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December 22, 2022

Via Electronic Mail (rule-comments@sec.gov)

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

Re: Amendment and Partial Amendment No. 1 to an Amendment to the National Market System Plan Governing the Consolidated Audit Trail File No. 4-698 (Release #: 34-94984[1] and 34-96394[2])

Dear Ms. Countryman:

On behalf of Data Boiler Technologies, I am pleased to provide the U.S. Securities and Exchange Commission (SEC) with our comments on this release concerning a proposed amendment and Partial Amendment No. 1 to an Amendment to the CAT NMS Plan to implement a revised funding model for the Consolidated Audit Trail (CAT). Both the original funding model and the Executed Share Model proposed by (FINRA) CAT LLC are **inequitable and inconsistent with the Exchange Act**. It is a **Financial Transaction Tax**[3] tolling everyone in the industry, which will be passed-down to the end-investors. Congress never confers such tax levying authority to the SEC. If the CAT operating committee's funding authority under the CAT NMS Plan Exhibit A - Article XI §11.1[4] is a delegated power conferred by the SEC to perform a public duty, then we have the following concerns and/or questions:

1. If the CAT fee is related to supporting the SEC to "rapidly reconstruct market events/ trading activity" beyond using the public available data, then the Commission may subscribe to the Self-Regulatory Organizations' (SROs) proprietary feeds for any non-public data, or seek expressed consent to voluntarily share, or use of its permissible authority to summon the relevant private information.

2. If the CAT fee is related to "facilitating risk-based examinations" and/or "improving abilities for evaluating tips, complaints, and referrals of potential misconduct made to regulators, monitoring and evaluating changes to market structure", then the SEC and SROs may go back to the Congress for funding or pay for it using collected fines, penalties, and intragovernmental fees, but not "user fees".

3. If the CAT fee is related to "better identification of potentially manipulative trading activity, increased efficiency of cross-market and principal order surveillance", then private surveillance businesses affiliated with Exchange Groups stand to receive benefits from CAT, hence they should pay the most if not all such CAT costs. The SEC and other SROs shall have choice to use peers' surveillance system or build their own or buy from other private vendors.

4. If the CAT fee is related to "improving efficiencies from a potential reduction in disparate reporting requirements and data requests", then it should be segregated into the regulators' portion and the users' portion. If CAT is constituted as one of the "user fees" imposed by the SEC and/or SROs, then according to the Government Accountability Office, these "fees assessed to users for goods or services provided by the Federal Government are deposited to the Treasury as miscellaneous receipts and are generally not available to the agency." Fees assessed under the authority of the Independent Offices Appropriation Act of 1952 (codified at 31 U.S.C. § 9701)[5], rather than under a specific authorizing

[1] https://www.sec.gov/rules/sro/nms/2022/34-94984.pdf
[2] https://www.sec.gov/rules/sro/nms/2022/34-96394.pdf
[3] https://securitytraders.org/wp-content/uploads/STA-FTT-Letter-FINAL-03_16_2021.pdf
[4] https://www.catnmsplan.com/sites/default/files/2020-02/34-79318-exhibit-a.pdf
[5] https://www.law.cornell.edu/uscode/text/31/9701

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statute, must be deposited to the Treasury as miscellaneous receipts and are not available to the agency or program that collected the fees, unless otherwise authorized by law.

5. If the CAT NMS Plan is meant to prevent flash crashes, curb suspicious trading behavior and unusual market events, then why should one who is doing things fairly and squarely be subjected to regulatory scrutiny and CAT cost burden?

We challenged the existing §11.2 Funding Principles as being insufficient to check against the CAT operating committee's legislative power to (a) approve budget of CAT and (b) establish fees for themselves as well as for all industry members, the committee's executive power in (c) imposing and collecting of all CAT Funding Fees, and the judicial right to (d) assign and change the tier assigned to any particular Person, resolution of disputes upon reasonable notice to such Person. We **suggest adding a new CAT funding principle 11.2(g)** about CAT costs allocation should be in proportion with specific public benefits received, i.e. not private benefits of CAT participants.

