Virtu Canada Corp.
222 Bay Street, Suite 1720
Toronto, ON, M5K 1B7

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VIA ELECTRONIC DELIVERY

MARKET REGULATION
ONTARIO SECURITIES COMMISSION
20 QUEEN STREET WEST
TORONTO, ONTARIO M5H 3S8
comments@osc.gov.on.ca

RE: CSA/CIRO STAFF NOTICE 23-331 – REQUEST FOR FEEDBACK ON DECEMBER 2022 SEC MARKET STRUCTURE PROPOSALS AND POTENTIAL IMPACT ON CANADIAN CAPITAL MARKETS

Dear CSA/CIRO:

Virtu Canada Corp. appreciates the opportunity to provide our perspective on the SEC Proposed Amendments[1] and their potential impact on Canadian equity market structure should the SEC adopt any or all of them in any form. Virtu Canada Corp. is the Canadian investment dealer arm of Virtu Financial ("Virtu"), a leading global provider of financial services and products that leverages cutting-edge technology to deliver liquidity to the global markets and innovative, transparent trading solutions to its clients.

Virtu and its subsidiaries operate as a market maker across numerous exchanges in the U.S. and is a member of all U.S. registered stock exchanges. Virtu's market structure expertise, broad diversification, and execution technology enable it to provide competitive bids and offers in over 25,000 securities, at over 235 venues, in 36 countries worldwide. Virtu has commented extensively on the SEC market structure proposals, and we note that, except for the proposal to enhance Rule 605, there is broad opposition to the balance of the proposals. Comments from dozens of participants, including Asset Managers, Exchanges, Retail Brokers, Academics, Sellside Brokers, and Issuer groups, among others, demonstrate the growing opposition to these three proposals. We have compiled an overview of this opposition in our publication Growing Consensus Supports Phased & Limited Reforms.

Virtu is strongly opposed to the SEC's proposed market structure rules (excluding those pertaining to Rule 605), and we encourage the CSA and CIRO to employ a thoughtful, data-driven approach in considering whether to implement any of the reforms contemplated by the proposals in Canada. Any potential implementation in the U.S. should be assessed and analyzed prior to implementing any changes in Canada. We also encourage the CSA and CIRO to read in detail Virtu's comments on the proposals which highlight our extensive concerns:

- Joint Comment Letter on SEC Proposals by Cboe, State Street, T. Rowe Price, UBS, and Virtu
- Virtu Comment Letter on SEC's Proposed Order Competition Rule
- Virtu Comment Letter on SEC's Proposed Regulation Best Execution
- Virtu Comment Letter on SEC's Proposed Amendments to Enhance Disclosure of Order Execution Information
- Virtu Comment Letter on SEC's Proposed Amendments to Regulation NMS
- Virtu's Supplemental Comment Letter on SEC's Best Execution and Order Competition Proposals

As a threshold matter, none of the SEC's market structure proposals has been finalized. Accordingly, we respectfully submit that the CSA and CIRO should wait to see if any of the proposals are actually finalized in the U.S. and only then engage in an assessment of whether any similar reforms that are in fact adopted by the SEC should be considered in Canada. As part of that process, we respectfully submit that the CSA and CIRO should solicit comments again on any material differences between the SEC's proposals and any final rules.

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[1] Regulation NMS: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders published at www.sec.gov/rules/proposed/2022/34-96494.pdf;
Regulation Best Execution published at www.sec.gov/rules/proposed/2022/34-96496.pdf;
Disclosure of Order Execution Information published at: www.sec.gov/rules/proposed/2022/34-96493.pdf;
Order Competition Rule published at www.sec.gov/rules/proposed/2022/34-96495.pdf;

We note that many of the SEC proposals' stated aims are to enhance market quality and order competition. Rather than considering adopting reforms made in the U.S. markets, we encourage the CSA and CIRO to instead focus on possible enhancements unique to Canadian market structure such as re-evaluating broker preferencing in the Canadian markets. We believe that broker preferencing favours incumbent dealers and stifles order competition in the Canadian marketplaces.

