TMX Group
100 Adelaide Street West
Toronto, ON, M5H 1S3
Canada

1 888 873-8392
info@tmx.com

November 12, 2026

VIA EMAIL

Market Regulation Policy
Canadian Investment Regulatory Organization
Suite 2600
40 Temperance Street
Toronto, Ontario M5H 0B4
E-mail: Market_Regulation_Policy@ciro.ca

Copy to:

Trading and Markets
Ontario Securities Commission
Suite 2200
20 Queen Street West Toronto, Ontario M5H 3S8
E-mail: tradingandmarkets@osc.ca

Market Oversight
Alberta Securities Commission
Suite 600 250-5th Street SW, Calgary, Alberta T2P 0R4
E-mail: CIRO-Reporting@asc.ca

Dear Sirs/Mesdames:

Re: **Proposed Guidance on Marketplace Thresholds and Single-Stock Circuit Breakers**

TMX Group Limited ("**TMX**" or "**we**") appreciates the opportunity to comment on CIRO's proposed updates to its Guidance on Marketplace Thresholds and Single-Stock Circuit Breakers ("**SSCBs**") published on October 13, 2026 (the "**Proposal**"). We commend CIRO for its continued work in reviewing the volatility-control framework and considering how it should operate as trading hours and market structures evolve. We support the overall objective of maintaining fair, orderly and efficient markets through effective volatility controls.

Capitalized terms used in this letter and not specifically defined have the meaning given to them in the Proposal. All times are listed in Eastern Time (ET).

Executive Summary

TMX supports CIRO's objective to update its Guidance on both Marketplace Thresholds and SSCBs to address the application of these controls during extended trading hours. However, as a marketplace operator, we believe there are a few areas where further refinement and operational clarity would help ensure that the proposed framework achieves its objectives while minimizing unintended disruption to price discovery and market operations. Our comments focus on two areas: the application of SSCBs immediately before the regular market opening, and the synchronization of the One-Minute Reference Price with the Primary Listing Exchange's opening price.

TMX

TMX is an integrated, multi-asset class exchange group. TMX's key subsidiaries operate cash and derivatives markets for multiple asset classes, including equities and fixed income, and provide clearing facilities, data driven solutions and other services to domestic and global financial and energy markets. Toronto Stock Exchange, TSX Venture Exchange, Alpha Exchange, The Canadian Depository for Securities, Montreal Exchange, Canadian Derivatives Clearing Corporation, Shorcan Brokers Limited and other TMX companies provide securities listing markets, trading markets, clearing facilities, data products and other services to the global financial community and play a central role in Canadian capital and financial markets.

I. Discussion of the Proposal

A. Application of SSCBs immediately before the regular market opening

TMX recommends that CIRO consider a consistent exclusion from SSCB triggering beginning at 9:20 a.m. and continuing until the security has completed its Opening Auction. Under this approach, no new SSCB would be triggered during this period, irrespective of the magnitude of the price movement. We recognize that CIRO's proposed wider thresholds during the pre-market period are intended to account for different liquidity and price-discovery conditions during this period. However, permitting an SSCB to trigger immediately before the opening auction could introduce operational and market-integrity challenges.

(i) Potential disruption to the opening process

An SSCB triggered immediately before the scheduled open may interfere with the orderly establishment of the opening price. For example, if an SSCB is triggered at 9:27 a.m. and results in a five-minute halt, the security's opening could be delayed until approximately 9:32 a.m. which could materially change the conditions under which the opening price is established. During such a halt, participants could enter, cancel or reprice orders, respond to developments in other markets, or adjust their trading strategies during the halt. Consequently, the eventual opening price may differ materially from the price that would otherwise have been established through the scheduled opening process.

(ii) Cross-border trading and related securities

The potential implications if an SSCB is triggered immediately before the scheduled open extend beyond the Canadian-listed security itself. For example, consider a Canadian-listed security that triggers an SSCB immediately before the Canadian open but continues trading on a U.S. exchange. Canadian investors could be prevented from trading the security while U.S. investors continue to participate in price discovery. This could create a temporary disconnect between Canadian and U.S. prices, potentially disadvantage Canadian market participants and introduce additional complexity when trading on Canadian marketplaces resumes.