FINRA - CAT LLC being the appointed CAT processor does not automatically entitle the CAT participants to the "rights" in recovering the costs of creating and funding CAT. Such rights must be earned through fulfillment of its "obligations" and have demonstrable benefits to the NMS.

(A) **Recovery** in a broad sense means the **return of something lost**. "**Prospective**" CAT Costs and related calculation under the proposed §11.3(a)(iii)(B) that includes components, such as "**projected volume**" and/or "Equivalent executed share volume **projections**" – are hypothetical numbers about the future rather than actual "incurred" lost happened in the past. Therefore, they are unfit and not qualified as recoupable costs. We oppose the Executed Shares Model by revising the manner in which fees to recover cost.

(B) We oppose the proposed changes to the funding principle in Section 11.2(b) of the CAT NMS Plan to eliminate the requirement that the Operating Committee shall seek to take into account distinctions in the securities trading operations of Participants and Industry Members and their relative impact upon Company resources and operations. Referencing to 2022 CAT Budget[6], $118.7 million (73.8% of total technology cost or 69% of operating cost) goes to (Amazon AWS) Cloud hosting services. Another $10.4 million (93% of 2022 General and Administrative budget) is allocated to Legal, Consulting, and Insurance costs. How lucrative!

The fact that FINRA would receive explicit benefit from CAT (from perspectives of being the CAT processor, may capitalize prior development works by Thesys, and CAT will enhance FINRA's technology[7]), **FINRA as a direct recipient of CAT benefits must bear higher portion of CAT costs** than other SROs who do not own or affiliate with a surveillance business. Indeed, FINRA and Amazon Web Services (AWS), FINRA's cloud vendor, should fend off any public concerns about too big to fail (TBTF) by voluntarily providing full disclosure. The SEC should scrutinize that CAT funding will not be mixed-in and/or **cross-subsidize** existing surveillance and cloud processing business. There is a thin line between synergy and potential conflicts of interest (especially, as FINRA also holds the SRO power to fine broker-dealers over surveillance system deficiencies[8]).

The entire industry footing the bill for these CAT vendors, while only $2.67 million (1.5% of Total Expenditures) is capitalized by FINRA CAT, such a low capitalization rate tech project would never get approved in the private sector unless it being a state-run monopoly. The above proves the **Historical CAT Assessment** calculation by CAT operating committee is **inequitable**. Section 31 like fees should be discouraged and avoided wherever possible.

[6] https://www.catnmsplan.com/sites/default/files/2022-08/08.02.22-CAT-Q3-2022-Budget.pdf
[7] https://www.finra.org/about/technology
[8] https://financefeeds.com/finra-fines-lime-brokerage-surveillance-system-deficiencies/

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(C) Shouldn't most of the CAT costs be related to surveillance analytics and be capitalized by the SROs if CAT is for prevention of flash crashes? The **ballooning of data** (average of 296 BILLION records per day)[9] **in a non-productive vault/ data warehouse cannot be justified economically**. The CAT's technical design since 2012 as a golden-source while well intended is out-of-date.[10] It will take "forever" to produce a "golden" unified "single source of truth". By the time a common standard is adhered, the value of the data will subside to almost worthless. The SEC should consider our suggestions[11] for a better way to market surveillance without kicking the can down the road.

Whoever decided to blindly charge forward without timely rectifying the CAT's design flaw for years should own up to his or her mistake or indecision. We estimate 80+% of the 2022 budget (~$95 million) is **avoidable and unnecessary cost**. How this lost should be absorbed by the SEC and/or the SROs, or can Congress appropriate funding to cover this one-off loss? If accountability is not put into place, the CAT project will continue to be a **Money Pit**. Not meeting requirements set forth by the Government Performance and Results Modernization Act of 2010 (GPRA) may prompt the Office of Management and Budget (OMB) to do a thorough investigation of the SEC and the SROs. **If no authority is willing to subject itself to risk resulting in its own poor decision, then no risk no reward** – i.e., no entitlement to CAT funding for the CAT processor and the SROs.

