMS Plan.³¹

Budget Category	2025 Budgeted CAT Costs ³²
Capitalized Developed	\$3,923,360 ³³
Technology Costs*	
Technology Costs:	\$234,925,808
Cloud Hosting Services	\$182,594,630
Operating Fees	\$30,831,330 ³⁴
CAIS Operating Fees	\$20,749,848
Change Request Fees	\$750,000
Legal	\$5,720,000
Consulting	\$1,750,000
Insurance	\$1,594,452

Section 11.3(a)(iii)(B) of the CAT NMS Plan.

Note that costs and related cost calculations provided in this filing may reflect minor variations from the budgeted costs due to rounding.

The 2025 Budgeted CAT Costs described in this table of costs were determined based an analysis of a variety of factors, including historical costs/invoices, estimated costs from respective vendors/service providers, contractual terms with vendors/service providers, anticipated service levels and needs, and discussions with vendors and Participants.

This cost number is calculated by adding together the Capitalized Developed Technology Costs of \$1,150,000 and the Software License Fee – 2024 of \$2,773,360, each as set forth in the 2025 CAT Budget.

This cost number is calculated by adding together the Operating Fees of \$28,886,088 and the Cyber Insurance Premium Adjustment of \$1,945,242, each as set forth in the 2025 CAT Budget.

Budget Category	2025 Budgeted CAT Costs ³²
Professional and administration	\$882,456
Public relations	\$50,000
Subtotal	\$248,846,076
Reserve	\$23,842,200
Total 2025 Budgeted CAT	\$272,688,276
Costs	

^{*} The non-cash amortization of these capitalized developed technology costs to be incurred during 2025 have been appropriately excluded from the above table.³⁵

To the extent that CAT LLC enters into notes with Participants or others to pay costs incurred during the period in which CAT Fee 2025-1 is in effect, CAT LLC will use the proceeds from CAT Fee 2025-1 and the related Participant CAT fees to repay such notes.

The following table compares the budgeted CAT costs as set forth in the annual 2024 budget for CAT LLC approved by the Operating Committee in December 2023 ("Original 2024 Budget")³⁶, the updated budget for 2024 approved by the Operating Committee in July 2024 ("Updated 2024 Budget")³⁷, and the 2025 CAT Budget.

Budget Category	2024 Budgeted CAT	2024 Budgeted CAT	2025 Budgeted CAT
	Costs from Original	Costs from Updated	Costs
	2024 Budget	2024 Budget	
Capitalized Developed	\$2,300,000	\$7,761,480 ³⁸	\$3,923,360
Technology Costs			
Technology Costs:	\$202,782,731	\$196,921,118	\$234,925,808
Cloud Hosting Services	\$154,624,108	\$148,789,981	\$182,594,630

With respect to certain costs that were "appropriately excluded," such excluded costs relate to the amortization of capitalized technology costs, which are amortized over the life of the Plan Processor Agreement. As such costs have already been otherwise reflected in the filing, their inclusion would double count the capitalized technology costs. In addition, amortization is a non-cash expense.

Consolidated Audit Trail LLC 2024 Financial and Operating Budget – December 2023 (https://www.catnmsplan.com/sites/default/files/2024-07/07.09.2024-CAT%20LLC-2024-Financial-and-Operating-Budget.pdf).

Consolidated Audit Trail, LLC 2024 Financial and Operating Budget - Mid-Year Update - July 2024 (https://www.catnmsplan.com/sites/default/files/2024-08/07.31.24-CAT-LLC-2024-Financial and Operating-Budget.pdf).

This cost number is calculated by adding together the Capitalized Developed Technology Costs of \$2,300,000 and \$291,000 and the Software License Fee – 2024 of \$1,359,490 and \$3,810,990, each as set forth in the Updated 2024 Budget. These costs numbers are discussed further below.

Budget Category	2024 Budgeted CAT	2024 Budgeted CAT	2025 Budgeted CAT
	Costs from Original	Costs from Updated	Costs
	2024 Budget	2024 Budget	
Operating Fees	\$27,223,132	\$27,768,718 ³⁹	\$30,831,330
CAIS Operating Fees	\$20,691,740	\$20,199,919	\$20,749,848
Change Request Fees	\$243,750	\$162,500	\$750,000
Legal	\$4,460,000	\$8,146,599	\$5,720,000
Consulting	\$1,600,000	\$1,600,000	\$1,750,000
Insurance	\$1,868,025	\$1,342,345	\$1,594,452
Professional and administration	\$821,264	\$823,930	\$882,456
Public relations	\$92,400	\$93,275	\$50,000
Subtotal	\$213,924,421	\$216,688,747	\$248,846,076
Reserve	\$0	\$13,847,693	\$23,842,200
Total Budgeted CAT Costs	\$213,925,421	\$230,536,440	\$272,688,276

The 2024 budgets, including the Original 2024 Budget and the Updated 2024 Budget, were prepared on the cash basis of accounting, as such budgets were primarily used to determine the dollar amount of promissory notes from the Participants that were required to fund the ongoing operations of the CAT. Commencing in 2025, with the contemplated recovery of costs from Industry Members and the Participants via CAT Fees, the 2025 CAT Budget was prepared on the accrual basis of accounting to properly match projected revenues with estimated expenses incurred. A cash basis budget reflects expenditures when paid, while an accrual basis budget reflects expenditures when incurred. In moving from a cash basis budget to an accrual basis budget there is no double counting of expenses.

The following table compares the cash basis Original 2024 Budget and an accrual basis budget for 2024 for the period through September 30, 2024.

Budget Category	Original 2024 Budget through Sept. 30, 2024: Cash Basis	2024 Budgeted CAT Costs through Sept. 30, 2024: Accrual Basis	Variance from Cash to Accrual Basis
Capitalized Developed Technology Costs	\$2,300,000	\$980,000	Decrease by \$1,320,000*
Technology Costs:	\$147,454,327	\$153,502,302	
Cloud Hosting Services	\$111,345,620	\$117,352,554	Increase by \$6,006,934**

This cost number is calculated by adding together the Operating Fees of \$26,423,306 and the Cyber Insurance Premium Adjustment of \$1,345,412 each as set forth in the Updated 2024 Budget.

Budget Category	Original 2024 Budget through	2024 Budgeted CAT Costs through	Variance from Cash to Accrual Basis
	Sept. 30, 2024: Cash Basis	Sept. 30, 2024: Accrual Basis	
Operating Fees	\$20,617,804	\$20,723,185	Increase by \$105,381
CAIS Operating Fees	\$15,328,403	\$15,182,813	Decrease by \$145,590
Change Request Fees	\$162,500	\$243,750	Increase by \$81,250
Legal	\$3,487,500	\$3,487,500	=
Consulting	\$1,200,000	\$1,200,000	=
Insurance	\$1,868,025	\$1,868,025	=
Professional and administration	\$545,930	\$545,930	-
Public relations	\$69,300	\$69,300	-
Total	\$156,925,082	\$161,653,057	Increase by \$4,727,975

^{*}The variance is attributable to capitalized costs of \$1,320,000 incurred in December 2023 and paid in February 2024

The following table compares the accrual basis 2025 CAT Budget and a cash basis budget for 2025. The accrual basis budget for 2025 is higher than the cash basis budget for 2025 primarily as a result of rising cloud hosting services costs and the two-month lag in paying the Plan Processor.

Budget Category	2025 Budgeted CAT Costs:	2025 CAT Budget: Accrual Basis	Variance from Cash to Accrual Basis
	Cash Basis	11001 4441 24616	00 11001 WW1 2W010
Capitalized Developed	\$4,217,760	\$3,923,360	Decrease by \$294,400
Technology Costs			
Technology Costs:	\$226,142,359	\$234,925,808	
Cloud Hosting Services	\$174,284,634	\$182,594,630	Increase by \$8,309,996*
Operating Fees	\$30,692,230	\$30,831,330	Increase by \$139,100
CAIS Operating Fees	\$20,665,495	\$20,749,848	Increase by \$84,353
Change Request Fees	\$500,000	\$750,000	Increase by \$250,000
Legal	\$5,720,000	\$5,720,000	-
Consulting	\$1,750,000	\$1,750,000	-
Insurance	\$1,594,452	\$1,594,452	-
Professional and administration	\$882,456	\$882,456	-
Public relations	\$50,000	\$50,000	-
Total	\$240,357,027	\$248,846,076	Increase by \$8,489,049

^{*} The variance is attributable to cloud hosting services costs of \$33,642,746 to be incurred in November and December 2025 (included in the accrual basis budget) compared with cloud hosting services costs of \$25,332,749 to be incurred in November and December 2024, but to be paid in January and February 2025 (included in the cash basis budget).

^{**} The variance is attributable to incurred cloud hosting services costs of \$27,668,055 in August and September 2024 (included in the accrual basis budget) compared with cloud hosting services costs of \$21,661,121 incurred in November and December 2023, but paid in January and February 2024 (included in the cash basis budget).

Finally, the following table compares the Original 2024 Budget with the actuals through September 30, 2024.

Budget Category	Original 2024 Budget through Sept. 30, 2024	2024 Actuals through Sept. 30, 2024	Variance from Original 2024 Budget to 2024 Actuals
Capitalized Developed	\$2,300,000	\$7,761,480	Increase by
Technology Costs			\$5,461,480*
Technology Costs:	\$147,454,327	\$136,377,912	
Cloud Hosting	\$111,345,620	\$100,974,720	Decrease by
Services			\$10,370,900**
Operating Fees	\$20,617,804	\$20,244,211	Decrease by \$393,593
CAIS Operating Fees	\$15,328,403	\$15,138,981	Decrease by \$189,422
Change Request Fees	\$162,500	\$0	Decrease by \$162,500
Legal	\$3,487,500	\$5,566,888	Increase by \$2,079,388***
Consulting	\$1,200,000	\$1,161,566	Decrease by \$38,434
Insurance	\$1,868,025	\$1,342,345	Decrease by \$525,680****
Professional and administration	\$545,930	\$560,203	Increase by \$14,273
Public relations	\$69,300	\$59,231	Decrease by \$10.069
Total	\$156,925,082	\$152,789,625	Decrease by \$4,135,457

^{*} The variance is attributable to software license fees agregating \$5,170,481, which were not originally included in the budget.

(i) Technology Costs – Cloud Hosting Services

(a) Description of Cloud Hosting Services Costs

Section 11.3(a)(iii)(B)(B)(1) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the cloud hosting services costs set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that included \$182,594,630 in technology costs for cloud hosting services for 2025. The technology costs for cloud hosting services represent costs reasonably budgeted to be incurred for services provided by the cloud services provider for the CAT, Amazon Web Services, Inc. ("AWS") during 2025.

^{**}The variance is attributable to, among other things, cost reduction efforts related to compute efficiencies, the implementation of single pass linker related to options quotes, and the implementation of compute and other efficiencies related to CAIS.

^{***}The variance is attributable to unanticipated issues that required additional legal efforts on behalf of CAT LLC that developed after the budget was created.

^{****}The variance is attributable to savings achieved after the budget was prepared.

SR-EMERALD-2024-31 Page 17 of 155

In the agreement between CAT LLC and the Plan Processor for the CAT ("Plan Processor Agreement"), FINRA CAT, LLC ("FCAT"), AWS was named as the subcontractor to provide cloud hosting services. Under the Plan Processor Agreement, CAT LLC is required to pay FCAT the fees incurred by the Plan Processor for cloud hosting services provided by AWS as FCAT's subcontractor on a monthly basis for the cloud hosting services, and FCAT, in turn, pays such fees to AWS. The fees for cloud hosting services were negotiated by FCAT on an arm's length basis with the goals of managing costs and receiving services required to comply with the CAT NMS Plan and Rule 613, taking into consideration a variety of factors, including the expected volume of data, the breadth of services provided and market rates for similar services. It is anticipated that AWS will provide a broad array of cloud hosting services for the CAT, including data ingestion, data management, and analytic tools during 2025. Services provided by AWS include storage services, databases, compute services and other services (such as networking, management tools and DevOps tools), as well as various environments for CAT, such as development, performance testing, test, and production environments. AWS will perform cloud hosting services for both the CAT transaction database as well as the CAT Customer and Account Information System ("CAIS") during 2025.

The cost for AWS cloud services for the CAT is a function of the volume of CAT Data, largely as a result of the processing and storage of the CAT Data. The greater the amount of CAT Data, the greater the cost of AWS services to CAT LLC. During 2025, it is expected that AWS will provide cloud hosting services for volumes of CAT Data far in excess of the volume predictions set forth in the CAT NMS Plan. The CAT NMS Plan states, when all CAT Reporters are submitting their data to the CAT, it "must be sized to receive[,] process and load more than

SR-EMERALD-2024-31 Page 18 of 155

58 billion records per day,"⁴⁰ and that "[i]t is expected that the Central Repository will grow to more than 29 petabytes of raw, uncompressed data."⁴¹ In contrast with those estimates, the Q3 2024 data volumes, which averaged 666 billion events per day, were up 51% compared to Q3 2023, which averaged 440 billion events per day, with peak volumes recorded on August 5, 2024 of 905 billion events. The top five peak days were recorded in August 2024.