Discussion

As detailed in the letters above Virtu has commented extensively on this topic, as have dozens of other market participants representing a broad and diverse segment of the industry. The collective views of these commenters can be summarized as follows:

- **Disclosure of Order Execution Information**: The SEC should take a phased approach, start with enacting Rule 605 reform and then pause the remaining proposals until after reassessing the impact of enhanced disclosure under Rule 605 on liquidity and competition across the market.
- **Regulation NMS**: Only reduce ticks to ½ penny and only for truly tick-constrained symbols; tiny ticks and harmonization would hurt investors.
- **Regulation Best Execution**: The SEC should NOT adopt this proposal; it will undermine existing investor protections.
- **Order Competition Rule**: The SEC should NOT adopt this proposal; it will harm order execution quality for all investors.

Below we have expanded in more detail on our concerns with the proposals with excerpts from our detailed comment letters. In each section, we refer to the following specific proposals:

- Disclosure of Order Execution Information published at: www.sec.gov/rules/proposed/2022/34-96493.pdf;
- Regulation NMS: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders published at www.sec.gov/rules/proposed/2022/34-96494.pdf;
- Regulation Best Execution published at www.sec.gov/rules/proposed/2022/34-96496.pdf;
- Order Competition Rule published at www.sec.gov/rules/proposed/2022/34-96495.pdf;

Disclosure of Order Execution Information

Virtu has long advocated for, and strongly supports, expanding and enhancing the disclosure regime for order execution quality and believes that Rule 605 reform is the most important and impactful of all of the SEC's equity market structure proposals. Rule 605 reports form the benchmark by which execution quality is measured for retail investors. We believe that those reports are currently incomplete and present an inaccurate picture of execution quality. Accordingly, we agree that Rule 605 reform is needed to improve the benchmark.

The most sensible and impactful place to start is with Rule 605. In the Proposed Rule, the SEC itself acknowledges that updating Rule 605 would "better promote competition among market centers and broker-dealers on the basis of execution quality and ultimately improve the efficiency of securities transactions." It also claims that broker-dealers "facing conflicts of interest . . . would be better incentivized to manage these conflicts . . . to compete on the basis of execution quality." Further, the SEC states that "the proposed amendments would improve execution quality in terms of execution prices by increasing the extent to which reporting entities seek out executions at prices better than the NBBO; i.e., increasing the extent to which market centers execute order[s] with price improvement, and/or increasing the extent to which broker-dealers route to market centers offering price improvement." The SEC's observations demonstrate that any problem the SEC perceives regarding competition and conflicts of interest is likely to be addressed by this Proposed Rule.

But while the Proposed Rule is a step in the right direction, it does not go far enough and there is room for improvement. Perhaps the most fundamental weakness of the current Rule 605 is that critical information about size improvement (i.e., the execution of more shares than the displayed amount at the NBBO quote), and execution quality statistics for odd lot orders, large lot orders, and many important order types are not reflected in current Rule 605 reports. And Rule 605's approach to bucketing orders solely by share quantity yields skewed comparisons because it fails to consider the notional value of orders. Furthermore, its NBBO price-based benchmark is incomplete in that it does not include

information about odd lot quotes. As part of any update to Rule 605, it is critical that the SEC accelerate changes from its 2020 market data infrastructure rule that would incorporate odd lot data in the NBBO.

Regulation NMS

The notion that tick sizes need to be harmonized is a red herring aimed at masking the SEC's real objective – the elimination of competition from off-exchange trading in order to drive more trading activity back to exchanges. Rather than engaging in a risky experiment that arbitrarily dictates a new tick-size regime, the SEC should take a phased, methodical approach, starting with Rule 605 reform, which will enable the SEC to objectively measure outcomes and then consider any further rulemaking on an informed basis.

The purported benefits highlighted by the SEC in the Proposed Rule are decidedly theoretical and demonstrate a complete lack of understanding and appreciation of how the proposed changes will harm the marketplace and investors. Introducing new tiny tick sizes would fragment liquidity across more price levels which makes it harder for investors to find the liquidity they need, and will actually result in a wider NBBO, ultimately increasing the cost of liquidity. Because of increased odd lot trades and message traffic that will result from smaller tick sizes, pennying will become more prevalent, which will reduce incentives for market makers and institutions to provide liquidity on exchanges. Similarly, the Proposed Rule's contemplated limitation on exchange rebates and fee tiers would reduce incentives to provide liquidity and harm competition between exchanges, especially new exchanges.