(D) We oppose the proposed §11.3(b) and 11.3(b)(i)(D). What constitutes as "**past CAT costs**" is NOT well defined in Section A.3.(b) of the Executed Share Model proposal. We suspect most of these costs are pertaining to the $90 million train wreck[12] in having FINRA replaced Thesys as the CAT processor. No way should the industry members bear the loss caused by poor decisions of the authorities.

CAT participants' **attempts to "recoup" what they can possibly capitalize as "private assets" are unjust**. We oppose the proposed §11.3(b)(i)(A) and (iii)(B). When acquiring a commercial business, the acquirer inherits both assets and liabilities of the acquiree. If FINRA - CAT LLC determines that the prior development work by Thesys has no residual values to be capitalized, then the **written down values in disposal of assets is totally a FINRA commercial responsibility, not a right** for CAT participants to recuperate their acquisition cost of Thesys' intellectual property.

We strongly oppose the proposed §11.3(b) and 11.3(b)(ii) that CAT Participant ditching their own obligation to pay the Historical CAT Assessment. Loans made to CAT LLC by the CAT Participants are liabilities on the SROs. If SROs are allowed to **shift liability to Industry Members, then it would go against Funding Principle §11.2(e)**, where SROs are improperly disincentivized to place an inappropriate burden on competition and a reduction in market quality by levying "tax"[3] to **alter the playing field** in market. Executed Share Model imposing payment obligation on the executing broker could well be a flight between lit venues versus dark pools and internalizers.

(E) A thousand industry members in aggregate have already incurred in total over $800 million a year in both internal efforts and external resources support trying to prepare and comply with the CAT reporting requirements, such as producing the data in format that is initially ingested into the CAT system. Industry members have already paid more than their fair share for CAT. CAT operating committee **failed to capture this social cost**.

Under the Commission's Rules of Practice, the "**burden to demonstrate** that an NMS plan filing is consistent with the Exchange Act and the rules and regulations issued thereunder is on the Plan Participants that filed the NMS plan filing", i.e., the SROs, or more specifically the **CAT operating committee**. Therefore, CAT LLC as a private entity operating a

[9] https://www.catnmsplan.com/sites/default/files/2022-02/2.02.22-CAT-Processing-Update.pdf
[10] https://www.linkedin.com/pulse/cat-outdated-design-since-2012-kelvin-to/
[11] https://www.linkedin.com/pulse/cat-surveillance-without-kicking-can-down-road-kelvin-to/
[12] https://www.sec.gov/comments/4-698/4698-8790127-237768.pdf

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regulated public utility must demonstrate its provision of service would yield benefits outweighing all costs, including the social cost incurred for the public to access and use the service. Disregarding the significant social cost incurred by industry members as part of the total cost, it proven that FINRA – CAT LLC **failed to demonstrate CAT's benefits would outweigh its costs**. CAT in aggregate has incurred both the plan participants and industry members over $1 billion with no realized benefit – see point (F).

(F) The CAT operating committee's self-claim of the costs being "critical" to the creation, implementation and maintenance of the Plan is neither a demonstration of CAT benefits outweighed its cost, nor a demonstration that an NMS plan filing is consistent with the Exchange Act and the rules and regulations. Merely pointing to the high-level purpose of CAT – "creating enhanced oversight of the markets" and attempts to claim it as "reason" is not acceptable. Moving the goalposts wherever they want under the guise of "enhanced oversight" **undermine the Constitution that divided the Government into three branches**: Legislative, Executive, and Judicial.

Despite SROs being required to file the fee schedules with the Commission, under the CAT Participants' proposal, it would "permit the Fee Rate to potentially remain in effect even if the budget or projected executed equivalent share volume changes". CAT Participants, i.e. the SROs, "do not intend to file a new separate amendment to the CAT NMS Plan for Participants each time a new Fee Rate is approved" could be a circumvention of the filing requirement. We thank the Commission for rescinding the Rule 608(b)(3)(i) provision[13] that would otherwise allow a fee amendment to become effective immediately upon filing with the Commission, and an NMS plan could begin charging the new fee prior to an opportunity for public comment and without Commission action. All in all, such **unchecked power**[14] of the CAT operating committee would not ease the public or the industry community's concerns for potential biases.