There may also be implications for related securities, including Canadian-listed ETFs with exposure to the affected issuer. For example, a Canadian-listed security that triggers an SSCB before the open could affect the price discovery of a single stock ETF based on that security or, in the case of a Canadian-listed bank security, an ETF which tracks the banking sector. This can complicate the ETF price discovery process as market participants may need to assess the value of the halted constituent using prices from related instruments, other markets or other available information.

These circumstances reinforce the importance of avoiding unnecessary volatility halts immediately before the regular opening process.

(iii) Consistency with the existing closing-period exclusion

We note that, currently, SSCBs are operational only until 3:30 p.m. to avoid unintended disruption to the closing process and the establishment of the closing price. For the same reason, the Proposal intends that SSCBs will be suspended between 3:30 p.m. and 4:15 p.m. We support the rationale for this exclusion and believe a similar principle should apply to the opening. While the opening and closing processes are not identical, both represent important price-discovery events; the potential for an SSCB to disrupt the opening auction warrants consideration of a corresponding pre-opening exclusion.

TMX also suggests that CIRO consider whether the beginning of the closing-period exclusion could be delayed to 3:40 p.m. TMX understands that at the time SSCBs were initially instituted, the TSX Market-On-Close ("**MOC**") imbalance period began at 3:40 p.m. Thus, excluding SSCBs beginning at 3:30 p.m. ensured that SSCBs did not affect the MOC or cause unintended consequences. The MOC period has since changed, with the MOC imbalance publication now beginning at 3:50 p.m. With this later start to the MOC period, CIRO should consider whether the appropriate closing-period SSCB exclusion should be between 3:40 p.m. and 4:15 p.m.

(iv) Proposed approach to SSCBs

TMX recommends the following approach related to the pre-market and opening period:

- SSCBs - with typical trigger levels - would continue to operate during the pre-market period up to 9:20 a.m.
- An SSCB triggered before 9:20 a.m. would follow the applicable halt and resumption procedures.
- No new SSCB would be triggered from 9:20 a.m. until the security has completed its Opening Trade.
- Normal SSCB protections would apply following the opening.

For example, where an SSCB is triggered at 9:18 a.m., the applicable five-minute halt would allow the security to resume trading at approximately 9:23 a.m., providing market participants an opportunity to reassess and adjust their orders before the scheduled opening. This approach would preserve pre-market volatility protections while avoiding the introduction of a new volatility halt immediately before the opening auction.

We recommend that this exclusion apply consistently across all securities, irrespective of the magnitude of the price movement. A consistent rule would provide greater certainty for marketplaces and participants while avoiding the need for additional exceptions or differentiated treatment.

B. Synchronization of the One-Minute Reference Price with the Opening Trade

TMX supports the underlying objective of synchronizing the One-Minute Reference Price with the opening price established on the security's Primary Listing Exchange. Using the Primary Listing Exchange's opening price can help ensure that the reference price reflects the principal price-discovery event for the security. Further, TMX supports this synchronization with the opening price established not solely at the initial market open, but also at other auctions during the trading day (i.e., re-openings and closing auctions).

TMX acknowledges that the practical application of this requirement may differ depending on the circumstances in which a security begins or resumes trading, as each of the regular opening auction, the resumption of trading following a halt, and a security's first trade occurring after 9:30 a.m. may involve different operational and market-data considerations. Despite potential operational adjustments, TMX believes that it would be beneficial for CIRO to consider applying the One-Minute Reference Price requirement to all such openings/auctions, including re-openings, throughout the trading day.

C. Application of the Proposal to extended hours generally

TMX also suggests that CIRO consider applying the Proposal to extended hour trading without specifying times (except as necessary to distinguish a time period during which different guidance would apply such as during the period prior to the regular market opening or the close period). This approach would future-proof the Proposal against changes to any particular marketplace's extended hours, while preserving the ability for CIRO to issue revised guidance or proposals as may be required by changes to a marketplace's particular extended hours.

II. Responses to Questions

<u>Questions on Marketplace Thresholds and SSCBs</u>

Question 1 - Initial Implementation Period

(i) *Effective date of Final Guidance*

CIRO is proposing that the Final Guidance become effective no earlier than 120 days after publication to allow marketplaces to prepare for the Initial Implementation Period. In light of competing technology priorities, CIRO does not expect the Initial Implementation Period to begin before May 2027. If the Final Guidance is published after January 2027, would a minimum 120-day period provide marketplaces and other impacted stakeholders with sufficient time to complete any necessary technology, systems or operational changes?