What is especially puzzling is the fact that the SEC seems to be ignoring the substantial research it conducted in its consideration of the Sub-Penny Rule in 2005, which ultimately concluded $0.01 to be the optimal tick size. In the Proposed Rule, the SEC has not provided adequate explanation for how its previous analysis of what was optimal then does not apply now. Equally puzzling is the SEC's reliance on the Tick Size Pilot ("TSP") as a basis for supporting the new regime contemplated by the Proposed Rule. The TSP studied the impact of a widened minimum quoting and trading increment for certain small capitalization stocks, and offered no analysis, data, or conclusions on the potential impact that a narrowed, subpenny tick regime would have on the marketplace, the investor experience, or issuers. It is an apples-to-oranges comparison and is irrelevant as a basis for support.

Moreover, the SEC has failed to consider the compound impact of the Proposed Rule on the three other market structure Rule Proposals released in conjunction with the Proposed Rule – or any of the SEC's subsequent related proposals, and vice versa. Specifically, the changes to tick sizes set forth in the Proposed Rule will significantly impact the baseline conditions the SEC relies upon in calculating expected costs and benefits of the other Rule Proposals, thereby casting doubt on the SEC's projections in its economic analyses. The Proposed Rule also relies, in part, on data from Rule 605 reports – which use metrics that the SEC has acknowledged are deficient and in need of modification. Reforms to Rule 605 reports will therefore necessarily impact the data underlying the Proposed Rule's economic analyses in ways for which the SEC has not adjusted.

Regulation Best Execution

The Proposed Rule is one of four overlapping, intersecting proposals that are all purportedly aimed at the same objective of ensuring that retail investors get the highest quality execution; however, the Proposed Rule threatens today's highly competitive marketplace and, in turn, will have the opposite effect of limiting investor access to the vast array of benefits that wholesalers provide under the existing regulatory framework. In particular, its requirements related to so-called conflicted transactions are so onerous that the SEC acknowledges the requirements may drive retail brokers to route all of their order flow to exchanges, and in the process eliminate the intense competition of today's marketplace that has led to billions of dollars of benefits for retail investors in the form of commission-free trading, immediacy of execution, and significant price and size improvement. Indeed, the requirements for handling "conflicted transactions" are so complex and burdensome that they appear designed to discourage retail brokers from accepting "payment for order flow" from wholesalers altogether. Excluding wholesalers from the marketplace will substantially constrain liquidity, especially in thinly traded securities, and make it more expensive for retail investors to participate in our markets. Retail investors themselves, for whose benefit the SEC set forth the Proposed Rule, have expressed these very concerns.

U.S. securities laws are rooted in promoting disclosure and competition. The SEC's proposal suggests generally that it needs to develop its own best execution rules to ensure consistency in best execution practices, but it acknowledges that its proposal is consistent with FINRA and MSRB rules and does not explain how the duplicative and likely burdensome addition of its own proposal is needed to improve disclosure or, ultimately, competition. In public statements, Chair Gensler has also suggested that he "was surprised to learn the SEC didn't actually have its own best

execution rule," and though two other agencies already have substantially similar best execution rules, believed that the SEC should adopt its own. But the marketplace has already solved for best execution.

Today's highly effective U.S. market structure is premised on a broad and diverse set of market centers competing against one another to offer investors the highest quality execution. These competitive forces exist in a highly transparent marketplace, which naturally incentivizes market participants to achieve the best possible execution for each and every customer. Ironically, the Proposed Rule's heavy-handed approach would have the perverse impact of severely limiting, if not eliminating, the competition that is a hallmark of today's unparalleled investor experience, ultimately leading to worse execution quality.

Order Competition Rule

The Proposed Rule contemplates a public auction system that purportedly will increase transparency and competition for individual investor orders, resulting in execution of those orders at better prices. For institutional investors, the Proposed Rule contemplates new opportunities to interact with an increased volume of individual investor orders currently inaccessible to them. These contemplated benefits and promises are, at best, entirely theoretical and speculative, and the Proposed Rule is likely instead to diminish the substantial benefits that retail investors currently experience as a result of the vigorous competition for retail orders that presently exists today.