CAT LLC estimates that the budget for cloud hosting services costs during 2025 will be approximately \$182,594,630. The budget for cloud hosting services costs during 2025 is set forth in the 2025 CAT Budget. CAT LLC estimated the budget for the cost for cloud hosting services for 2025 based on an assumption of 40% annual year-over-year volume growth for the transaction database and an assumption of 5% annual year-over-year volume growth for CAIS. CAT LLC determined these growth assumptions in coordination with FCAT based on an analysis of a variety of existing data and alternative growth scenarios. In particular, in determining to use the 40% annual year-over-year volume growth in events per day, CAT LLC considered, among other things, the average annual year-over-year volume growth for 2019 through 2024 of approximately 45%, the average annual year-over-year volume growth for 2020 through 2024 of approximately 30%, and the average monthly growth rate for 2024 of approximately 50%. 42

Appendix D-4 of the CAT NMS Plan at n.262.

⁴¹ Appendix D-5 of the CAT NMS Plan.

Note that these growth rates are based on events processed and stored in the CAT. Executed transactions are a small subset of such events. As a result, the number of transactions in the CAT, and, hence, the number of executed equivalent shares, is not directly correlated with the number of events processed in the CAT or the costs of cloud hosting services for the CAT. Accordingly, the number of executed equivalent shares may stay relatively constant from year to year while the number of events processed and stored in the CAT may grow significantly.

SR-EMERALD-2024-31 Page 19 of 155

This process for estimating the budget for cloud hosting services costs for 2025 is the same process by which CAT LLC estimated the cloud hosting services costs for the Original 2024 Budget. The Original 2024 Budget estimated a budget for cloud hosting services for 2024 through September 2024 of \$111,345,620. The actual costs for cloud hosting services for 2024 through September 2024 were \$100,974,720. Therefore, the variance between budgeted and actual cloud hosting services costs for this period was an approximate decrease of 9%. Accordingly, CAT LLC believes that the process for estimating the budgeted cloud hosting services costs for 2025 is reasonable.

(b) Changes from Prior Fee Filing

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for cloud hosting services costs from the prior CAT Fee filing. Accordingly, this filing describes the changes in the cloud hosting services costs from the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1. CAT LLC's proposed annual 2025 budget for cloud hosting services costs increased by about 18.5% from the Updated 2024 Budget, from \$148,789,981 to \$182,594,630. The increase in costs for cloud hosting services in the 2025 Budgeted CAT Costs reflects cost increases related to data volume growth and the associated

This total was calculated by adding the first three quarters of budgeted CAT costs for cloud hosting services as set forth in the Original 2024 Budget.

Note that this variance is calculated on a cash basis.

Fee Filing for CAT Fee 2024-1.

As described above, the 2025 CAT Budget was prepared on the accrual basis of accounting, whereas the 2024 Updated CAT Budget was prepared on the cash basis of accounting. Cash basis budgeted figures for 2025 are separately noted above. Accordingly, the comparisons between the Updated 2024 Budget and the 2025 CAT Budget here and in other sections of the filing reflect a comparison of cash basis budget figures and accrual basis budget figures.

SR-EMERALD-2024-31 Page 20 of 155

compute and storage of the increased data levels. This cost increase, however, also reflects cost reduction efforts.

(ii) Technology Costs – Operating Fees

(a) Description of Operating Fees

Section 11.3(a)(iii)(B)(B)(1) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the operating fees set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that included \$30,831,330 in technology costs for operating fees for 2025. Operating fees are those fees paid by CAT LLC to FCAT as the Plan Processor to operate and maintain the CAT and to perform business operations related to the system, including compliance, security, testing, training, communications with the industry (*e.g.*, management of the FINRA CAT Helpdesk, FAQs, website and webinars) and program management as required by the CAT NMS Plan. Operating fees also include market data provider costs, as discussed below.

Plan Processor: FCAT. Under the Plan Processor Agreement with FCAT, CAT LLC is required to pay FCAT a negotiated monthly fixed price for the operation of the CAT. This fixed price contract was negotiated on an arm's length basis with the goals of managing costs and receiving services required to comply with the CAT NMS Plan and Rule 613, taking into consideration a variety of factors, including the breadth of services provided and market rates for similar types of activity. It is anticipated that FCAT will provide a variety of services to the CAT during 2025, including the following:

SR-EMERALD-2024-31 Page 21 of 155

Provide the CAT-related functions and services as the Plan Processor as required by SEC
 Rule 613 and the CAT NMS Plan in connection with the operation and maintenance of the CAT;

- Address compliance items, including drafting CAT policies and procedures, and addressing Regulation SCI requirements;
- Provide support to the Operating Committee, the Compliance Subcommittee and CAT working groups;
- Assist with interpretive efforts and exemptive requests regarding the CAT NMS Plan;
- Oversee the security of the CAT;
- Monitor the operation of the CAT, including with regard to Participant and Industry
 Member reporting;
- Provide support to subcontractors under the Plan Processor Agreement;
- Provide support in discussions with the Participants and the SEC and its staff;
- Operate the FINRA CAT Helpdesk;
- Facilitate communications with the industry, including via FAQs, CAT Alerts, meetings,
 presentations and webinars;
- Administer the CAT website and all of its content;
- Maintain cyber security insurance related to the CAT; and
- Provide technical support and assistance with connectivity, data access, and user support, including the use of CAT Data and query tools, for Participants and the SEC staff.

CAT LLC calculated the budget for the FCAT technology costs for operating fees for 2025 based on the recurring monthly operating fees under the Plan Processor Agreement.

SR-EMERALD-2024-31 Page 22 of 155

Market Data Provider: Algoseek. It is anticipated that the operating fees costs for 2025 will include costs related to the receipt of certain market data for the CAT pursuant to an agreement between FCAT and Algoseek, LLC ("Algoseek"). CAT LLC determined that Algoseek would provide market data that included data elements set forth in Section 6.5(a)(ii) of the CAT NMS Plan, and that the fees were reasonable and in line with market rates for the market data received. All costs under the contract would be treated as a direct pass through cost to CAT LLC. CAT LLC estimated the budget for the costs for Algoseek for 2025 based on the monthly rate set forth in the agreement between Algoseek and FCAT.

Operating Fee Estimates. CAT LLC estimates that the budget for operating fees during 2025 will be approximately \$30,831,330. The budget for operating fees during 2025 is set forth in the 2025 CAT Budget. As discussed above, CAT LLC estimated the budget for the operating fees during 2025 based on monthly rates set forth in the Plan Processor Agreement and the agreement with Algoseek. CAT LLC also recognized that the operating fees are generally consistent throughout the year. This process for estimating the budget for the operating fees for 2025 is the same process by which CAT LLC estimated the operating fees for the Original 2024 Budget. The Original 2024 Budget estimated a budget for operating fees for 2024 through September 2024 of \$20,617,804.⁴⁷ The actual costs for operating fees for 2024 through September 2024 were \$20,244,211. Therefore, the variance between budgeted and actual operating fees for this period was approximately 2%.⁴⁸ Accordingly, CAT LLC believes that the process for estimating the budgeted operating fees for 2025 is reasonable.

(b) Changes from Prior Fee Filing

This total was calculated by adding the first three quarters of budgeted CAT costs for operating fees as set forth in the Original 2024 Budget.

Note that this variance is calculated on a cash basis.

SR-EMERALD-2024-31 Page 23 of 155

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for operating fees from the prior CAT Fee filing. Accordingly, this filing describes the changes in the operating fees set forth in the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1.⁴⁹ CAT LLC's proposed annual budget for operating fees for 2025 increased by approximately 14% from \$26,423,306 in the Updated 2024 Budget to \$30,831,330 in the 2025 CAT Budget. The increase in operating fees over 2024 reflects cost increases related to an increase in the recurring operating fee as set forth in the Plan Processor Agreement, annual inflation adjustments for services provided directly by FCAT (which includes services related to IM connectivity, the Secure Analytics Workspace, external metastore, and the CAT billing algorithm), an insurance adjustment based on an estimated 6% increase in insurance premiums, and new operating fees resulting from a newly implemented change request related to the automated late to lifecycle processing.

(iii) Technology Costs – CAIS Operating Fees

(a) Description of CAIS Operating Fees

Section 11.3(a)(iii)(B)(B)(1) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the CAIS operating fees set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that included \$20,749,848 in technology costs for CAIS operating fees for 2025. CAIS operating fees represent the fees paid to FCAT for services provided with regard to the operation and maintenance of CAIS, and to perform the business

See Fee Filing for CAT Fee 2024-1.

SR-EMERALD-2024-31 Page 24 of 155

operations related to the system, including compliance, security, testing, training, communications with the industry (*e.g.*, management of the FINRA CAT Helpdesk, FAQs, website and webinars) and program management. The CAT is required under the CAT NMS Plan to capture and store Customer Identifying Information and Customer Account Information in a database separate from the transactional database and to create a CAT-Customer-ID for each Customer. As of May 31, 2024, the implementation of CAIS was completed. ⁵⁰

During 2025, it is anticipated that FCAT will provide CAIS-related services. Under the Plan Processor Agreement with FCAT, CAT LLC is required to pay FCAT for CAIS-related services provided by FCAT on a monthly basis. CAT LLC negotiated the fees for FCAT's CAIS-related services on an arm's length basis with the goals of managing costs and receiving services required to comply with the CAT NMS Plan, taking into consideration a variety of factors, including the services to be provided and market rates for similar types of activity. During 2025, it is anticipated that FCAT will continue to provide services relating to the ongoing operation, maintenance and support of CAIS.

CAT LLC estimates that the budget for CAIS operating fees during 2025 will be approximately \$20,749,848. The budget for CAIS operating fees during 2025 is set forth in the 2025 CAT Budget. CAT LLC calculated the budget for FCAT's CAIS-related services for 2025 based on the recurring monthly CAIS operating fees under the Plan Processor Agreement. This process for estimating the budget for the CAIS operating fees for 2025 is the same process by which CAT LLC estimated the CAIS operating fees for the Original 2024 Budget. The Original 2024 Budget estimated a budget for CAIS operating fees for 2024 through September 2024 of

For a discussion of the implementation timeline for CAIS, see CAT Alert 2023-01.

SR-EMERALD-2024-31 Page 25 of 155

\$15,328,403.⁵¹ The actual costs for CAIS operating fees for 2024 through September 2024 were \$15,138,981. Therefore, the variance between budgeted and actual CAIS operating fees for this period was approximately 1%.⁵² Accordingly, CAT LLC believes that the process for estimating the budgeted CAIS operating fees for 2025 is reasonable.

(b) Changes from Prior Fee Filing

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for CAIS operating fees from the prior CAT Fee filing. Accordingly, this filing describes the changes in CAIS operating fees from the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1.⁵³ CAT LLC's proposed annual budget for CAIS operating fees for 2025 is \$20,749,848, which is an approximate 2.7% increase of \$549,929 from the Updated 2024 Budget amount of \$20,199,919. This increase is due to an annual inflation adjustment.

(iv) Technology Costs – Change Request Fees

(a) Description of Change Request Fees

Section 11.3(a)(iii)(B)(B)(1) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the change request fees set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that included \$750,000 in technology costs for change request fees for 2025. The technology costs related to change request fees include costs related to certain modifications, upgrades or other changes to the CAT.

This total was calculated by adding the first three quarters of budgeted CAT costs for CAIS operating fees as set forth in the Original 2024 Budget.

Note that this variance is calculated on a cash basis.

⁵³ See Fee Filing for CAT Fee 2024-1.

SR-EMERALD-2024-31 Page 26 of 155

Change requests are standard practice and necessary to reflect operational changes, including changes related to new market developments, such as new market participants. In general, if CAT LLC determines that a modification, upgrade or other changes to the functionality or service is necessary and appropriate, CAT LLC will submit a request for such a change to the Plan Processor. The Plan Processor will then respond to the request with a proposal for implementing the change, including the cost (if any) of such a change. CAT LLC then determines whether to approve the proposed change.

During 2025, it is anticipated that CAT LLC will engage FCAT to pursue certain change requests in accordance with the Plan Processor Agreement. The budget for change requests for 2025 includes a placeholder of \$750,000 for potential change request fees that may be necessary in accordance with the Plan Processor Agreement. The placeholder amount was determined based on prior experience with change requests related to the CAT.

CAT LLC estimates that the budget for change requests during 2025 will be approximately \$750,000. The budget for change requests during 2025 is set forth in the 2025 CAT Budget. CAT LLC estimated the budget for the potential change requests for 2025 based on, among other things, a review of past change requests and potential future change request needs, as well as discussions with FCAT. This process for estimating the budget for the change requests for 2025 is the same process by which CAT LLC estimated the change requests cost for the Original 2024 Budget. The change request budget line is established to include expected costs to be incurred in which the nature of the costs (*i.e.*, capitalization versus expensing) have not yet been determined. Upon the incurrence of such costs, the final determination of capitalization versus expensing is determined and then such costs are reclassified from the

SR-EMERALD-2024-31 Page 27 of 155

change request line to the appropriate technology cost line item. Accordingly, CAT LLC believes that the process for estimating the budgeted change request costs for 2025 is reasonable.

