

EXHIBIT 4A

(additions are underlined; deletions are [bracketed])

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Cboe BZX U.S. Equities Exchange Fee Schedule

Effective [May 23]~~November 3~~, 2017

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Membership Fees:

(No change).

Consolidated Audit Trail - Funding Fees:

(a) Definitions:

(1) For purposes of the Consolidated Audit Trail Funding Fees, the terms “CAT”, “CAT NMS Plan”, “Industry Member”, “NMS Stock”, “OTC Equity Security”, “Options Market Maker”, and “Participant” are defined as set forth in [the] Rule 4.5 (Consolidated Audit Trail – Definitions).

(2) “ATS” means an alternative trading system as defined in Rule 300(a) of Regulation ATS under the Securities Exchange Act of 1934, as amended, that operates pursuant to Rule 301 of Regulation ATS.

(3) “CAT Fee” means the Consolidated Audit Trail Funding Fee(s) to be paid by Industry Members as set forth in paragraph (b) below.

(4) “Equity ATS” is an ATS that executes transactions in NMS Stocks and/or OTC Equity Securities.

(5) “Equity Execution Venue” means an Execution Venue that trades NMS Stocks and/or OTC Equity Securities.

(6) “Execution Venue” means a Participant or an ATS (excluding any such ATS that does not execute orders).

(b) Fee Schedule:

(1) The CAT NMS, LLC will assign each Industry Member (other than an Equity ATS) to a fee tier once every quarter, where such tier assignment is calculated by ranking each Industry Member based on its total message traffic (with discounts for equity market maker quotes and Options Market Maker quotes based on the trade to quote ratio for equities and

options, respectively) for the three months prior to the quarterly tier calculation day and assigning each Industry Member to a tier based on that ranking and predefined Industry Member percentages. The Industry Members with the highest total quarterly message traffic will be ranked in Tier 1, and the Industry Members with lowest quarterly message traffic will be ranked in Tier [9]7. Each quarter, each Industry Member (other than an Equity ATS) shall pay the following CAT Fee corresponding to the tier assigned by the CAT NMS, LLC for such Industry Member for that quarter:

Tier	Percentage of Industry Members	Quarterly CAT Fee
1	[0.500%] <u>0.900%</u>	[\$101,004] <u>\$81,483</u>
2	[2.500%] <u>2.150%</u>	[\$81,153] <u>\$59,055</u>
3	[2.125%] <u>2.800%</u>	[\$57,717] <u>\$40,899</u>
4	[4.625%] <u>7.750%</u>	[\$19,965] <u>\$25,566</u>
5	[3.625%] <u>8.300%</u>	[\$12,489] <u>\$7,428</u>
6	[4.000%] <u>18.800%</u>	[\$7,680] <u>\$1,968</u>
7	[17.500%] <u>59.300%</u>	[\$1,503] <u>\$105</u>
[8]	[20.125%]	[\$435]
[9]	[45.000%]	[\$66]

(2) The CAT NMS, LLC will assign each Equity ATS to a fee tier once every quarter, where such tier assignment is calculated by ranking each Equity Execution Venue based on its total market share of NMS Stocks and OTC Equity Securities (with a discount for Equity ATSs exclusively trading OTC Equity Securities based on the average shares per trade ratio between NMS Stocks and OTC Equity Securities) for the three months prior to the quarterly tier calculation day and assigning each Equity Execution Venue to a tier based on that ranking and predefined Equity Execution Venue percentages. The Equity Execution Venues with the higher total quarterly market share will be ranked in Tier 1, and the Equity Execution Venues with the [lower]lowest quarterly market share will be ranked in Tier [2]4. Each quarter, each Equity ATS shall pay the following CAT Fee corresponding to the tier assigned by the CAT NMS, LLC for such Equity ATS for that quarter:

Tier	Percentage of Equity Execution Venues	Quarterly CAT Fee
1	25.00%	[\$63,375] <u>\$81,048</u>
2	[75.00%] <u>42.00%</u>	[\$38,820] <u>\$37,062</u>
<u>3</u>	<u>23.00%</u>	<u>\$21,126</u>
<u>4</u>	<u>10.00%</u>	<u>\$129</u>

(c) Timing and Manner of Payments:

(1) The CAT NMS, LLC will provide each Industry Member with one invoice each quarter for its CAT Fees as determined pursuant to paragraph (b) above, regardless of whether the Industry Member is a member of multiple self-regulatory organizations. Each Industry Member will pay its CAT Fees to the CAT NMS, LLC via the centralized system for the

collection of CAT Fees established by the CAT NMS, LLC in the manner prescribed by the CAT NMS, LLC.

(2) Each Industry Member shall pay CAT Fees within thirty days after receipt of an invoice or other notice indicating payment is due (unless a longer payment period is otherwise indicated). If an Industry Member fails to pay any such fee when due, such Industry Member shall pay interest on the outstanding balance from such due date until such fee is paid at a per annum rate equal to the lesser of (i) the Prime Rate plus 300 basis points, or (ii) the maximum rate permitted by applicable law.

(d) Expiration: These Consolidated Audit Trail Funding Fees will automatically expire two years after the operative date of the amendment of the CAT NMS Plan that adopts CAT fees for the Participants.

EXHIBIT 4B

(additions are underlined; deletions are [bracketed])

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Cboe BZX Options Exchange Fee Schedule

Effective [May 23]November 3, 2017

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Membership Fees

(No change).

Consolidated Audit Trail - Funding Fees:

(a) Definitions:

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