The current U.S. market structure yields significant benefits for retail investors, including broadly available commission-free trading, speedy and certain execution of orders, and significant price and size improvement. Indeed, recent publicly available analyses have estimated that today's retail investors receive actual and measurable benefits in excess of $20 billion annually from the existing equity market structure. These benefits are the result of a broad and diverse set of market centers competing against one another, including national securities exchanges, to offer investors the highest quality executions. Both Congress and the SEC have long recognized that competition among trading centers is in the public interest. In accordance with this mandate, the SEC explained when it adopted the final rule promulgating Regulation NMS in 2005 that it sought to avoid "a totally centralized system that loses the benefits of vigorous competition and innovation among individual markets," and when it then reviewed the equity market structure in 2010, it recognized that mandating consolidation of order flow "would create a monopoly and thereby lose the important benefits of competition among markets."

Far from adding to the extensive benefits that retail investors currently enjoy, the Proposed Rule will jeopardize the over $20 billion in savings currently delivered to retail investors—by, among other things, harming competition among trading centers in contravention of the Exchange Act and the clear intent of Congress in establishing the national market system. More specifically, retail brokers, who have a duty of best execution, constantly assess the execution quality received from wholesalers, exchanges and Alternative Trading Systems ("ATSs") and reward the market centers that provide the most superior execution quality by routing higher levels of order flow to them. This responsive dynamic creates competition between wholesalers which has a disciplining effect on execution quality and causes wholesalers to provide significant price and size improvement and liquidity across all securities, including by extending their own capital. Under the Proposed Rule, this competitive dynamic will be vitiated and wholesalers will no longer have an incentive to provide these benefits. Given this and other likely harms, it is therefore particularly notable that the SEC has failed to identify a market failure justifying this radical proposal. Although the SEC claims that the Proposed Rule is necessary to promote "order-by-order competition," it fails to establish that customers are not receiving best execution for their orders under the existing regime.

In short, the SEC is poised to engage in a risky experiment, without having conducted a proper economic analysis, that would jeopardize substantial benefits the current market structure delivers to investors for a theoretical, and highly speculative $1.5 billion in notional savings that the Proposed Rule hypothesizes may accrue from an order-by-order auction regime.

Questions and Responses

We have provided direct responses to the questions posed in the following pages:

Regulation NMS: Variable Minimum Pricing Increments

QUESTION #1: *If adopted as proposed by the SEC, please provide your views regarding whether Canada should harmonize with an amended SEC rule, including with respect to:*
(a) the methodology used to calculate minimum pricing increments, including, source of data (which marketplaces and what entity should be responsible for calculation) and time periods during which the metrics are calculated,
(b) securities to which any amended Canadian price increments would apply (e.g., inter-listed securities only or all or some classes of securities, exchange-traded funds and/or other exchange-traded securities),
(c) treatment of situations where the use of an aligned methodology results in different trading increments between inter-listed securities traded in Canada and the U.S. (i.e., where the time-weighted average quoted spreads in Canada and the U.S. are different for the same security).

Answer:
As detailed above, we encourage the CSA and CIRO to employ a thoughtful, data-driven approach and believe that any potential implementation in the U.S. does not necessitate an immediate copy-cat implementation in Canada. Instead, the CSA and CIRO should review the negative and positive impacts of the proposals by assessing data post-implementation and determine whether any related implementation is necessary in the Canadian markets.

QUESTION #2: *If Canadian requirements as related to minimum pricing increments are not amended in response to an amended SEC rule as proposed:*
(a) Would marketplace participants send less order flow to Canadian marketplaces in favor of U.S. trading venues?
(b) Does the difference in value between the Canadian and the American dollars matter in your analysis?

Answer:
We note that given the potential for the Proposed Rules to be implemented simultaneously or within a short timeframe, it is challenging to determine with certainty the degree to which certain participants would send more or less order flow to Canadian marketplaces in favour of U.S. trading venues. We believe this supports a data-driven approach as detailed above.

