January 1, 2026
VIA SEC COMMENT FORM

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

Re: File No. 4-698; Securities Exchange Act Release No. 34-102980 (May 2, 2025)
Order Granting Temporary Conditional Exemptive Relief Relating to Granularity of Timestamps Specified in Section 6.8(b) and Section 3 of Appendix D of the CAT NMS Plan

Dear Ms. Countryman:

I submit this comment regarding File No. 4-698 and Release No. 34-102980 concerning exemptive relief related to timestamp granularity under the National Market System Plan Governing the Consolidated Audit Trail (CAT NMS Plan). This letter addresses a narrow, administrable point: **timestamp granularity is an integrity predicate for auditability and reconstructability of the CAT event record.**

Executive summary

1. CAT is an audit trail. Its utility depends on whether reportable events can be adequately sequenced and reconstructed. The CAT NMS Plan itself ties “finer increment” reporting to the goal that events “can be adequately sequenced.”[1]
2. Timestamp granularity should be evaluated as an integrity predicate: if ordering cannot be independently tested, downstream surveillance and enforcement analysis becomes less reliable and more dispute-prone.
3. A practical integrity-first sequence is: (Step 1) establish record sequencing integrity, then (Step 2) evaluate analytics that depend on that order.
4. A precision cap can be compatible with CAT objectives if paired with minimal, objective safeguards for timestamp ties and clock-context transparency, and if assessed through the existing annual evaluation structure in Section 6.8(c).[2]

Background and the specific integrity predicate

Release No. 34-102980 describes the CAT NMS Plan’s timestamp requirements and the relief requested from provisions in Section 6.8(b) and Section 3 of Appendix D. The release explains that Section 6.8(b) requires reporting to the Central Repository in milliseconds, but also provides that, to the extent order handling or execution systems utilize finer increments, the reporter should use the finer increment when reporting so that reportable events can be adequately sequenced.[1] The release further notes that Appendix D, Section 3 requires the Central

Repository to accept electronically handled order event timestamps to the finest level of granularity captured by CAT Reporters.[3]

The release also highlights Section 6.8(c), which requires the Chief Compliance Officer, in conjunction with advisory groups, to annually evaluate whether industry standards have evolved such that the required timestamp in Section 6.8(b) should be in finer increments.[2] In addition, the release describes the April 2020 exemptive relief structure and its conditions, including requiring truncation to nanoseconds for timestamps more granular than nanoseconds for CAT submission.[4]

The predicate point is narrow and administrable: CAT's purpose depends on reconstructability. If event order cannot be reconstructed using objective checks, downstream analyses become more dependent on inference about ordering rather than evidence of ordering. The Commission can evaluate this as a threshold integrity question without revisiting market-structure policy or proprietary system design.

Integrity-first administrability framework (technology-neutral)

A practical, technology-neutral sequence for evaluating timestamp granularity is:

1. **Step 1: Record integrity and sequencing.** Ensure the event record is stable and sequenced well enough that missing, reordered, or tied events are detectable using objective checks.
2. **Step 2: Analytical use.** Once the record is stable, evaluate surveillance and enforcement questions that depend on event order (routing behavior, layering, spoofing, best execution, and other reconstructions).

In CAT context, Step 1 turns on whether the combination of (a) timestamp granularity, (b) clock discipline, and (c) tie-handling structure yields a reconstructible audit trail consistent with CAT's sequencing objective.[1][2]

1. Why timestamp granularity is an integrity predicate (not a feature)

When multiple events occur within a narrow time window, insufficient granularity creates timestamp collisions that obscure sequence. Even where reported precision is high, ambiguity can still arise if cross-system clock alignment is meaningfully looser than the reported increment. The practical harm is the same: reconstruction depends on inference about ordering rather than evidence of ordering.