(b) Changes from Prior Fee Filing

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for change request fees from the prior CAT Fee filing. Accordingly, this filing describes the changes in the change request fees from the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1. CAT LLC's proposed annual budget for change requests for 2025 increased from \$162,500 in the Updated 2024 Budget to \$750,000 in the 2025 CAT Budget. The increase is informed by past years' change request implementation fees and expectation of change requests that might be approved in the budget year.

(v) Technology Costs - Capitalized Developed Technology Costs

(a) Description of Capitalized Developed Technology Costs

Section 11.3(a)(iii)(B)(B)(1) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the capitalized developed technology costs set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that includes \$3,923,360 in technology costs for capitalized developed technology costs for 2025. This category of costs includes the budget for capitalizable application development costs incurred in the development of the CAT. It is anticipated that such costs will include certain costs related to the software license fee for CAIS

See Fee Filing for CAT Fee 2024-1.

SR-EMERALD-2024-31 Page 28 of 155

in accordance with the Plan Processor Agreement with FCAT, as well as costs related to a set of technology changes to be implemented by FCAT.

CAT LLC estimates that the budget for capitalized developed technology costs during 2025 will be approximately \$3,923,360. The budget for capitalized developed technology costs during 2025 is set forth in the 2025 CAT Budget. CAT LLC estimated the budget for capitalized developed technology costs for 2025 based on an analysis of a variety of factors, including information related to potential technology costs and related contractual and Plan requirements, and discussions with FCAT regarding such potential technology costs. This process for estimating the budget for capitalized developed technology costs for 2025 is the same process by which CAT LLC estimated the capitalized developed technology costs for the Original 2024 Budget. The Original 2024 Budget estimated a budget for capitalized developed technology costs for 2024 through September 2024 of \$2,300,000.55 The actual costs for capitalized developed technology costs for 2024 through September 2024 were \$7,761,480. As noted above, a significant portion of this variance is attributable to software license fees aggregating \$5,170,481, which were not originally included in the budget. The remaining variance from the Original 2024 budget is approximately 12%.⁵⁶ Accordingly, CAT LLC believes that the process for estimating the budgeted capitalized developed technology costs for 2025 is reasonable.

(b) Changes from Prior Fee Filing

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for capitalized developed technology costs from the prior CAT Fee filing. Accordingly, this filing describes the changes in the

This total was calculated by adding the first three quarters of budgeted CAT costs for capitalized developed technology costs in the Original 2024 Budget.

Note that this variance is calculated on a cash basis.

SR-EMERALD-2024-31 Page 29 of 155

capitalized developed technology costs from the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1.⁵⁷ CAT LLC's proposed budget for capitalized developed technology costs for 2025 decreased from the Updated 2024 Budget to the 2025 CAT Budget. The annual budget for capitalized developed technology costs for 2025 decreased by \$3,838,120 from the Updated 2024 Budget of \$7,761,480 to the 2025 CAT Budget of \$3,923,360. This decrease in the budgeted capitalized developed technology costs in the 2025 CAT Budget compared to the Updated 2024 Budget was primarly the result of costs related to the software license fee for CAIS in accordance with the Plan Processor Agreement with FCAT.

(vi) Legal Costs

(a) Description of Legal Costs

Section 11.3(a)(iii)(B)(B)(2) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the legal costs set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that includes \$5,720,000 in legal costs for 2025. This category of costs represents budgeted costs for legal services for this period. CAT LLC anticipates that it will receive legal services from two law firms, Wilmer Cutler Pickering Hale and Dorr LLP ("WilmerHale") and Jenner & Block LLP ("Jenner"), during 2025.

Law Firm: WilmerHale. It is anticipated that legal costs during 2025 will include costs related to the legal services performed by WilmerHale. CAT LLC anticipates that it will continue to employ WilmerHale during 2025 based on, among other things, their expertise, long history with the project and recognition that the hourly fee rates for this law firm are anticipated to be in line with market rates for specialized legal expertise. WilmerHale's billing rates are

^{57 &}lt;u>See</u> Fee Filing for CAT Fee 2024-1.

SR-EMERALD-2024-31 Page 30 of 155

negotiated on an annual basis and are determined with reference to the rates charged by other leading law firms for similar work. The Participants assess WilmerHale's performance and review prospective budgets and staffing plans submitted by WilmerHale on an annual basis. The legal fees will be paid by CAT LLC to WilmerHale.

During 2025, it is anticipated that WilmerHale will provide legal services related to the following:

- Assist with CAT fee filings and related funding issues;
- Draft exemptive requests from CAT NMS Plan requirements and/or proposed amendments to the CAT NMS Plan;
- Provide legal guidance with respect to interpretations of CAT NMS Plan requirements;
- Provide legal support for the Operating Committee, Compliance Subcommittee, working groups and Leadership Team;
- Draft SRO rule filings related to the CAT Compliance Rule;
- Manage corporate governance matters, including supporting Operating Committee meetings and preparing resolutions and consents;
- Assist with communications with the industry, including CAT Alerts and presentations;
- Provide guidance regarding the confidentiality of CAT Data;
- Assist with cost management analyses and proposals;
- Assist with commercial contract-related matters, including change orders and amendments, Plan Processor Agreement items, and subcontract matters;
- Provide support with regard to discussions with the SEC and its staff, including with respect to addressing interpretive and implementation issues;
- Provide legal guidance with respect to the CAT budgets;

SR-EMERALD-2024-31 Page 31 of 155

- Provide background assistance to other counsel for CAT matters;
- Assist with legal responses related to third-party data requests; and
- Provide legal support regarding CAT policies and procedures.

CAT LLC estimated the budget for the legal costs for WilmerHale for 2025 through an analysis of a variety of factors, including WilmerHale fee rates, historical legal fees, and information related to pending legal issues and potential future legal issues.

Law Firm: Jenner. It is anticipated that legal costs during 2025 will include costs related to the legal services performed by Jenner. CAT LLC anticipates that it will continue to employ Jenner during 2025 based on among other things, their expertise, history with the project and recognition that their hourly fee rates are in line with market rates for specialized legal expertise. The legal fees will be paid by CAT LLC to Jenner.

During 2025, it is anticipated that Jenner will continue to provide legal assistance to CAT LLC regarding certain litigation matters, including: (1) CAT LLC's defense against a lawsuit filed in the Western District of Texas against Chair Gensler, the SEC and CAT LLC challenging the validity of Rule 613 and the CAT and alleging various constitutional, statutory, and common law claims; ⁵⁸ (2) CAT LLC's intervention in a lawsuit in the Eleventh Circuit filed by various parties against the SEC challenging the SEC's approval of the CAT Funding Model; ⁵⁹ and (3) a lawsuit in the Eleventh Circuit filed by Citadel Securities LLC seeking review of the SEC's May 20, 2024 order ⁶⁰ granting the Participants temporary conditional exemptive relief related to the reporting of bids and/or offers made in response to a request for quote or other form of

Davidson v. Gensler, Case No. 6:24-cv-197 (W.D. Tex.).

⁵⁹ American Securities Ass'n v. Securities and Exchange Commission, Case No. 23-13396 (11th Cir.).

⁶⁰ Securities Exchange Act Rel. No. 100181 (May 20, 2024), 89 Fed. Reg. 45715 (May 23, 2024).

SR-EMERALD-2024-31 Page 32 of 155

solicitation response provided in standard electronic format that is not immediately actionable.⁶¹ Litigation involving CAT LLC is an expense of operating the CAT, and, therefore, is appropriately an obligation of both Participants and Industry Members under the CAT Funding Model.

CAT LLC estimated the budget for the legal costs for Jenner for 2025 through an analysis of a variety of factors, including Jenner's fee rates, historical legal fees, and information related to pending legal issues and potential future legal issues.

Legal Cost Estimates. CAT LLC estimates that the budget for legal services during 2025 will be approximately \$5,720,000. The budget for legal services during 2025 is set forth in the 2025 CAT Budget. CAT LLC estimated the budget for the legal services for 2025 based on an analysis of a variety of factors, including law firm fee rates, historical legal fees, and information related to pending legal issues and potential future legal issues, and discussions with the law firms. This process for estimating the budget for the legal services for 2025 is the same process by which CAT LLC estimated the legal cost for the Original 2024 Budget. The Original 2024 Budget estimated a budget for legal costs for 2024 through September 2024 of \$3,487,500.62 The actual costs for legal services for 2024 through September 2024 were \$5,566,888. This increase was due to unanticipated issues that required additional legal efforts on behalf of CAT LLC that developed after the budget was created. Accordingly, CAT LLC believes that the process for estimating the budgeted legal costs for 2025 is reasonable.

(b) Changes from Prior Fee Filing

⁶¹ Citadel Securities LLC v. United States Securities and Exchange Commission, Case No. 24-12300 (11th Cir.).

This total was calculated by adding the first three quarters of budgeted CAT costs for legal services in the Original 2024 Budget.

SR-EMERALD-2024-31 Page 33 of 155

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for legal costs from the prior CAT Fee filing. Accordingly, this filing describes the changes in the legal costs from the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1.63 CAT LLC's proposed budget for legal costs for 2025 decreased from the Updated 2024 Budget to the 2025 CAT Budget. The annual budget for legal costs for 2025 decreased from the the Updated 2024 Budget to the 2025 CAT Budget by \$2,426,599, from \$8,146,599 to \$5,720,000. This budgeted decrease in the legal costs in the 2025 CAT Budget from the Updated 2024 Budget was primarily due to an anticipated decrease in legal costs related to litigation matters as well as regulatory and corporate legal matters. In addition, CAT LLC no longer anticipates incurring legal costs related to the law firms of Pillsbury Winthrop Shaw Pittman LLP and Covington & Burling LLP during 2025 due to the conclusion of the relevant prior legal matters.

(vii) Consulting Costs

(a) Description of Consulting Costs

Section 11.3(a)(iii)(B)(B)(3) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the consulting costs set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that included \$1,750,000 in consulting costs for 2025. The consulting costs represent the fees estimated to be paid to the consulting firm Deloitte & Touche LLP ("Deloitte") as project manager during 2025. These consulting costs include costs for advisory

See Fee Filing for CAT Fee 2024-1.

SR-EMERALD-2024-31 Page 34 of 155

services related to the operation of the CAT, and meeting facilitation and communications coordination, vendor support and financial analyses.

It is anticipated that the costs for CAT during 2025 will include costs related to consulting services performed by Deloitte. CAT LLC anticipates that it will continue to employ Deloitte during 2025 based on, among other things, their expertise, long history with the project, and the recognition that it is anticipated that the consulting fees will remain in line with market rates for this type of specialized consulting work. Deloitte's fee rates are negotiated on an annual basis. CAT LLC assesses Deloitte's performance and reviews prospective budgets and staffing plans submitted by Deloitte on an annual basis. The consulting fees will be paid by CAT LLC to Deloitte.

It is anticipated that Deloitte will provide a variety of consulting services to the CAT during 2025, including the following:

- Implement program operations for the CAT project;
- Provide support to the Operating Committee, the Chair of the Operating Committee and the Leadership Team, including project management support, coordination and planning for meetings and communications, and interfacing with law firms and the SEC;
- Assist with cost and funding matters for the CAT, including assistance with loans and the CAT bank account for CAT funding;
- Provide support for updating the SEC on the progress of the development of the CAT; and
- Provide support for third party vendors for the CAT, including FCAT, Anchin and the law firms engaged by CAT LLC.

SR-EMERALD-2024-31 Page 35 of 155

In addition, the consulting costs include the compensation for the Chair of the CAT Operating Committee.

CAT LLC estimates that the budget for consulting costs during 2025 will be approximately \$1,750,000. The budget for consulting costs during 2025 is set forth in the 2025 CAT Budget. CAT LLC estimates the budget for the consulting costs for Deloitte for 2025 based on the current statement of work with Deloitte, which took into consideration past consulting costs, potential future consulting needs, the proposed rates and other contractual issues, as well as discussions with Deloitte. This process for estimating the budget for consulting costs for 2025 is the same process by which CAT LLC estimated the consulting costs for the Original 2024 Budget. The Original 2024 Budget estimated a budget for consulting services for 2024 through September 2024 of \$1,200,000.⁶⁴ The actual costs for consulting services for 2024 through September 2024 were \$1,161,566. Therefore, the variance between budgeted and actual consulting costs was approximately 3%.⁶⁵ Accordingly, CAT LLC believes that the process for estimating the budgeted consulting costs for 2025 is reasonable.

(b) Changes from Prior Fee Filing

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for consulting costs from the prior CAT Fee filing. Accordingly, this filing describes the changes in the consulting costs from the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1.66 CAT LLC's proposed annual budget for consulting costs for 2025 increased from

This total was calculated by adding the first three quarters of budgeted CAT costs for consulting services in the Original 2024 Budget.

Note that this variance is calculated on a cash basis.

See Fee Filing for CAT Fee 2024-1.

SR-EMERALD-2024-31 Page 36 of 155

the Updated 2024 Budget to the 2025 CAT Budget by \$150,000, from \$1,600,000 to \$1,750,000. This budgeted increase in the consulting costs in the 2025 CAT Budget from the Updated 2024 Budget was primarily due to the anticipated need for additional consulting services and an inflationary adjustment in consulting fees.

(viii) Insurance Costs

(a) Description of Insurance Costs

Section 11.3(a)(iii)(B)(B)(4) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the insurance costs set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that included \$1,594,452 in insurance costs for 2025. The insurance costs represent the costs to be incurred for insurance for CAT during 2025.