QUESTION #3: *Concerns have been raised in relation to:*
(a) operational resiliency and systems readiness should the number of pricing increments be increased, especially where they would be periodically adjusted on a per-security basis, and
(b) increase in message traffic (i.e., electronic order and trade messages) that will result from an increase in the number of pricing increments.
Please discuss whether you share these concerns.

Answer:
We have previously detailed similar concerns in our comment letter to the SEC on this proposal and believe that the increased operational risk and additional cost of developing systems and processing message traffic should only be accepted if it is supported by a robust economic analysis which currently has not been conducted. Please see the section above on Regulation NMS and our complete Reg NMS comment letter for additional discussion.

QUESTION #4: *It has been suggested that any Canadian proposal to amend minimum pricing increments would introduce complexity in managing orders. Please provide your views in this regard, including as related to:*
(a) complexities associated with the frequency at which minimum trading increments could change,
(b) the necessary lead-time between establishment and implementation of new minimum trading increments both initially and on an ongoing basis,
(c) challenges with management of existing orders entered on marketplaces at prices that have become invalid trading increments (may be particularly relevant for orders of retail investors that are entered with longer expiry dates (i.e., "GTC" orders)),
(d) investor education challenges associated with an amended approach to minimum pricing increments

Answer:
We agree the proposals would introduce significant complexity in managing orders and believe that the cost of this additional complexity would ultimately be detrimental to investors. Please see the section above on Regulation NMS and our complete Reg NMS comment letter for additional discussion.

QUESTION #5: *As modifying trading increments in Canada would impact the determination of a "better price" under UMIR, please discuss whether Participants (as defined in UMIR 1.1) would still be providing meaningful price improvement in circumstances where a "better price" is required.*

Answer:
We do not believe any change is necessary to the definition of a "better price" under UMIR.

QUESTION #6: *Please provide any views on expected outcomes (positive and negative) associated with any changes to minimum trading increments, including as related to expected quoted volume at each price increment. Additionally, please provide your views on what metrics could be used to evaluate whether any new approach to minimum trading increments results in positive or negative outcomes.*

Answer:
We believe additional changes to minimum trading increments will ultimately harm the marketplace, investors, and issuers that access our capital markets. Please see the section above on Regulation NMS and our complete Reg NMS comment letter for additional discussion about the harmful effects of over fragmentation and how it disincentivizes liquidity provision and makes the NBBO less robust.

Regulation NMS: Reduce Access Fee Caps

QUESTION #7: *Please discuss whether fee caps should also apply to "taker-maker" fee models and, if so, whether their fee caps should be different.*

Answer:
Virtu broadly supports innovation and competition in marketplaces, and accordingly does not believe additional regulation of access fees is necessary in the Canadian marketplace. With the requirements of the Order Protection Rule, we note that the existing regulation of taker fees with relation to "maker-taker" models is necessary as firms are required to remove (take) liquidity from protected marketplaces. However, this protection is not necessary on "taker-maker" fee models where firms would be rebated for taking liquidity.

Please see the section above on Regulation NMS for additional discussion.

QUESTION #8: *To be able to calculate the full cost of a transaction at the time of execution, the SEC also proposes to require that all exchange fees and rebates be determinable at the time of execution. U.S. trading venues would be required to set such volume thresholds or tiers using volume achieved during a stated period prior to the assessment of the fee or rebate so that market participants are able to determine what fee or rebate level would be applicable to any submitted order at the time of execution.*

Please discuss whether we should take a similar approach in Canada.

Answer:
We do not believe any additional regulation of exchange fees and rebates is necessary and advocate for the CSA and CIRO to allow natural competitive economic forces to determine marketplace pricing models.

QUESTION #9: *If adopted as proposed by the SEC, please provide your views on a Canadian approach to fee caps, including with respect to:*

(a) harmonization with an amended SEC rule, including with respect to application to inter-listed and/or non-inter-listed securities,

(b) methodology used, including with respect to:

i. application to all securities, regardless of price,

ii. consideration of a fee cap that reflects tick size, similar to the methodology proposed by the SEC, and

iii. consideration of a percentage-based fee cap for securities priced under CAD1.00.

