

February 12, 2025

Ms. Vanessa Countryman
Secretary
U.S. Securities and Exchange Commission
100 F Street NE
Washington DC 20549-1090

Re: Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Expand its Co-Location Services (SR-NASDAQ-2024-054; SR-BX-2024-035; SR-GEMX-2024-34; SR-ISE-2024-45; SR-MRX-2024-36; SR-Phlx-2024-47) and Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Establish Fees for Its Expanded Co-Location Services (SR-NASDAQ-2024-056; SR-BX-2024-037; SR-GEMX-2024-36; SR-ISE-2024-47; SR-MRX-2024-37; SR-Phlx-2024-49)

Dear Ms. Countryman:

McKay Brothers LLC (“**McKay**”) and its affiliate Quincy Data LLC (“**Quincy**”)¹ write to call attention to certain concerning developments as The Nasdaq Stock Market LLC and its affiliate exchanges (collectively, “**Nasdaq**” or the “**Exchanges**”) proceed with the expansion to the NY11-4 facility and work toward implementing the forthcoming “Equalization Project.”²

We very much appreciate Nasdaq’s presentation and discussion regarding the NY11-4 expansion and Equalization Project at its November 18, 2024 event in Chicago. Such conversations help market participants gain a shared understanding of the challenges and opportunities in the evolving market infrastructure landscape. More disclosure is necessary, including details of Nasdaq’s eighteen-month timeline that began in September 2024.

Recent experiences with Nasdaq’s practices at NY11 and NY11-4 have raised additional significant concerns regarding transparency, equitable treatment of exchange members and customers, and adherence to Nasdaq’s obligations under the Securities Exchange Act of 1934 (“**Exchange Act**”). We must ask the Commission for diligent oversight as Nasdaq proceeds with its Equalization Project, in particular with respect to its information sharing.³ In particular, as detailed below, Nasdaq appears to be offering to some market participants, for fees, a materially faster form of connectivity which: (a) has not

¹ Quincy is a market data distributor that provides equal access to low latency US equities market data that helps subscribers make tighter markets. McKay is a telecommunications service provider, affiliated with Quincy and using various technologies—often wireless—to offer low-latency data transport services, which likewise allow subscribers to manage risk more effectively and make tighter markets. We offer services on a level-playing field basis—meaning we make our best latencies available to all subscribers. We also provide mechanisms to support greater diversity of market participants with access to low latency market data.

² The “Equalization Project,” according to Nasdaq, is designed to equalize telecommunications provider access across all parts of Nasdaq’s data campus. *See, e.g.*, Securities Exchange Act Release No. [101078](#) (Sept. 18, 2024), 89 FR 77937, 77938 (Sept. 24, 2024) (SR-NASDAQ-2024-054). *See also, e.g.*, Securities Exchange Act Release No. [101267](#) (Oct. 7, 2024), 89 FR 82666 (Oct. 11, 2024) (SR-NASDAQ-2024-056).

³ *See* Letter to Vanessa Countryman, Secretary, Commission, from Jim Considine, Chief Financial Officer, McKay Brothers, LLC (Mar. 22, 2024) at 12, <https://www.sec.gov/comments/sr-nasdaq-2024-007/srnasdaq2024007-449159-1150442.pdf> (“The repeated and sustained efforts to provide unequal and unfair advantages to select market participants by the [Nasdaq] Exchanges—and obscure such advantages— further stress the need for heightened Commission oversight.”).

been filed in any proposed rule change with the Commission and (b) has not been identified on Nasdaq's fee schedule. Nasdaq also appears to be seeking ways to limit competition through contractual provisions within its datacenter.

I. Nasdaq Secretly and Selectively Grants Latency Advantages: This Time via a Previously Undisclosed Offer for Hollow-Core Fiber Upgrades

As evidenced in Nasdaq's current rules, Nasdaq offers fiber connections with various bandwidths (e.g., 100MB, 1Gb, or 10Gb connectivity). Until recently, McKay and most market participants, relying on Nasdaq rule filings, understood that Nasdaq provided a uniform type of fiber to all colocation customers. We, and certain customers of ours, have recently learned that Nasdaq offers some customers the option to improve latency by installing hollow-core fiber, which provides a materially lower latency connection than standard, solid-core fiber.