It is anticipated that the insurance costs for CAT during 2025 will include costs related to cyber security liability insurance, directors' and officers' liability insurance, and errors and omissions liability insurance brokered by USI Insurance Services LLC ("USI"). Such policies are standard for corporate entities, and cyber security liability insurance is important for the CAT System. CAT LLC anticipates that it will continue to maintain this insurance during 2025, and notes that the annual premiums for these policies were competitive for the coverage provided. CAT LLC estimated the budget for the insurance costs for 2025 based on the insurance estimate from USI for 2025. The annual premiums would be paid by CAT LLC to USI.

The budgeted insurance costs for 2025 are based on an insurance cost estimate from USI for 2025. Accordingly, CAT LLC believes that the process for estimating the budgeted insurance costs for 2025 is reasonable.

(b) Changes from Prior Fee Filing

SR-EMERALD-2024-31 Page 37 of 155

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for insurance costs from the prior CAT Fee filing. Accordingly, this filing describes the changes in the insurance costs from the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1.⁶⁷ CAT LLC's proposed annual budget for insurance costs for 2025 increased by \$252,107 from the Updated 2024 Budget, from \$1,342,345 to \$1,594,452. The budgeted insurance costs as set forth in the Updated 2024 Budget were based on the actual insurance quote from USI for 2024. The budgeted insurance costs for 2025 are based on an insurance cost estimate from USI for 2025.

(ix) Professional and Administration Costs

(a) Description of Professional and Administration Costs

Section 11.3(a)(iii)(B)(B)(5) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the professional and administration costs set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that included \$882,456 in professional and administration costs for 2025. In adopting the CAT NMS Plan, the Commission amended the Plan to add a requirement that CAT LLC's financial statements be prepared in compliance with GAAP, audited by an independent public accounting firm, and made publicly available.⁶⁸ The professional and administration costs would include costs related to accounting and accounting advisory services to support the operating and financial functions of CAT, financial statement audit services by an independent accounting firm, preparation of tax returns, and various cash

See Fee Filing for CAT Fee 2024-1.

Section 9.2 of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 38 of 155

management and treasury functions. The professional and administration costs represent the fees to be paid to Anchin Block & Anchin ("Anchin") and Grant Thornton LLP ("Grant Thornton") for financial services during 2025.

Financial Advisory Firm: Anchin. It is anticipated that the professional and administration costs for 2025 will include costs related to financial advisory services performed by Anchin. CAT LLC anticipates that it will continue to employ Anchin during 2025 based on, among other things, the firm's relevant expertise and fees, which are anticipated to remain in line with market rates for these financial advisory services. The fees for these services will be paid by CAT LLC to Anchin.

It is anticipated that Anchin will provide a variety of services to the CAT during 2025, including the following:

- Update and maintain internal controls;
- Provide cash management and treasury functions;
- Facilitate bill payments to vendors;
- Facilitate repayments of short-term loans and promissory notes to Participants;
- Provide monthly bookkeeping;
- Review vendor invoices and documentation in support of cash disbursements;
- Review documentation to ensure that repayments of short-term loans and promissory notes to Participants are in accordance with established policies and procedures;
- Provide accounting research and consultations on various accounting, financial reporting and tax matters;
- Address not-for-profit tax and accounting considerations;
- Prepare tax returns;

SR-EMERALD-2024-31 Page 39 of 155

• Address various accounting, financial reporting and operating inquiries from Participants;

- Develop and maintain annual operating and financial budgets, including budget to actual fluctuation analyses;
- Support compliance with the CAT NMS Plan;
- Work with and provide support to the Operating Committee and various CAT working groups;
- Prepare monthly, quarterly and annual financial statements;
- Support the annual financial statement audits by an independent auditor;
- Review historical costs from inception;
- Provide accounting and financial information in support of SEC filings; and
- Perform additional ad hoc accounting and financial advisory services, as requested by CAT LLC.

CAT LLC estimated the annual budget for the costs for Anchin based on historical costs adjusted for cost of living rate increases, and projected incremental advisory and support services.

Accounting Firm: Grant Thornton. It is anticipated that the professional and administration costs for 2025 will include costs related to accounting services performed by Grant Thornton. CAT LLC anticipates that it will continue to employ Grant Thornton during 2025 based on, among other things, the firm's relevant expertise and fees, which are anticipated to remain in line with market rates for these financial advisory services. It is anticipated that Grant Thornton will continue to be engaged as an independent accounting firm to complete the audit of CAT LLC's financial statements, in accordance with the requirements of the CAT NMS Plan. The fees for these services will be paid by CAT LLC to Grant Thornton. CAT LLC

SR-EMERALD-2024-31 Page 40 of 155

estimated the budget for the accounting costs for Grant Thornton for 2025 based on the anticipated hourly rates and the anticipated services plus an administrative fee.

Professional and Administration Cost Estimates. CAT LLC estimates that the budget for professional and administration services during 2025 will be approximately \$882,456. The budget for professional and administration services during 2025 is set forth in the 2025 CAT Budget. CAT LLC estimated the budget for the professional and administration costs for 2025 based on a review of past professional and administration costs, potential future professional and administration needs, the proposed rates and other contractual issues, as well as discussions with Anchin and Grant Thornton. This process for estimating the budget for the professional and administration costs for 2025 is the same process by which CAT LLC estimated the professional and administration costs for the Original 2024 Budget. The Original 2024 Budget estimated a budget for professional and administration costs for 2024 through September 2024 of \$545,930.69 The actual costs for professional and administration costs for 2024 through September 2024 were \$560,203. Therefore, the variance between budgeted and actual professional and administration costs was approximately 3%. ⁷⁰ Accordingly, CAT LLC believes that the process for estimating the budgeted professional and administration costs for 2025 is reasonable.

(b) Changes from Prior Fee Filing

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for professional and administration costs from the prior CAT Fee filing. Accordingly, this filing describes the changes in the

This total was calculated by adding the first three quarters of budgeted CAT costs for professional and administration services in the Original 2024 Budget.

Note that this variance is calculated on a cash basis.

SR-EMERALD-2024-31 Page 41 of 155

professional and administration costs from the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1.⁷¹ CAT LLC's proposed annual budget for professional and administration costs for 2025 had an increase of \$58,526 from the Updated 2024 Budget, from \$823,930 to \$882,456. CAT LLC's proposed annual budget for professional and administration costs for 2025 has only changed in a minor way for Anchin and Grant Thornton costs.

(x) Public Relations Costs

(a) Description of Public Relations Costs

Section 11.3(a)(iii)(B)(B)(6) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the public relations costs set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that included \$50,000 in public relations costs for 2025. The public relations costs represent the fees paid to a public relations firm for professional communications services to CAT, including media relations consulting, strategy and execution. By engaging a public relations firm, CAT LLC will be better positioned to understand and address CAT matters to the benefit of all market participants.

It is anticipated that the public relations costs for 2025 will include costs related to the public relations services performed by RF|Binder Partners Inc. ("RF|Binder"). CAT LLC anticipates that it will continue to employ RF|Binder during 2025 based on, among other things, the firm's relevant expertise, history with the project, and fees, which are anticipated to remain in line with market rates for these public relations services. It is anticipated that, during 2025, RF|Binder will provide services related to communications with the public regarding the CAT,

See Fee Filing for CAT Fee 2024-1.

SR-EMERALD-2024-31 Page 42 of 155

including monitoring developments related to the CAT (*e.g.*, congressional efforts, public comments and reaction to proposals, press coverage of the CAT), reporting such developments to CAT LLC, and drafting and disseminating communications to the public regarding such developments as well as reporting on developments related to the CAT (*e.g.*, amendments to the CAT NMS Plan). Public relations services are important for various reasons, including monitoring comments made by market participants about the CAT and understanding issues related to the CAT discussed on the public record.

CAT LLC estimates that the budget for public relations services during 2025 will be approximately \$50,000. The budget for public relations services during 2025 is set forth in the 2025 CAT Budget. CAT LLC estimated the budget for the public relations costs for 2025 based on a review of past public relations costs, potential future public relations needs, the proposed rates and other contractual issues, as well as discussions with RF|Binder. CAT LLC also recognized that public relations costs are generally consistent throughout the year. This process for estimating the budget for the public relations costs for 2025 is the same process by which CAT LLC estimated the public relations costs for the Original 2024 Budget. The Original 2024 Budget estimated a budget for public relations costs for 2024 through September 2024 of \$69,300.72 The actual costs for public relations costs for 2024 through September 2024 were \$59,231. Therefore, the variance between budgeted and actual public relations costs was an approximate 15% decrease in costs. ⁷³ Accordingly, CAT LLC believes that the process for estimating the budgeted public relations costs for 2025 is reasonable.

(b) Changes from Prior Fee Filing

This total was calculated by adding the first three quarters of budgeted CAT costs for public relations services in the Original 2024 Budget.

Note that this variance is calculated on a cash basis.

SR-EMERALD-2024-31 Page 43 of 155

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for public relations costs from the prior CAT Fee filing. Accordingly, this filing describes the changes in the public relations costs from the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1.⁷⁴ CAT LLC's proposed annual budget for public relations costs for 2025 had a nearly 50% decrease from the Updated 2024 Budget to the 2025 CAT Budget, from \$93,275 to \$50,000. This change reflects updated contractual terms.

(xi) Reserve

(a) Description of Reserve

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to provide a brief description of the reserve costs set forth in the budget. The Operating Committee approved an operating budget for the CAT pursuant to Section 11.1(a) of the CAT NMS Plan that includes \$23,842,200 for an additional reserve amount for 2025.

Section 11.1(a)(i) of the CAT NMS Plan states that the budget shall include a reserve. Section 11.1(a)(ii) of the CAT NMS Plan further describes the reserve as follows:

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.

CAT LLC determined to maintain a reserve in the amount of 25% of 2025 Budgeted CAT Costs (other than the reserve). Accordingly, the total 25% reserve was calculated by multiplying the

See Fee Filing for CAT Fee 2024-1.

SR-EMERALD-2024-31 Page 44 of 155

2025 Budgeted CAT Costs (other than the reserve) by 25%, which is \$62,211,519.⁷⁵ The Updated 2024 Budget contemplates the collection of \$27,695,385 for the reserve. In addition, CAT LLC recognized a favorable variance of \$10,084,698 for budgeted versus actual cloud hosting services costs covering the period from July 16, 2024 through September 30, 2024. Furthermore, CAT LLC has collected a Participation Fee from a new Participant in the CAT NMS Plan of \$589,232. Accordingly, the 2025 CAT Budget includes the reserve amount of \$23,842,200, which is calculated by reducing the total 25% reserve amount of \$62,211,519 by the contemplated collected reserve, the favorable variance for cloud hosting services and the Participation Fee. ⁷⁶

(b) Changes from Prior Fee Filing

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan requires the fee filing for a Prospective CAT Fee to describe the reason for changes in the line item for a reserve from the prior CAT Fee filing. Accordingly, this filing describes the changes in the reserve from the Updated 2024 Budget, which was used in the calculation of the prior Prospective CAT Fee, CAT Fee 2024-1. Prior to July 16, 2024, all CAT costs were paid by the Participants via notes. Accordingly, prior to that date, CAT LLC maintained no reserve. After July 16, 2024 and with the implementation of CAT Fee 2024-1, CAT LLC began collecting a reserve with CAT Fee 2024-1 beginning with the October 2024 invoices due in November 2024. However, given the early stages of the collection of the reserve pursuant to CAT Fee 2024-1, it has been assumed for the purposes of the calculation of the reserve for CAT Fee 2025-1 that the entire amount of the reserve to be

The reserve was calculated by multiplying \$248,846,076 by 25%, which equals approximately \$62,211,519.

This calculation is \$62,211,519 - \$27,695,385 - \$10,084,698 - \$589,232, which equals approximately \$23,842,200.

See Fee Filing for CAT Fee 2024-1.

SR-EMERALD-2024-31 Page 45 of 155

invoiced via CAT Fee 2024-1 will be collected. The Updated 2024 Budget included costs for a reserve of \$27,695,385, while the 2025 CAT Budget includes a reserve amount of \$23,842,200, calculated as described above. This reserve amount set forth in the 2025 CAT Budget is the additional amount needed to collect 25% of the 2025 Budgeted CAT Costs.

(D) Projected Total Executed Equivalent Share Volume

The calculation of Fee Rate 2025-1 also requires the determination of the projected total executed equivalent share volume of transactions in Eligible Securities for 2025. Under the CAT NMS Plan, the Operating Committee is required to "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." The Operating Committee is required to base its projection on the prior twelve months, but it may use its discretion to analyze the likely volume for the upcoming year. Such discretion would allow the Operating Committee to use its judgment when estimating projected total executed equivalent share volume if the volume over the prior twelve months was unusual or otherwise unfit to serve as the basis of a future volume estimate. 79

The total executed equivalent share volume of transactions in Eligible Securities for the 12-month period from October 2023 through September 2024 was 4,080,578,509,209.40 executed equivalent shares. The Operating Committee has determined to calculate the projected total executed equivalent share volume for 2025 for CAT Fee 2025-1 by utilizing the executed equivalent share volume for the 12-month period from October 2023 through September 2024. The Operating Committee determined that such an approach was reasonable as the CAT's annual

Section 11.3(a)(i)(D) of the CAT NMS Plan.