Answer:
As detailed above we strongly urge the CSA and CIRO to reject the notion of a simultaneous implementation and encourage the CSA and CIRO to employ a data-driven approach before any implementation.

Regulation NMS: Enhance Transparency about Better Priced Orders Available in the Market

QUESTION #10: *Our preliminary view is that enhancing the transparency of better priced orders does not need to be addressed in Canada. The transparency of order and trade data is sufficient in Canada due to the availability of odd lot data and the lack of off-exchange trading.*

Please discuss if you share our assessment and provide any additional considerations in this area.

Answer:
We do not believe a regulatory response is required to mandate additional transparency of order and trade data.

Regulation Best Execution

QUESTION #11: *Our preliminary view is that the SEC Proposed Amendments in connection to Regulation Best Execution are not dissimilar to the existing best execution requirements in Canada and therefore, should likely have no implications for the Canadian best execution regime and no impact on Canadian capital markets.*

Please discuss if you share our assessment and provide any additional considerations in this area.

Answer:
As many firms expressed in their comment letters, Virtu believes that the SEC's Best Execution proposal should be rejected in its entirety. Accordingly, we do not support any related implementation in the Canadian marketplace. Please see the section above on Regulation Best Execution for additional discussion.

Disclosure of Order Execution Information

QUESTION #12: *Our preliminary view is that, since we do not have equivalent disclosure requirements as SEC Rule 605, the SEC Proposed Amendments with respect to disclosure of order execution information should not affect Canadian markets.*

Please discuss if you share our assessment and provide any additional considerations in this area.

Answer:
We agree that any potential changes to SEC Rule 605 should not affect Canadian markets and no regulatory response by the CSA and CIRO is necessary. Please see the section above on Disclosure of Order Execution Information for additional discussion.

However, Virtu would support enhancements to retail order execution quality disclosure requirements in order to promote better transparency and competition. Implementing additional disclosure requirements for retail order execution will enable retail investors to better evaluate dealers based on comparable, objective metrics such as midpoint trading, price improvement and size improvement to foster greater competition.

Order Competition Rule

QUESTION #13: *Our preliminary view is that the issues addressed by the SEC Proposed Amendment concerning order competition do not exist in Canada. In Canada, orders are generally not permitted to be executed internally by a trading venue or dealer that restricts order-by-order competition.*

Please discuss if you share our assessment and provide any additional considerations in this area.

Answer:
As many firms expressed in their comment letters, Virtu believes that the SEC's Order Competition Rule proposal should be rejected in its entirety. Virtu does not support any related implementation in the Canadian marketplace.

We encourage the CSA and CIRO to instead review the vast amount of data and analysis compiled in response to the proposed rule which demonstrates the value of the wholesaler in the existing U.S. market structure. The CSA and CIRO should consider implementing rule changes to allow this activity to occur in Canada, ultimately for the benefit of retail investors.

* * *

In closing, we refer the CSA and CIRO to a recent statement by Commissioner Hester Pierce detailing a troubling recent pattern where the SEC[2]:

- *Release[s] an expansive, unworkable rule proposal that includes myriad questions;*
- *Watch[es] as concerned commenters expend available resources to mount an all-out attack on the most unrealistic and potentially catastrophic provisions in the proposed rule, leaving them with little to no remaining resources to address questions about other, less immediately alarming, yet also concerning provisions in the proposed rule;*
- *Trim[s] the rule's unworkable excesses when finalizing the rule after the comment period has closed; and*
- *Cite[s] to the proposal's myriad questions – both answered and unanswered – to support the contention that the rule is responsive to commenters and a logical outgrowth of the proposal.*

We urge the CSA and CIRO to reject this style of rulemaking and instead look to a sensible, practical, and data-driven approach that focuses on encouraging innovation to enhance our capital markets while ensuring appropriate safeguards.

Virtu appreciates the opportunity to provide our perspective on these proposals and would welcome the opportunity to discuss further with CSA and CIRO staff on potential alternate approaches to improve market quality and increase order competition.

Respectfully submitted,

Ian Williams
Chief Executive Officer
Virtu Canada Corp.

[2] https://www.sec.gov/news/statement/peirce-statement-securitizations-112723