For this reason, the Commission's evaluation of timestamp granularity is best framed as a reconstructability question: what minimum structure is necessary so that an independent

reviewer can reconstruct the order lifecycle using objective checks, without privileged access to proprietary system internals. This framing aligns with the CAT NMS Plan's explicit linkage between finer increments and adequate sequencing.[1]

2. Minimal sequencing safeguards that preserve reconstructability

A staff-friendly approach is to focus on objective, non-proprietary predicates that preserve reconstructability even where a precision cap is granted. The following non-exclusive safeguards address the practical failure mode (tied timestamps and ambiguous ordering) without requiring disclosure of proprietary trading logic:

- No rounding; truncation only when capping precision. Truncation is conservative and avoids creating artificial ordering. The Commission has previously structured timestamp relief with truncation conditions for CAT submission.[4]
- Deterministic within-source ordering for tied timestamps (within a single source only). When multiple reportable events share the same reported timestamp for a given CAT Reporter or Industry Member source, preserve within-source order using a deterministic ordering hook (for example, a monotonic per-source sequence counter maintained by the reporter). This is intended to preserve ordering within that source's own event stream, not to impose cross-participant ordering.
- Clock-context transparency where timing is material. Preserve or reference clock source and synchronization tolerance so cross-system comparisons can be interpreted appropriately.
- Collision-rate evaluability (defined and scoped). Track the rate at which electronically handled events for a given source share an identical reported timestamp at the accepted granularity (a "tied timestamp rate"), as an input to evaluating whether the chosen granularity remains adequate for sequencing. This tied timestamp rate should be maintained as an internal control and used in the Section 6.8(c) annual evaluation process, not submitted as a CAT data field.

Important clarification for scope and burden: These items are intended as objective evaluability predicates and internal audit controls, and as inputs to the existing Section 6.8(c) annual evaluation, not as additional CAT reporting fields or expanded CAT submission requirements. They can be incorporated as conditions to relief and evaluated through existing governance without requiring proprietary disclosures.

3. Requested action (narrow and administrable)

In connection with File No. 4-698, I respectfully request that the Commission treat timestamp granularity as a reconstructability predicate and, when granting, extending, or revisiting exemptive relief, anchor relief to minimal sequencing safeguards that preserve an independently testable event order.

- **Condition any precision cap on objective sequencing protections (as terms of any extension or renewal of relief):** maintain truncation (not rounding) and require a deterministic method to preserve within-source order when timestamps are tied for electronically handled events.[4]
- **Require lightweight ongoing evaluability (as explicit factors in the Section 6.8(c) annual evaluation):** incorporate tied timestamp (collision) rate tracking and a documented annual assessment of whether the applicable granularity remains adequate for reconstructible sequencing.[2]

This approach is intended to be administrable and low-burden. It can be implemented as conditions to exemptive relief and as evaluation inputs under the existing Section 6.8(c) framework, without mandating proprietary disclosures, adding new CAT data fields, or requiring finer-than-necessary timestamp increments.

4. Closing

Thank you for considering this comment. The Commission can keep the CAT timestamp regime cost-aware while preserving CAT's core purpose by treating timestamp granularity as a reconstructability predicate and pairing any precision cap with minimal, technology-neutral safeguards that preserve an independently testable event sequence.

Respectfully submitted,

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References (pinpointed)

[1] Release No. 34-102980 (May 2, 2025), p. 3: Section 6.8(b) states that if a Participant's systems use finer-than-minimum timestamp increments, the Participant must "utilize such finer increment" when reporting CAT Data so events "can be adequately sequenced."

[2] Release No. 34-102980 (May 2, 2025), p. 3: Section 6.8(c) requires the Chief Compliance Officer, "in conjunction with… advisory groups," to "annually evaluate and make a recommendation" whether "industry standards have evolved" such that the required Section 6.8(b) "time stamp… should be in finer increments."

[3] Release No. 34-102980 (May 2, 2025), p. 3: Appendix D, Section 3 requires the Central Repository to "[a]ccept timestamps on order events handled electronically to the finest level of granularity captured by CAT Reporters."

[4] Release No. 34-102980 (May 2, 2025), p. 4: April 2020 exemptive relief required Participants and Industry Members to “truncate timestamps… more granular than nanoseconds to nanoseconds for submission to the CAT,” and required the Central Repository to accept electronically handled order event timestamps “to a nanosecond granularity.”