⁷⁹ CAT Funding Model Approval Order at 62651.

SR-EMERALD-2024-31 Page 46 of 155

executed equivalent share volume has remained relatively constant. For example, the executed equivalent share volume for 2021 was 3,963,697,612,395, the executed equivalent share volume for 2022 was 4,039,821,841,560.31, and the executed equivalent share volume for 2023 was 3,868,940,345,680.6. Accordingly, the projected total executed equivalent share volume for CAT Fee 2025-1 is projected to be 4,080,578,509,209.40 executed equivalent shares.

The projected total executed equivalent share volume of all transactions in Eligible Securities for 2025 for CAT Fee 2025-1 and a description of the calculation of the projection is provided in this filing in accordance with the requirement in the CAT NMS Plan to provide such information in a fee filing for a CAT Fee. ⁸⁰

(E) Fee Rate 2025-1

Fee Rate 2025-1 would be calculated by dividing the 2025 Budgeted CAT Costs by the reasonably projected total executed equivalent share volume of all transactions in Eligible Securities for 2025, as described in detail above. Specifically, Fee Rate 2025-1 would be calculated by dividing \$272,688,276 by 4,080,578,509,209.40 executed equivalent shares. As a result, Fee Rate 2025-1 would be \$0.00006682588642384252 per executed equivalent share. Fee Rate 2025-1 is provided in this filing in accordance with the requirement in the CAT NMS Plan to provide the Fee Rate in a fee filing for a CAT Fee. See

(3) Monthly Fees

Section 11.3(a)(iii)(B) of the CAT NMS Plan.

In approving the CAT Funding Model, the Commission stated that "[t]he manner in which the Fee Rate for Prospective CAT Costs will be calculated (*i.e.*, by dividing the CAT costs reasonably budgeted for the upcoming year by the reasonably projected total executed equivalent share volume of all transactions in Eligible Securities for the year) is reasonable." CAT Funding Model Approval Order at 62651.

Section 11.3(a)(iii)(B) of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 47 of 155

CEBBs and CEBSs would be required to pay fees for CAT Fee 2025-1 on a monthly basis for six months, from March 2025 until August 2025. A CEBB's or CEBS's fee for each month would be calculated based on the transactions in Eligible Securities executed by the CEBB or CEBS from the prior month. Proposed paragraph (a)(iv)(A) of the fee schedule would state that each CAT Executing Broker would receive its first invoice for CAT Fee 2025-1 in February 2025, and would receive an invoice for CAT Fee 2025-1 each month thereafter until July 2025. Proposed paragraph (a)(iv)(B) of the fee schedule would state that "Consolidated Audited Trail, LLC shall provide each CAT Executing Broker with an invoice for CAT Fee 2025-1 on a monthly basis." In addition, paragraph (b)(i) of the fee schedule states that each CEBB and CEBS is required to pay its CAT fees "each month."

(4) Cost Recovery

Fee Rate 2025-1 is calculated based on the 2025 CAT Budget, which includes budgeted CAT costs for the full year of 2025, and the projected executed equivalent share volume for the full year of 2025. However, because CAT Fee 2025-1 is expected to only be in place for six months, it is expected that CAT Fee 2025-1 would collect approximately half of the costs set forth in the 2025 CAT Budget. It is expected that a new CAT Fee will be in place for the second half of the year, and such new CAT Fee would be expected to collect the remaining half of the CAT costs for 2025 based on an adjusted mid-year budget. 85

(5) Consolidated Audit Trail Funding Fees

To implement CAT Fee 2025-1, the Exchange proposes to add a new paragraph to the "Consolidated Audit Trail Funding Fees" section of the Exchange's fee schedule, to include the

See Section 11.3(a)(iii)(B)(A) of the CAT NMS Plan.

See proposed paragraph (a)(iv)(B) of the fee schedule.

See proposed paragraph (a)(iv)(C) of the fee schedule.

SR-EMERALD-2024-31 Page 48 of 155

proposed paragraphs described below.

(A) Fee Schedule for CAT Fee 2025-1

The CAT NMS Plan states that:

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 11.3.86

Accordingly, based on the factors discussed above, the Exchange proposes to add paragraph (a)(iv) to the Consolidated Audit Trail Funding Fees section of its fee schedule. Proposed paragraph (a)(iv) would state the following:

- (A) Each CAT Executing Broker shall receive its first invoice for CAT Fee 2025-1 in February 2025, which shall set forth the CAT Fee 2025-1 fees calculated based on transactions in January 2025, and shall receive an invoice for CAT Fee 2025-1 for each month thereafter until July 2025.
- (B) Consolidated Audit Trail, LLC shall provide each CAT Executing Broker with an invoice for CAT Fee 2025-1 on a monthly basis. Each month, such invoices shall set forth a fee for each transaction in Eligible Securities executed by the CAT Executing Broker in its capacity as a CAT Executing Broker for the Buyer ("CEBB") and/or the CAT Executing Broker for the Seller ("CEBS") (as applicable) from the prior month as set forth in CAT Data. The fee for each such

Section 11.3(a)(iii)(A) of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 49 of 155

transaction will be calculated by multiplying the number of executed equivalent shares in the transaction by the fee rate of \$0.000022 per executed equivalent share.

- (C) Notwithstanding the last invoice date of July 2025 for CAT Fee 2025-1 in paragraph (iv)(A), CAT Fee 2025-1 shall continue in effect after July 2025, with each CAT Executing Broker receiving an invoice for CAT Fee 2025-1 each month, until a new subsequent CAT Fee is in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act. Consolidated Audit Trail, LLC will provide notice when CAT Fee 2025-1 will no longer be in effect.
- (D) Each CAT Executing Broker shall be required to pay each invoice for CAT Fee 2025-1 in accordance with paragraph (b).

As noted in the Plan amendment for the CAT Funding Model, "[a]s 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." Accordingly, proposed paragraph (a)(iv)(B) of the fee schedule would set forth a fee rate of \$0.000022 per executed equivalent share. This fee rate is calculated by multiplying Fee Rate 2025-1 of \$0.00006682588642384252 by one-third, and rounding the result to six decimal places. The Operating Committee determined to use six decimal places to balance the accuracy of the calculation with the potential systems and other impracticalities of using additional decimal places in the calculation.

⁸⁷ CAT Funding Model Approval Order at 62658, n.658.

Dividing \$0.00006682588642384252 by three equals \$0.00002227529547461417. Rounding \$0.00002227529547461417 to six decimal places equals \$0.000022.

SR-EMERALD-2024-31 Page 50 of 155

The proposed language in paragraph (a)(iv)(A) of the fee schedule would describe when CAT Executing Brokers would receive their first monthly invoice for CAT Fee 2025-1. Specifically, CAT Executing Brokers would receive their first monthly invoice for CAT Fee 2025-1 in February 2025 and the fees set forth in that invoice would be calculated based on transactions executed in January 2025. The payment for the first invoice would be required within 30 days after the receipt of the first invoice (unless a longer period is indicated), as described in paragraph (b)(ii) of the fee schedule.

Proposed paragraph (a)(iv)(A) of the fee schedule also would describe the monthly cadence of the invoices for CAT Fee 2025-1. Specifically, after the first invoices are provided to CAT Executing Brokers in February 2025, invoices will be sent to CAT Executing Brokers each month thereafter until July 2025.

Proposed paragraph (a)(iv)(B) of the fee schedule would describe the invoices for CAT Fee 2025-1. Proposed paragraph (a)(iv)(B) of the fee schedule would state that "Consolidated Audit Trail, LLC shall provide each CAT Executing Broker with an invoice for CAT Fee 2025-1 on a monthly basis." Proposed paragraph (a)(iv)(B) of the fee schedule also would describe the fees to be set forth in the invoices for CAT Fee 2025-1. Specifically, it would state that "[e]ach month, such invoices shall set forth a fee for each transaction in Eligible Securities executed by the CAT Executing Broker in its capacity as a CAT Executing Broker for the Buyer ('CEBB') and/or the CAT Executing Broker for the Seller ('CEBS') (as applicable) from the prior month as set forth in CAT Data. The fee for each such transaction will be calculated by multiplying the number of executed equivalent shares in the transaction by the fee rate of \$0.000022 per executed equivalent share."

Since CAT Fee 2025-1 is a monthly fee based on actual transaction volume from the

SR-EMERALD-2024-31 Page 51 of 155

prior month, CAT Fee 2025-1 may collect more or less than two-thirds of the 2025 Budgeted CAT Costs. To the extent that CAT Fee 2025-1 collects more than two-thirds of the 2025 Budgeted CAT Costs, any excess money collected will be used to offset future fees and/or to fund the reserve for the CAT. To the extent that CAT Fee 2025-1 collects less than two-thirds of the 2025 Budgeted CAT Costs, the budget for the CAT in the ensuing months will reflect such shortfall.

Furthermore, proposed paragraph (a)(iv)(C) of the fee schedule would describe how long CAT Fee 2025-1 would remain in effect. It would state that "[n]otwithstanding the last invoice date of July 2025 for CAT Fee 2025-1 in paragraph (iv)(A), CAT Fee 2025-1 shall continue in effect after July 2025, with each CAT Executing Broker receiving an invoice for CAT Fee 2025-1 each month, until a new subsequent CAT Fee is in effect with regard to Industry Members in accordance with Section 19(b) of the Exchange Act. Consolidated Audit Trail, LLC will provide notice when CAT Fee 2025-1 will no longer be in effect."

Finally, proposed paragraph (a)(iv)(D) of the fee schedule would set forth the requirement for the CAT Executing Brokers to pay the invoices for CAT Fee 2025-1. It would state that "[e]ach CAT Executing Broker shall be required to pay each invoice for CAT Fee 2025-1 in accordance with paragraph (b)."

(B) Manner of Payment

Paragraph (b)(i) of the "Consolidated Audit Trail Funding Fees" section of the fee schedule describes the manner of payment of Industry Member CAT fees. It states that "[e]ach CAT Executing Broker shall pay its CAT fees as required pursuant to paragraph (a) each month to the Consolidated Audit Trail, LLC in the manner prescribed by the Consolidated Audit Trail, LLC." The CAT NMS Plan requires the Operating Committee to establish a system for the

collection of CAT fees.⁸⁹ The Plan Processor has established a billing system for CAT fees.⁹⁰ Accordingly, CAT Executing Brokers would be required to pay CAT Fee 2025-1 in accordance with such system.

(C) Failure to Pay CAT Fees

The CAT NMS Plan further 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). 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.⁹¹

Paragraph (b)(ii) of the fee schedule states that:

Each CAT Executing Broker shall pay the CAT fees required pursuant to paragraph (a) within thirty days after receipt of an invoice or other notice indicating payment is due (unless a longer payment period is otherwise indicated). If a CAT Executing Broker fails to pay any such CAT fee when due, such CAT Executing Broker 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 (i) the Prime Rate plus 300 basis points, or (ii) the maximum rate permitted by applicable law.

The requirements of paragraph (b)(ii) would apply to CAT Fee 2025-1.

(6) CAT Fee Details

The CAT NMS Plan states that:

Details regarding the calculation of a Participant or CAT Executing Broker's 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

⁸⁹ Section 11.4 of the CAT NMS Plan.

The billing process and system are described in CAT Alert 2023-02 as well as the CAT FAQs related to the billing of CAT fees, the Industry Member CAT Reporter Portal User Guide, the FCAT Industry Member Onboarding Guide, the FCAT Connectivity Supplement for Industry Members and the CAT Billing Webinars (dated Sept. 28, 2023 and Nov. 7, 2023), each available on the CAT website.

⁹¹ Section 11.4 of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 53 of 155

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.⁹²

Such information would provide CEBBs and CEBSs with the ability to understand the details regarding the calculation of their CAT Fee. 93 CAT LLC will provide CAT Executing Brokers with these details regarding the calculation of their CAT Fees on their monthly invoice for the CAT Fees.

In addition, CAT LLC will make certain aggregate statistics regarding CAT Fees publicly available. Specifically, the CAT NMS Plan states 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." Such aggregate statistics will be available on the CAT website.

Furthermore, CAT LLC will make publicly available on the CAT website the total amount invoiced each month that CAT Fee 2025-1 is in effect as well as the total amount invoiced for CAT Fee 2025-1 for all months since its commencement. CAT LLC also will make publicly available on the CAT website the total costs to be collected from Industry Members for CAT Fee 2025-1.

(7) Financial Accountability Milestones

Section 11.3(a)(iv)(A) of the CAT NMS Plan.

In approving the CAT Funding Model, the Commission stated that, "[i]n the Commission's view, providing CAT Execut[ing] Brokers information regarding the calculation of their CAT Fees will aid in transparency and permit CAT Execut[ing] Brokers to confirm the accuracy of their invoices for CAT Fees." CAT Funding Model Approval Order at 62667.

Section 11.3(a)(iv)(B) of the CAT NMS Plan. In approving the CAT Funding Model, the Commission stated that "[t]he publication of the aggregate executed equivalent share volume and aggregate fee is appropriate because it would allow Participants and CAT Executing Brokers a high-level validation of executed volume and fees." CAT Funding Model Approval Order at 62667.