TMX Response: A 120-day period should be sufficient for marketplaces to ensure that their main threshold technology is operational for the duration of their trading day as of the Initial Implementation Period. However, the change whereby the One-Minute Reference Price will be synchronized with the opening price on the security's Primary Listing Exchange may require more time prior to implementation. Marketplaces will address this reset requirement differently, and certain approaches may take longer to build out. As such, CIRO should consider extending additional time prior to the Initial Implementation Period for this aspect of the Proposal.

(ii) *Length of Initial Implementation Period*

CIRO is seeking feedback on the appropriate length of time for the Initial Implementation Period. Data collected during the Initial Implementation Period would assist CIRO in reviewing order and trade activity during extended trading hours and assess whether further changes to the Marketplace Thresholds and SSCB frameworks are needed.

TMX Response: No comment.

<u>Questions on Marketplace Thresholds</u>

Question 2 - Data from Initial Implementation Period to be used for Assessment

CIRO recognizes that marketplaces currently take different approaches to address incoming orders that breach Marketplaces Thresholds as long as the execution of the offending order is being precluded. This can take one of the following forms:

- *rejecting the incoming order*
- *repricing the incoming order, or*
- *booking the incoming order where there is no tradable liquidity on the other side and preventing any future execution of that booked order while it continues to fall outside Marketplace Threshold parameters.*

To assist CIRO in assessing the appropriateness of the Marketplace Threshold price parameters during the Initial Implementation Period, CIRO is seeking information from marketplaces about orders that breach Marketplace Thresholds. This would include all orders that are rejected, repriced, or otherwise booked but not immediately tradable. For each such order, it would be helpful if marketplaces could include the following information:

- *date and time of incoming order*
- *market order number (also known as the Sequence Number)*
- *symbol*
- *price*
- *volume*
- *National Last Sale Price (NLSP) and One-Minute Reference Price at the time the order was received by the marketplace*
- *identify whether the order was rejected, repriced, or booked (but not immediately tradable) on the marketplace.*

CIRO seeks feedback from marketplaces on whether it would be feasible to provide a report containing this information to CIRO at the end of the Initial Implementation Period.

TMX Response: As CIRO will need to have data from all marketplaces in a manner that can be analyzed, we suggest that CIRO first look to the Market Regulation Feed ("**MRF**") to extract the data that it intends to analyze and to identify any outstanding data that is not included in the MRF. The MRF would already contain many of the data elements that CIRO intends to include in the Assessment. CIRO can then work directly with the marketplaces to obtain any remaining data, ensuring that it is received in a manner that can be readily incorporated into a report format.

Question 3 - Reprice One-Minute Reference Price to Opening Trade Price only
(i) Other trades resulting from an auction
CIRO is proposing the repricing of the One-Minute Reference Price only in the context of the Opening Trade, and not in other instances such as any subsequent re-opening or closing auction later in the trading day. The reason for this proposal is that a new marketplace will now be open for a significant period of time prior to the listing exchange, which could contribute to a material difference between the pre-open trade prices and the calculated opening price on the listing exchange.

CIRO does not expect the same degree of potential price divergence during core trading hours, including in the case of a re-opening or closing auction, because the security would generally have been trading continuously throughout the day. Re-openings and closing auctions also occur under the current framework, and CIRO has not identified any material issues related to price divergence. Accordingly, to reduce operational complexity, CIRO is proposing to require the One-Minute Reference Price to be repriced only in connection with the Opening Trade.

CIRO seeks feedback on whether commenters agree with this proposed approach.

TMX Response: TMX supports having this protection apply to all trades resulting from an auction, and not just to the Opening Trade Price. If an event occurs that triggers the need to hold a re-opening during the day, it is sensible to consistently apply the protections that would be used during the initial market opening. In our view, there would not be significant operational complexity to have this measure apply during the regular trading day on a re-opening or during a closing auction.

(ii) Implementation Impact of Repricing One-Minute Reference Price to Opening Trade Price

In order for marketplaces to reprice the One-Minute Reference Price to the Opening Trade price as proposed, marketplaces would need to:

- *identify and consume the Opening Trade price from the listing exchange*
- *distinguish the Opening Trade from other auctions (e.g. reopenings and closing auctions) on a listing exchange.*

CIRO seeks feedback on whether the above information is currently available from each of the listing exchanges as part of the market data feed in order to facilitate this implementation, and if not, whether this information may be made available by each of the listing exchanges.