(G) Given "the regulators directly control and benefit from these stages of the CAT system after ingestion",[15] the SROs should at a minimum bear the costs of processing the complex data that they themselves required of others to submit. We think both the Executed Share Model and the alternate cost-based approach are inequitable. **Those who do things fairly and squarely should NOT be subject to any CAT fees**.

If the SROs cannot afford this post-ingestion cost, this reflects a **structural deficit** of this current CAT project, hence not comply with Funding Principle §11.2(f) – "to build financial stability to support the Company as a **going concern**." The SEC and FINRA **should call for an immediate stop and consider rightsizing the project** per our suggestions[11].

CAT LLC's argument citing "Industry Members have far greater financial resources than the Participants" is not relevant. CAT funding should not be a wealth tax levying on whoever has more financial resources. Rulemaking to seek sole benefit for the government agency or the affiliated SROs should be prohibited because it is in **contrast with serving the public interest**.

We believe the Commission's current operating cost is also supported substantively by fines and settlements. So, we think the **CAT funding model should be driven by fines and settlements**, which is an acceptable revenue stream to satisfy the Article XI §11.2 funding principles.

(H) We strongly oppose the proposed §11.1(a)(i) and (a)(ii) to include "reserve" as one of the categories in the CAT budget. **Under no circumstances should the collected CAT fees exceed CAT costs, or else it would violate §11.3** – see point (A) about recovery. The funding condition is on reimbursement basis, and recoupable costs should reference to actual

[13] https://www.sec.gov/news/press-release/2020-188
[14] https://cpb-us-w2.wpmucdn.com/campuspress.yale.edu/dist/6/1038/files/2015/10/leadership-xtufp4.pdf
[15] https://www.sec.gov/comments/4-698/4698-20133896-303830.pdf

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"incurred" lost happened in the past. The proposed added language under §11.2(c) are "fluffs" or "untruth" about Prospective CAT Costs and the Historical CAT Assessment are intended to be "cost based" fees, when CAT LLC subtly asked for a "reserve" (surplus). Allowing the size of "reserve" as high as 25% of the annual budget indeed **contradicts with the "transparent" requirement under Funding Principle §11.2(a)**.

The CAT Participants' proposal disproportionally increases the Industry Members' share of CAT fees, harms efficiency, competition, and capital formation. Warlords are staking claims everywhere division of the markets.[16] Using CAT to exacerbate fights among lit venue, dark pools, internalizers, options players, OTC, and whatnot is destructive. We despise a Financial Transaction Tax[3] approach to toll everyone that the CAT cost would be passed down to end-investors.

In our opinion, CAT costs should be allocated to those requiring the regulators' extra efforts in deciphering their complex activities as compared to firms with a simpler business model. Suspicious Activity Report (SAR) would be a good basis for easier administration in determining CAT fees for industry members, and it would conform to Funding Principle §11.2(d). Again, CAT funding should be driven by fines and settlements.

Feel free to contact us with any questions. Thank you and we look forward to engaging in any opportunities where our expertise might be required.

Sincerely,

Kelvin To

MSc Banking, MMGT, BSc
Founder and President
Data Boiler Technologies, LLC

CC: The Honorable Gary Gensler, Chairman
The Honorable Hester M. Peirce, Commissioner
The Honorable Caroline A. Crenshaw, Commissioner
The Honorable Mark T. Uyeda, Commissioner
The Honorable Jaime Lizárraga, Commissioner
Dr. Haoxiang Zhu, Director, Division of Trading and Markets

This letter is also available at:
https://www.DataBoiler.com/index_htm_files/DataBoiler%20SEC%20CAT%20Funding%20202212.pdf

[16] https://www.linkedin.com/pulse/warring-states-period-finding-new-equilibrium-kelvin-to/