SR-EMERALD-2024-31 Page 54 of 155

The CAT NMS Plan states 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." Under Section 1.1 of the CAT NMS Plan, a Financial Accountability Milestone is considered complete as of the date identified in the Participants' Quarterly Progress Reports. As indicated by the Participants' Quarterly Progress Report for the second and third quarter of 2024, he Financial Accountability Milestone related to Period 4 was satisfied on July 15, 2024. In addition, the satisfaction of the Financial Accountability Milestone related to Period 4 was described in detail in the fee filing for the first Prospective CAT Fee, CAT Fee 2024-1, which is currently in effect. he first Prospective CAT Fee, CAT Fee

(8) Relationship to CAT Fee 2024-1

CAT LLC intends for CAT Fee 2025-1 to replace CAT Fee 2024-1 (which has a fee rate of \$0.000035). 98 Accordingly, as long as CAT Fee 2025-1 is in effect, CAT Fee 2024-1 would not be charged to CEBBs, CEBSs and Participants. Specifically, subject to CAT Fee 2025-1 being in effect, CAT LLC intends to send the last invoice for CAT Fee 2024-1 in January 2025 based on December 2024 transactions and, correspondingly, to send the first invoice for CAT Fee 2025-1 in February 2025 based on January 2025 transactions.

(9) Participant Invoices

⁹⁵ Section 11.3(a)(iii)(C) of the CAT NMS Plan.

⁹⁶ Q2 & Q3 2024 Quarterly Progress Report (July 29, 2024).

⁹⁷ See Fee Filing for CAT Fee 2024-1.

Note that CAT Fee 2025-1 is separate from and will be in addition to any Historical CAT Assessment to Industry Members.

SR-EMERALD-2024-31 Page 55 of 155

While CAT Fees charged to Industry Members become effective in accordance with the requirements of Section 19(b) of the Exchange Act, 99 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. 100 On November 19, 2024, the Operating Committee approved the Participant fee related to CAT Fee 2025-1. Specifically, pursuant to the requirements of CAT NMS Plan, ¹⁰¹ each Participant would be required to pay a CAT fee calculated using the fee rate of \$0.000022 per executed equivalent share, which is the same fee rate that applies to CEBBs and CEBSs. Like CEBBs and CEBSs, each Participant would be required to pay such CAT fees on a monthly basis for six months, from March 2025 until August 2025, and each Participant's fee for each month would be calculated based on the transactions in Eligible Securities executed on the applicable exchange (for the Participant exchanges) or otherwise than on an exchange (for FINRA) in the prior month. Accordingly, each Participant will receive its first invoice in February 2025, and would receive an invoice each month thereafter until July 2025. Like with the CAT Fee 2025-1 applicable to CEBBs and CEBSs as described in proposed paragraph (a)(iv)(C) of the fee schedule, notwithstanding the last invoice date of July 2025, Participants will continue to receive invoices for this fee each month until a new subsequent CAT Fee is in effect with regard to Industry Members. Furthermore, Section 11.4 of the CAT NMS Plan states that each Participant is required to pay such invoices as required by Section 3.7(b) of the CAT NMS Plan. Section 3.7(b) states, in part, that

[e]ach 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)

⁹⁹ Section 11.3(a)(i)(A)(I) of the CAT NMS Plan.

¹⁰⁰ CAT Funding Model Approval Order at 62659.

See Section 11.3(a)(ii) and Appendix B of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 56 of 155

(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 to the lesser of: (i) Prime Rate plus 300 basis points; or (ii) the maximum rate permitted by applicable law.

Implementation

The proposed rule changes will become effective on January 1, 2025.

(b) <u>Statutory Basis</u>

The Exchange believes the proposed rule change is consistent with the requirements of the Exchange Act. The Exchange believes that the proposed rule change is consistent with Section 6(b)(5) of the Act, ¹⁰² which requires, among other things, that the Exchange's rules must be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest, and not designed to permit unfair discrimination between customers, issuers, brokers and dealers. The Exchange also believes that the proposed rule change is consistent with the provisions of Section 6(b)(4) of the Act, 103 because it provides for the equitable allocation of reasonable dues, fees and other charges among members and issuers and other persons using its facilities and does not unfairly discriminate between customers, issuers, brokers or dealers. The Exchange further believes that the proposed rule change is consistent with Section 6(b)(8) of the Act¹⁰⁴ which requires that the Exchange's rules not impose any burden on competition that is not necessary or appropriate in furtherance of the purpose of the Exchange Act. These provisions also require that the Exchange be "so organized and [have] the capacity to be able to carry out the purposes" of the Act and "to comply, and . . . to enforce compliance by its members and persons associated

¹⁵ U.S.C. 78f(b)(6).

¹⁵ U.S.C. 78f(b)(4).

¹⁵ U.S.C. 78f(b)(8).

SR-EMERALD-2024-31 Page 57 of 155

with its members," with the provisions of the Exchange Act. 105 Accordingly, a reasonable reading of the Act indicates that it intended that regulatory funding be sufficient to permit an exchange to fulfill its statutory responsibility under the Act, and contemplated that such funding would be achieved through equitable assessments on the members, issuers, and other users of an exchange's facilities.

The Exchange believes that this proposal is consistent with the Act because it implements provisions of the Plan and is designed to assist the Exchange in meeting regulatory obligations pursuant to the Plan. In approving the Plan, the SEC noted that the Plan "is necessary and appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanism of a national market system, or is otherwise in furtherance of the purposes of the Act." To the extent that this proposal implements the Plan and applies specific requirements to Industry Members, the Exchange believes that this proposal furthers the objectives of the Plan, as identified by the SEC, and is therefore consistent with the Act.

The Exchange believes that the proposed fees to be paid by the CEBBs and CEBSs are reasonable, equitably allocated and not unfairly discriminatory. First, the CAT Fee 2025-1 fees to be collected are directly associated with the budgeted costs of establishing and maintaining the CAT, where such costs include Plan Processor costs and costs related to technology, legal, consulting, insurance, professional and administration, and public relations costs.

The proposed CAT Fee 2025-1 fees would be charged to Industry Members in support of the maintenance of a consolidated audit trail for regulatory purposes. The proposed fees,

¹⁰⁵ See 15 U.S.C. 78f(b)(1).

¹⁰⁶ CAT NMS Plan Approval Order at 84697.

SR-EMERALD-2024-31 Page 58 of 155

therefore, are consistent with the Commission's view that regulatory fees be used for regulatory purposes and not to support the Exchange's business operations. The proposed fees would not cover Exchange services unrelated to the CAT. In addition, any surplus would be used as a reserve to offset future fees. Given the direct relationship between CAT fees and CAT costs, the Exchange believes that the proposed fees are reasonable, equitable and not unfairly discriminatory.

As further discussed below, the SEC approved the CAT Funding Model, finding it was reasonable and that it equitably allocates fees among Participants and Industry Members. The Exchange believes that the proposed fees adopted pursuant to the CAT Funding Model approved by the SEC are reasonable, equitably allocated and not unfairly discriminatory.

(1) Implementation of CAT Funding Model in CAT NMS Plan

Section 11.1(b) of the CAT NMS Plan states that "[t]he 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." Per Section 11.1(b) of the CAT NMS Plan, the Exchange has filed this fee filing to implement the Industry Member CAT fees included in the CAT Funding Model. The Exchange believes that this proposal is consistent with the Exchange Act because it is consistent with, and implements, the CAT Funding Model in the CAT NMS Plan, and is designed to assist the Exchange and its Industry Members in meeting regulatory obligations pursuant to the CAT NMS Plan. In approving the CAT NMS Plan, the SEC noted that the Plan "is necessary and appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanism of a national market system, or is otherwise in furtherance of the purposes of the Act." 107

¹⁰⁷

SR-EMERALD-2024-31 Page 59 of 155

Similarly, in approving the CAT Funding Model, the SEC concluded that the CAT Funding Model met this standard. ¹⁰⁸ As this proposal implements the Plan and the CAT Funding Model described therein, and applies specific requirements to Industry Members in compliance with the Plan, the Exchange believes that this proposal furthers the objectives of the Plan, as identified by the SEC, and is therefore consistent with the Exchange Act.

(2) Calculation of Fee Rate for CAT Fee 2025-1 is Reasonable

The SEC has determined that the CAT Funding Model is reasonable and satisfies the requirements of the Exchange Act. Specifically, the SEC has concluded that the method for determining CAT Fees as set forth in Section 11.3 of the CAT NMS Plan, including the formula for calculating the Fee Rate, the identification of the parties responsible for payment and the transactions subject to the fee rate for CAT Fees, is reasonable and satisfies the Exchange Act. ¹⁰⁹ In each respect, as discussed above, CAT Fee 2025-1 is calculated, and would be applied, in accordance with the requirements applicable to CAT Fees as set forth in the CAT NMS Plan. Furthermore, as discussed below, the Exchange believes that each of the figures for the variables in the SEC-approved formula for calculating the fee rate for CAT Fee 2025-1 is reasonable and consistent with the Exchange Act. Calculation of Fee Rate 2025-1 for CAT Fee 2025-1 requires the figures for the 2025 Budgeted CAT Costs, the executed equivalent share volume for the prior twelve months, the determination of the recovery period, and the projection of the executed equivalent share volume for 2025. Each of these variables is reasonable and satisfies the Exchange Act, as discussed throughout this filing.

(A) 2025 Budgeted CAT Costs

¹⁰⁸ CAT Funding Model Approval Order at 62686.

¹⁰⁹ Id. at 62662-63.

SR-EMERALD-2024-31 Page 60 of 155

The formula for calculating a Fee Rate requires the amount of Budgeted CAT Costs to be recovered. Specifically, Section 11.3(a)(iii)(B) of the CAT NMS Plan requires a fee filing to provide:

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) 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, 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.

In accordance with this requirement, the Exchange has set forth the amount and type of 2025 Budgeted CAT Costs for each of these categories above.

Section 11.3(a)(iii)(B) of the CAT NMS Plan also requires that the fee filing provide "sufficient detail to demonstrate that the budget for the upcoming year, or part of year, as applicable, is reasonable and appropriate." As discussed below, the Exchange believes that the budget for 2025 is "reasonable and appropriate." Each of the costs included in CAT Fee 2025-1 are reasonable and appropriate because the costs are consistent with standard industry practice, based on the need to comply with the requirements of the CAT NMS Plan, incurred subject to negotiations performed on an arm's length basis, and/or are consistent with the needs of any legal entity, particularly one with no employees.

(i) Technology: Cloud Hosting Services

In approving the CAT Funding Model, the Commission recognized that it is appropriate to recover budgeted costs related to cloud hosting services as a part of CAT Fees. ¹¹⁰ CAT LLC determined that the budgeted costs related to cloud hosting services described in this filing are

Section 11.3(a)(iii)(B)(B)(1) of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 61 of 155

reasonable and should be included as a part of the 2025 Budgeted CAT Costs. As described above, the cloud hosting services costs reflect, among other things, the breadth of the CAT cloud activities, data volumes far in excess of the original volume estimates, the need for specialized cloud services given the volume and unique nature of the CAT, the processing time requirements of the Plan, and regular efforts to seek to minimize costs where permissible under the Plan. CAT LLC determined that use of cloud hosting services is necessary for implementation of the CAT, particularly given the substantial data volumes associated with the CAT, and that the fees for cloud hosting services negotiated by FCAT were reasonable, taking into consideration a variety of factors, including the expected volume of data and the breadth of services provided and market rates for similar services. ¹¹¹ Indeed, the actual costs of the CAT are far in excess of the original estimated costs of the CAT due to various factors, including the higher volumes and greater complexity of the CAT than anticipated when Rule 613 was originally adopted.

To comply with the requirements of the Plan, the breadth of the cloud activities related to the CAT is substantial. The cloud services not only include the production environment for the CAT, but they also include two industry testing environments, support environments for quality assurance and stress testing and disaster recovery capabilities. Moreover, the cloud storage costs are driven by the requirements of the Plan, which requires the storage of multiple versions of the data, from the original submitted version of the data through various processing steps, to the final version of the data.

Data volume is a significant driver of costs for cloud hosting services. When the Commission adopted the CAT NMS Plan in 2016, it estimated that the CAT would need to

For a discussion of the amount and type of cloud hosting services fees, *see* Section 3(a)(2)(C)(i) above.

SR-EMERALD-2024-31 Page 62 of 155

receive 58 billion records per day¹¹² and that annual operating costs for the CAT would range from \$36.5 million to \$55 million.¹¹³ The actual daily data volumes for Q3 2024 were more than ten times that original estimate.

In addition to the effect of the data volume on the cloud hosting costs, the processing timelines set forth in the Plan contribute to the cloud hosting costs. Although CAT LLC has proactively sought to manage cloud hosting costs while complying with the Plan, including through requests to the Commission for exemptive relief and amendments to the CAT NMS Plan, stringent CAT NMS Plan requirements do not allow for any material flexibility in cloud architecture design choices, processing timelines (*e.g.*, the use of non-peak processing windows), or lower-cost storage tiers. As a result, the required CAT processing timelines contribute to the cloud hosting costs of the CAT.