TMX Response: The Opening Trade price is available from the TMX listing exchanges. We note that each marketplace would have its own functionality for how it ingests the Opening Trade Price information in a manner that would be incorporated into its One-Minute Reference Price measure, and that CIRO may need to extend additional the implementation period in order for marketplaces to build the necessary functionality into their trading systems.

(iii) No Opening Trade on Listing Exchange

In the event there is no Opening Trade on a listing exchange in a particular symbol due to limited liquidity, the first trade on the listing exchange would continue to establish the NLSP.

However, where the opening auction process on a listing exchange does not result in a trade, and the first trade on that exchange occurs later in the trading day during the continuous trading session ("first trade"), CIRO would not view that circumstance as presenting the same risk that needs to be addressed by the repricing requirement described above. Any difference between the price of that first trade on the listing exchange and prices on other marketplaces would generally be similar to the price variation that can occur during normal continuous trading. CIRO also notes that this scenario can occur today, without any corresponding obligation for marketplaces to reset the One-Minute Reference Price. Accordingly, CIRO is proposing that the requirement to reset the One-Minute Reference Price apply only in connection with the Opening Trades on a listing exchange.

CIRO seeks feedback on whether commenters agree with this proposed approach.

TMX Response: TMX is supportive of this approach.

<u>Question on SSCBs</u>

Question 4 - Operation of SSCBs near opening
CIRO is proposing that SSCBs begin operating at 7:00 a.m. during extended trading hours, with wider trigger levels applying from 9:00 a.m. to 9:30 a.m. to account for potential volatility near the opening of the regular trading session. During this period, Marketplace Thresholds would continue to operate as the first layer of protection against erroneous orders and short-term unexplained price movements. For SSCB-eligible securities, the applicable Marketplace Threshold would remain at 10%, such that a single incoming order that would execute outside the applicable threshold would be rejected, repriced or otherwise prevented from executing.

Accordingly, under the proposed wider SSCB parameters, an SSCB would generally only be triggered during the pre-opening period where a series of orders causes the price of the security to move by at least 20% and 40 trading increments within five minutes.

CIRO seeks feedback on whether:

- *Applying wider SSCB trigger levels appropriately balances the need to address potential volatility near the open with the objective of maintaining volatility controls during extended trading hours? In the event a SSCB is triggered near the open, there is a possibility of delaying the Opening Trade on the Primary Listing Exchange.*
- *SSCBs should continue to operate during the pre-opening period, rather than be suspended, during extended trading hours?*

TMX Response: Enabling SSCBs shortly prior to the opening could be extremely problematic. We have articulated our concern in section 2(A) of this letter. Specifically, TMX believes that SSCBs should be suspended from 9:20 a.m. until the time of the Opening Trade, so as not to interfere with the price discovery process during an efficient opening auction on the Primary Listing Exchange. In our view, widening the SSCB trigger levels is not sufficient, and it is preferable to suspend SSCBs during the period prior to the market open time.

In addition, we support simplicity in the application of this model whereby SSCBs with regular trigger levels (10% / 20 ticks) would apply while markets are operating, with the exception of the two SSCB suspension periods: (i) 9:20 a.m. until the Opening Trade; and (ii) 3:30 p.m. (or 3:40 p.m.) until 4:15 p.m.

III. Conclusion

TMX supports CIRO's continued efforts to review and strengthen the volatility-control framework. As trading hours and market structures evolve, it is important that the framework remains effective while accommodating the operational realities of marketplace trading and the role of opening and closing price discovery. We believe the suggested refinements that we have outlined above would help achieve these objectives. In particular, a consistent exclusion from SSCB triggers immediately before the regular market opening would reduce the potential for unintended disruption, while mechanics that treat all auctions similarly (i.e., One-Minute Reference Price synchronization to the opening price at the market open, other re-openings, and the closing auction period) would support consistent implementation for similar events." Together, these adjustments will enhance predictability and market integrity across critical liquidity windows.

We appreciate CIRO's consideration of these comments and welcome the opportunity to continue engaging constructively on the development of the framework.

Sincerely,

"Kelsey Gunderson"

Kelsey Gunderson
Head of TMX Markets Products and Services and President of Equity Trading
TMX Group Limited