The costs for cloud hosting services also reflect the need for specialized cloud hosting services given the data volume and unique processing needs of the CAT. The data volume as well as the data processing needs of the CAT necessitate the use of cloud hosting services. The equipment, power and services required for an on-premises data model, the alternative to cloud hosting services, would be cost prohibitive. Moreover, as CAT was being developed, there were limited cloud hosting providers that could satisfy all the necessary CAT requirements, including the operational and security criteria. Over time, more providers offering cloud hosting services that would satisfy these criteria have entered the market. CAT LLC will continue to evaluate alternative cloud hosting services, recognizing that the time and cost to move to an alternative cloud provider would be substantial.

Appendix D-4 of the CAT NMS Plan at n.262.

¹¹³ CAT NMS Plan Approval Order at 84801.

SR-EMERALD-2024-31 Page 63 of 155

The reasonableness of the cloud hosting services costs is further supported by key cost discipline mechanisms for the CAT—a cost-based funding structure, cost transparency, cost management efforts (including regular efforts to lower compute and storage costs where permitted by the Plan) 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. 114

(ii) Technology: Operating Fees

In approving the CAT Funding Model, the SEC recognized that it is appropriate to recover budgeted costs related to operating fees as a part of CAT Fees. ¹¹⁵ CAT LLC determined that the budgeted costs related to operating fees described in this filing are reasonable and should be included as a part of the 2025 Budgeted CAT Costs.

The operating fees would include the negotiated fees paid by CAT LLC to the Plan Processor to operate and maintain the system for order-related information and to perform business operations related to the system, including compliance, security, testing, training, communications with the industry (*e.g.*, management of the FINRA CAT Helpdesk, FAQs, website and webinars) and program management. CAT LLC determined that the selection of FCAT as the Plan Processor was reasonable and appropriate given its expertise with securities regulatory reporting, after a process of considering other potential candidates. CAT LLC also determined that the fixed price contract, negotiated on an arm's length basis with the goals of managing costs and receiving services required to comply with the CAT NMS Plan and Rule 613, was reasonable and appropriate, taking into consideration a variety of factors, including the

See Securities Exchange Act Rel. No. 97151 (Mar. 15, 2023), 88 Fed. Reg. 17086, 17117 (Mar. 21, 2023) (describing key cost discipline mechanisms for the CAT).

Section 11.3(a)(iii)(B)(B)(1) of the CAT NMS Plan.

See Section 3(a)(2)(C)(ii) above.

SR-EMERALD-2024-31 Page 64 of 155

breadth of services provided and market rates for similar types of activity.¹¹⁷ The services to be performed by FCAT for 2025 and the budgeted costs related to such services are described above.¹¹⁸

The operating costs also include costs related to the receipt of market data. CAT LLC anticipates receiving certain market data from Algoseek during 2025. CAT LLC anticipates that Algoseek will provide data as set forth in the SIP Data requirements of the CAT NMS Plan and that the fees are reasonable and in line with market rates for market data received. 119

(iii) Technology: CAIS Operating Fees

In approving the CAT Funding Model, the SEC recognized that it is appropriate to recover budgeted costs related to CAIS operating fees as a part of CAT Fees. ¹²⁰ CAT LLC determined that the budgeted costs related to CAIS operating fees described in this filing are reasonable and should be included as a part of the 2025 Budgeted CAT Costs. The CAIS operating fees would include the fees paid to the Plan Processor to operate and maintain CAIS and to perform the business operations related to the system, including compliance, security, testing, training, communications with the industry (*e.g.*, management of the FINRA CAT Helpdesk, FAQs, website and webinars) and program management. CAT LLC determined that the fees for FCAT's CAIS-related services, negotiated on an arm's length basis with the goals of managing costs and receiving services required to comply with the CAT NMS Plan, taking into consideration a variety of factors, including the services to be provided and market rates for

^{117 &}lt;u>Id</u>.

^{118 &}lt;u>Id</u>.

¹¹⁹ Id

Section 11.3(a)(iii)(B)(B)(1) of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 65 of 155

similar types of activity, are reasonable and appropriate. ¹²¹ The services to be performed by FCAT for 2025 and the budgeted costs for such services are described above. ¹²²

(iv) Technology: Change Request Fees

In approving the CAT Funding Model, the SEC recognized that it is appropriate to recover budgeted costs related to change request fees as a part of CAT Fees. ¹²³ CAT LLC determined that the budgeted costs related to change request fees described in this filing are reasonable and should be included as a part of the 2025 Budgeted CAT Costs. It is common practice to utilize a change request process to address evolving needs in technology projects. This is particularly true for a project like CAT that is the first of its kind, both in substance and in scale. The substance and costs of each of the change requests are evaluated by the Operating Committee and approved in accordance with the requirements for Operating Committee meetings. In each case, CAT LLC forecasts that the change requests will be necessary to implement the CAT. As described above, ¹²⁴ CAT LLC has included a reasonable placeholder budget amount for potential change requests that may arise during 2025. As noted above, the total budgeted costs for change requests during 2025 represent a small percentage of the 2025 Budgeted CAT Costs—that is, approximately 0.3% of the 2025 Budgeted CAT Costs.

(v) Capitalized Developed Technology Costs

In approving the CAT Funding Model, the SEC recognized that it is appropriate to recover budgeted costs related to capitalized developed technology costs as a part of CAT

^{121 &}lt;u>See Section 3(a)(2)(C)(iii) above.</u>

^{122 &}lt;u>Id</u>.

Section 11.3(a)(iii)(B)(B)(1) of the CAT NMS Plan.

 $[\]underline{\text{See}}$ Section 3(a)(2)(C)(iv) above.

SR-EMERALD-2024-31 Page 66 of 155

Fees. ¹²⁵ In general, capitalized developed technology costs would include costs related to, for example, certain development costs, costs related to certain modifications, upgrades and other changes to the CAT, CAIS implementation fees and license fees. The amount and type of budgeted capitalized developed technology costs for 2025, which relate to the CAIS software license fee and technology changes to be implemented by FCAT, are described in more detail above. ¹²⁶ CAT LLC determined that these budgeted costs are reasonable and should be included as a part of the 2025 Budgeted CAT Costs.

(vi) Legal

In approving the CAT Funding Model, the SEC recognized that it is appropriate to recover budgeted costs related to legal fees as a part of CAT Fees. 127 CAT LLC determined that the budgeted legal costs described in this filing are reasonable and should be included as a part of the 2025 Budgeted CAT Costs. Given the unique nature of the CAT, the number of parties involved with the CAT (including, for example, the SEC, Participants, Industry Members, and vendors) and the many regulatory, contractual and other issues associated with the CAT, the scope of the necessary legal services is substantial. CAT LLC determined that the scope of the proposed legal services is necessary to implement and maintain the CAT and that the legal rates reflect the specialized services necessary for such a project. CAT LLC determined to hire and continue to use each law firm based on a variety of factors, including their relevant expertise and fees. In each case, CAT LLC determined that the fee rates were in line with market rates for specialized legal expertise. In addition, CAT LLC determined that the budgeted costs for the legal projects were appropriate given the breadth of the services provided. The services to be

Section 11.3(a)(iii)(B)(B)(1) of the CAT NMS Plan.

See Section 3(a)(2)(C)(v) above.

Section 11.3(a)(iii)(B)(B)(2) of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 67 of 155

performed by each law firm for 2025 and the budgeted costs related to such services are described above. 128

(vii) Consulting

In approving the CAT Funding Model, the SEC recognized that it is appropriate to recover budgeted consulting costs as a part of CAT Fees. ¹²⁹ CAT LLC determined that the budgeted consulting costs described in this filing are reasonable and should be included as a part of the 2025 Budgeted CAT Costs. Because there are no CAT employees ¹³⁰ and because of the significant number of issues associated with the CAT, the consultants are budgeted to provide assistance in the management of various CAT matters and the processes related to such matters. ¹³¹ CAT LLC determined the budgeted consulting costs were appropriate, as the consulting services were to be provided at reasonable market rates that were comparable to the rates charged by other consulting firms for similar work. Moreover, the total budgeted costs for such consulting services were appropriate in light of the breadth of services provided by Deloitte. The services budgeted to be performed by Deloitte and the budgeted costs related to such services are described above. ¹³²

(viii) Insurance

^{128 &}lt;u>See Section 3(a)(2)(C)(vi) above.</u>

Section 11.3(b)(iii)(B)(B)(3) of the CAT NMS Plan.

As stated in the filing of the proposed CAT NMS Plan, "[i]t is the intent of the Participants that the Company have no employees." Securities Exchange Act Rel. No. 77724 (Apr. 27, 2016), 81 Fed. Reg. 30614, 30621 (May 17, 2016).

¹³¹ CAT LLC uses certain third parties to perform tasks that may be performed by administrators for other NMS Plans. See, e.g., CTA Plan and CQ Plan.

Section 3(a)(2)(C)(vii) above.

SR-EMERALD-2024-31 Page 68 of 155

In approving the CAT Funding Model, the SEC recognized that it is appropriate to recover budgeted insurance costs as a part of CAT Fees. ¹³³ CAT LLC determined that the budgeted insurance costs described in this filing are reasonable and should be included as a part of the 2025 Budgeted CAT Costs. CAT LLC determined that it is common practice to have directors' and officers' liability insurance, and errors and omissions liability insurance. CAT LLC further determined that it was important to have cyber security insurance given the nature of the CAT, and such a decision is consistent with the CAT NMS Plan, which states that the cyber incident response plan may include "[i]nsurance against security breaches." ¹³⁴ As discussed above, ¹³⁵ CAT LLC determined that the budgeted insurance costs were appropriate given its prior experience with this market and an analysis of the alternative insurance offerings. Based on this analysis, CAT LLC determined that the selected insurance policies provided appropriate coverage at reasonable market rates. ¹³⁶

(ix) Professional and Administration

In approving the CAT Funding Model, the SEC recognized that it is appropriate to recover budgeted professional and administration costs as a part of CAT Fees. ¹³⁷ CAT LLC determined that the budgeted professional and administration costs described in this filing are reasonable and should be included as a part of the 2025 Budgeted CAT Costs. Because there are no CAT employees, all required accounting, financial, tax, cash management and treasury functions for CAT LLC have been outsourced at market rates. In addition, the required annual

Section 11.3(b)(iii)(B)(B)(4) of the CAT NMS Plan.

Section 4.1.5 of Appendix D of the CAT NMS Plan.

See Section 3(a)(2)(C)(viii) above.

¹³⁶ Id.

Section 11.3(a)(iii)(B)(B)(5) of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 69 of 155

financial statement audit of CAT LLC is included in professional and administration costs, which costs are also at market rates. The services performed by Anchin and Grant Thornton and the costs related to such services are described above. 138

CAT LLC anticipates continuing to make use of Anchin, a financial advisory firm, to assist with financial matters for the CAT. CAT LLC determined that the budgeted costs for Anchin were appropriate, as the financial advisory services were to be provided at reasonable market rates that were comparable to the rates charged by other such firms for similar work. Moreover, the total budgeted costs for such financial advisory services were appropriate in light of the breadth of services provided by Anchin. The services budgeted to be performed by Anchin and the budgeted costs related to such services are described above. 139

CAT LLC anticipates continuing to make use of Grant Thornton, an independent accounting firm, to complete the audit of CAT LLC's financial statements, in accordance with the requirements of the CAT NMS Plan. CAT LLC determined that the budgeted costs for Grant Thornton were appropriate, as the accounting services were to be provided at reasonable market rates that were comparable to the rates charged by other such firms for similar work. Moreover, the total budgeted costs for such accounting services were appropriate in light of the breadth of services provided by Grant Thornton. The services budgeted to be performed by Grant Thornton and the budgeted costs related to such services are described above. 140

(x) Public Relations Costs

^{138 &}lt;u>See Section 3(a)(2)(C)(ix) above.</u>

^{139 &}lt;u>Id</u>.

^{140 &}lt;u>Id</u>.

SR-EMERALD-2024-31 Page 70 of 155

In approving the CAT Funding Model, the SEC recognized that it is appropriate to recover budgeted public relations costs as a part of CAT Fees. ¹⁴¹ CAT LLC determined that the budgeted public relations costs described in this filing are reasonable and should be included as a part of the 2025 Budgeted CAT Costs. CAT LLC determined that the types of public relations services to be utilized were beneficial to the CAT and market participants more generally. Public relations services are important for various reasons, including monitoring comments made by market participants about CAT and understanding issues related to the CAT discussed on the public record. ¹⁴² By continuing to engage a public relations firm, CAT LLC will be better positioned to understand and address CAT issues to the benefit of all market participants. ¹⁴³ Moreover, CAT LLC determined that the budgeted rates charged for such services were in line with market rates. ¹⁴⁴ As noted above, the total budgeted public relations costs for 2025 represent a small percentage of the 2025 Budgeted CAT Costs—that is, approximately 0.02% of the 2025 Budgeted CAT Costs.

(xi) Reserve

In approving the CAT Funding Model, the SEC recognized that it is appropriate to recover budgeted reserve costs as a part of CAT Fees. ¹⁴⁵ CAT LLC determined that the collection of a reserve in the amount of 25% of the 2025 Budgeted CAT Costs (other than the reserve) complies with the requirements of the CAT NMS Plan related to a reserve, is a reasonable amount. Therefore, CAT LLC determined that the budgeted costs for the reserve

Section 11.3(a)(iii)(B)(B)(6) of the CAT NMS Plan.

See Section 3(a)(2)(C)(x) above.

^{143 &}lt;u>Id</u>.

¹⁴⁴ Id.

Section 11.3(a)(iii)(B)(B) of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 71 of 155

described in this filing are reasonable and should be included as a part of the 2025 Budgeted CAT Costs.

In its approval order for the CAT Funding Model, the Commission stated that it would be reasonable for the annual operating budget for the CAT to "include a reserve of not more than 25% of the annual budget." ¹⁴⁶ In making this statement, the Commission noted the following:

Because the CAT is a critical regulatory tool/system, the CAT needs to have a stable funding source to build financial stability to support the Company as a going concern. Funding for the CAT, as noted in Section 11.1(b), is the responsibility of the Participants and the industry. Because CAT fees are charged based on the budget, which is based on anticipated volume, it is reasonable to have a reserve on hand to prevent a shortfall in the event there is an unexpectedly high volume in a given year. A reserve would help to assure that the CAT has sufficient resources to cover costs should there be unanticipated costs or costs that are higher than expected. 147

The SEC also recognized that a reserve would help address the difficulty in predicting certain variable CAT costs, like trading volume. The SEC also recognized that CAT fees will be collected approximately three months after trading activity on which a CAT fee is based, or 25% of the year, and that the reserve would be available to address funding needs related to this three-month delay. The inclusion of the proposed reserve in the 2025 Budgeted CAT Costs would provide each of these benefits to the CAT. The reserve is discussed further above. 150

(B) Reconciliation of Budget to the Collected Fees

The CAT NMS Plan also requires fee filings for Prospective CAT Fees to include "a discussion of how the budget is reconciled to the collected fees." ¹⁵¹ As of October 2024, CAT

¹⁴⁶ CAT Funding Model Approval Order at 62657.

^{147 &}lt;u>Id</u>.

¹⁴⁸ Id.

^{149 &}lt;u>Id</u>

 $[\]underline{\text{See}}$ Section 3(a)(2)(C)(xi) above.

Section 11.3(a)(iii)(B)(C) of the CAT NMS Plan.

SR-EMERALD-2024-31 Page 72 of 155

LLC sent to Industry Members and Participants the first invoices for the first Prospective CAT Fee, CAT Fee 2024-1. Payment for the first invoices for CAT Fee 2024-1 was due in November 2024. Accordingly, CAT LLC has begun to collect CAT fees related to the Updated 2024 CAT Budget. However, given the early stages of the collection of the fees pursuant to CAT Fee 2024-1, it is not yet clear the extent to which such invoiced fees will be collected. Accordingly, the 2025 CAT Budget assumes that the full amount set forth in the Updated 2024 CAT Budget will be collected.

(C) Total Executed Equivalent Share Volume for the Prior 12 Months

The total executed equivalent share volume of transactions in Eligible Securities for the period from October 2023 through September 2024 was 4,080,578,509,209.40 executed equivalent shares. CAT LLC determined the total executed equivalent share volume for the prior twelve months by counting executed equivalent shares in the same manner as it counts executed equivalent shares for CAT billing purposes.¹⁵²

(D) Projected Executed Equivalent Share Volume for 2025

CAT LLC has determined that the projected total executed equivalent share volume for 2025 would be 4,080,578,509,209.40 executed equivalent shares, which is the same as the executed equivalent share volume for the prior 12 months. CAT LLC determined that such an approach was reasonable as the CAT's annual executed equivalent share volume has remained relatively constant in recent years. For example, the executed equivalent share volume for 2021 was 3,963,697,612,395 executed equivalent shares, the executed equivalent share volume for

See Section 3(a)(2)(D) above.

^{153 &}lt;u>Id</u>.

SR-EMERALD-2024-31 Page 73 of 155

2022 was 4,039,821,841,560.31 executed equivalent shares, and the executed equivalent share volume for 2023 was 3,868,940,345,680.6.

(E) Actual Fee Rate for CAT Fee 2025-1

(i) Decimal Places

As noted in the approval order for the CAT Funding Model, as a practical matter, the fee filing for a CAT Fee would provide the exact fee per executed equivalent share to be paid for each CAT Fee, by multiplying the Fee Rate by one-third and describing the relevant number of decimal places for the fee rate. Accordingly, proposed paragraph (a)(iv)(B) of the fee schedule would set forth a fee rate of \$0.000022 per executed equivalent share. This fee rate is calculated by multiplying Fee Rate 2025-1 by one-third and rounding the result to six decimal places. CAT LLC determined that the use of six decimal places is reasonable as it balances the accuracy of the calculation with the potential systems and other impracticalities of using additional decimal places in the calculation. 155

(ii) Reasonable Fee Level

The Exchange believes that imposing CAT Fee 2025-1 with a fee rate of \$0.000022 per executed equivalent share is reasonable because it provides for a revenue stream for the Company that is aligned with the 2025 Budgeted CAT Costs. Moreover, the Exchange believes that the level of the fee rate is reasonable, as it is less than CAT Fee 2024-1 and is comparable to other transaction-based fees. Indeed, CAT Fee 2025-1 is significantly lower than fees assessed

¹⁵⁴ CAT Funding Model Approval Order at 62658, n.658.

See Section 3(a)(5)(A) above.

SR-EMERALD-2024-31 Page 74 of 155

pursuant to Section 31 (*e.g.*, \$0.0009 per share to \$0.0004 per share), ¹⁵⁶ and, as a result, the magnitude of CAT Fee 2025-1 is small, and therefore will mitigate any potential adverse economic effects or inefficiencies. ¹⁵⁷

(3) CAT Fee 2025-1 Provides for an Equitable Allocation of Fees

CAT Fee 2025-1 provides for an equitable allocation of fees, as it equitably allocates
CAT costs between and among the Participants and Industry Members. The SEC approved the
CAT Funding Model, finding that each aspect of the CAT Funding Model satisfied the
requirements of the Exchange Act, including the formula for calculating CAT Fees as well as the
Industry Members to be charged the CAT Fees. In approving the CAT Funding Model, the
SEC stated that "[t]he Participants have sufficiently demonstrated that the proposed allocation of
fees is reasonable." Accordingly, the CAT Funding Model sets forth the requirements for
allocating fees related to Budgeted CAT Costs among Participants and Industry Members, and
the fee filings for CAT Fees must comply with those requirements.

CAT Fee 2025-1 provides for an equitable allocation of fees as it complies with the requirements regarding the calculation of CAT Fees as set forth in the CAT NMS Plan. For example, as described above, the calculation of CAT Fee 2025-1 complies with the formula set forth in Section 11.3(a) of the CAT NMS Plan. In addition, CAT Fee 2025-1 would be charged

¹⁵⁶ CAT Funding Model Approval Order at 62663, 62682. In explaining the comparison of Section 31 fees to CAT fees in the CAT Funding Model Approval Order, the SEC noted that "Section 31 fees are expressed per dollar volume traded. Translating this to a per share range involves identifying reasonable high and low trade sizes. The lower end of this range comes from the 25th percentile in \$ trade size of 1,200 and share trade size of 71 from the first quarter of 2021. The higher end of this range comes from the 75th percentile in \$ trade size of 5,200 and share trade size of 300 from the first quarter of 2021. Section 31 fees have ranged from \$5.10 per \$Million to \$23.10 per \$Million from Oct. 1, 2016 to Mar. 1, 2023." Id. at 62682., n.1100. In 2024, Section 31 fees were raised further to \$27.80 per million dollars.

¹⁵⁷ Id

See Section 11.3(a) of the CAT NMS Plan.

¹⁵⁹ CAT Funding Model Approval Order at 62629.

SR-EMERALD-2024-31 Page 75 of 155

to CEBBs and CEBSs in accordance with Section 11.3(a) of the CAT NMS Plan. Furthermore, the Participants would be charged for their designated share of the 2025 Budgeted CAT Costs through a fee implemented via the CAT NMS Plan, which would have the same fee rate as CAT Fee 2025-1.

In addition, as discussed above, each of the inputs into the calculation of CAT Fee 2025-1—the 2025 Budgeted CAT Costs, the count for the executed equivalent share volume for the prior 12 months, and the projected executed equivalent share volume for 2025—are reasonable. Moreover, these inputs lead to a reasonable fee rate for CAT Fee 2025-1 that is lower than other fee rates for transaction-based fees. A reasonable fee rate allocated in accordance with the requirements of the CAT Funding Model provides for an equitable allocation of fees.

(4) CAT Fee 2025-1 is Not Unfairly Discriminatory

CAT Fee 2025-1 is not an unfairly discriminatory fee. The SEC approved the CAT Funding Model, finding that each aspect of the CAT Funding Model satisfies the requirements of the Exchange Act. In reaching this conclusion, the SEC analyzed the potential effect of CAT Fees calculated pursuant to the CAT Funding Model on affected categories of market participants, including Participants (including exchanges and FINRA), Industry Members (including subcategories of Industry Members, such as alternative trading systems, CAT Executing Brokers and market makers), and investors generally, and considered market effects related to equities and options, among other things. CAT Fee 2025-1 complies with the requirements regarding the calculation of CAT Fees as set forth in the CAT NMS Plan. In addition, as discussed above, each of the inputs into the calculation of CAT Fee 2025-1 and the resulting fee rate for CAT Fee 2025-1 is reasonable. Therefore, CAT Fee 2025-1 does not impose an unfairly discriminatory fee on Industry Members.

SR-EMERALD-2024-31 Page 76 of 155

The Exchange believes the proposed fees established pursuant to the CAT Funding Model promote just and equitable principles of trade, and, in general, protect investors and the public interest, and are provided in a transparent manner and with specificity in the fee schedule. The Exchange also believes that the proposed fees are reasonable because they would provide ease of calculation, ease of billing and other administrative functions, and predictability of a fee based on fixed rate per executed equivalent share. Such factors are crucial to estimating a reliable revenue stream for CAT LLC and for permitting Exchange members to reasonably predict their payment obligations for budgeting purposes.

4. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

Section 6(b)(8) of the Act¹⁶⁰ requires that the Exchange's rules not impose any burden on competition that is not necessary or appropriate in furtherance of the purpose of the Exchange Act. The Exchange does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange notes that CAT Fee 2025-1 implements provisions of the CAT NMS Plan that were approved by the Commission and is designed to assist the Exchange in meeting its regulatory obligations pursuant to the Plan.

In addition, all Participants (including exchanges and FINRA) are proposing to introduce CAT Fee 2025-1 on behalf of CAT LLC to implement the requirements of the CAT NMS Plan. Therefore, this is not a competitive fee filing, and, therefore, it does not raise competition issues between and among the Participants.

Furthermore, in approving the CAT Funding Model, the SEC analyzed the potential competitive impact of the CAT Funding Model, including competitive issues related to market

¹⁵ U.S.C. 78f(b)(8).

SR-EMERALD-2024-31 Page 77 of 155

services, trading services and regulatory services, efficiency concerns, and capital formation. ¹⁶¹ The SEC also analyzed the potential effect of CAT fees calculated pursuant to the CAT Funding Model on affected categories of market participants, including Participants (including exchanges and FINRA), Industry Members (including subcategories of Industry Members, such as alternative trading systems, CAT Executing Brokers and market makers), and investors generally, and considered market effects related to equities and options, among other things. Based on this analysis, the SEC approved the CAT Funding Model as compliant with the Exchange Act. CAT Fee 2025-1 is calculated and implemented in accordance with the CAT Funding Model as approved by the SEC.

As discussed above, each of the inputs into the calculation of CAT Fee 2025-1 is reasonable and the resulting fee rate for CAT Fee 2025-1 calculated in accordance with the CAT Funding Model is reasonable. Therefore, CAT Fee 2025-1 would not impose any burden on competition that is not necessary or appropriate in furtherance of the purpose of the Exchange Act.

5. <u>Self-Regulatory Organization's Statement on Comments on the Proposed Rule</u>
<u>Change Received from Members, Participants, or Others</u>

Not applicable.

6. Extension of Time Period for Commission Action

Not applicable.

7. <u>Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2) or Section 19(b)(7)(D)</u>

¹⁶¹ CAT Funding Model Approval Order at 62676-86.

SR-EMERALD-2024-31 Page 78 of 155

Pursuant to Section 19(b)(3)(A)(ii) of the Act, ¹⁶² and Rule 19b-4(f)(2) thereunder ¹⁶³ the Exchange has designated this proposal as establishing or changing a due, fee, or other charge imposed on any person, whether or not the person is a member of the self-regulatory organization, which renders the proposed rule change effective upon filing.

8. <u>Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission</u>

As discussed in detail above, the proposed rule change is consistent with, and would implement the CAT fee requirements applicable to Industry Members in accordance with, the CAT NMS Plan. As such, each Participant in the CAT NMS Plan is proposing the same fee requirements.

9. <u>Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act</u> Not applicable.

10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act

Not applicable.

11. Exhibits

- 1. Completed notice of proposed rule change for publication in the <u>Federal Register</u>.
- 5. Copy of the applicable section of the Fee Schedule.

¹⁵ U.S.C. 78s(b)(3)(A)(ii).

¹⁷ CFR 240.19b-4.