For background, there are two types of fiber optic cables: (i) solid-core and (ii) hollow-core. Hollow-core fiber has an air-filled center, which allows light signals to travel faster than they do in solid-core fiber. Using hollow-core fiber reduces latency by about one-third (1/3).⁴

We understand that Nasdaq now sells the right to upgrade to the faster hollow-core fiber for an additional monthly fee of \$10,000. Nasdaq's current fees for fiber connectivity do not distinguish between the use of solid-core or hollow-core fiber, and McKay is not aware of any additional fee for the use of hollow-core fiber on Nasdaq's published fee schedule or in any Nasdaq proposed rule change. Nasdaq does not supply the hollow-core fiber itself, but the upgrade request is made through Nasdaq using standard Nasdaq forms and subject to the aforementioned monthly fee. Several market participants were as surprised as we were to learn that Nasdaq covertly provides select market participants with such a latency improvement option.

There can be no question that the availability of such hollow-core fiber offering is subject to the rule filing process. Without doing so, Nasdaq fails to comply with its obligations under Section 19(b) of the Exchange Act and Rule 19b-4 thereunder.⁵ The additional fee for hollow-core fiber also contravenes Sections 6(b)(4), 6(b)(5), and 6(b)(8) of the Exchange Act⁶ by, among other things, unfairly discriminating against any colocation customer or prospective customer to whom hollow-core fiber is not offered, imposing an inappropriate burden on competition between such customers and those customers that do attain hollow-core fiber, and lacking any certainty of a uniform, reasonable, and equitable fee. We do not know for how long Nasdaq has enabled select market participants to operate with lower latency through the use of hollow-core fiber.

We bring attention to the hollow-core fiber offering to illustrate further that Nasdaq's ongoing transparency lapses raise serious Exchange Act concerns and to urge either a rule filing with respect to the hollow-core fiber offering or eliminating such offering (and any other undisclosed latency

⁴ See, e.g., Alexander Osipovich, [High-Frequency Traders Push Closer to Light Speed with Cutting-Edge Cables](#), Wall Street Journal (Dec. 15, 2020) ("Because light travels nearly 50% faster through air than glass, it takes about one-third less time to send data through hollow-core fiber than through the same length of standard fiber.").

⁵ 15 U.S.C. 78s(b); 17 CFR 240.19b-4.

⁶ 15 U.S.C. 78f(b)(4), (5) and (8).

advantages) for all customers. It is extremely frustrating to periodically learn of yet another means by which Nasdaq provides hidden latency advantages to select market participants.⁷

II. Nasdaq Must Provide Greater Transparency and Commit to True Latency Neutrality

We continue to have significant concerns surrounding Nasdaq's lack of transparency in exchange connectivity and market data distribution. These include:

- Private Discussions Regarding the NY11-4 Rollout – The aforementioned November 2024 Chicago event on the NY11-4 expansion and the Equalization Project was by invitation only. It is unclear why this event was not open to the public and the Commission. The event followed many months of Nasdaq's selective disclosure through confidential technical specifications to select market participants only. It is unclear to us if Nasdaq affiliates also gain an information advantage.
- Availability of Hollow-Core Fiber – As detailed in Part I, the availability of hollow-core fiber at Nasdaq's datacenter means that some connections at Nasdaq are faster than others even where those connections have an identical length. The hollow-core fiber offering should be made available to all market participants in a manner consistent with the Exchange Act or should be withdrawn as a product (with currently advantaged connections removed).⁸
- Nasdaq Wireless Services – In the absence of an appropriate rule filing, it is unclear whether the Nasdaq Wireless Services have been secretly using hollow-core fiber and, if so, for how long. We have been told (but have never seen publicly validated by Nasdaq) that the Nasdaq Wireless Services were equalized by spooled fiber to negate some portion of the latency advantage provided by its exclusive access to the datacenter roof. By using hollow-core fiber, such services could still have a significant latency advantage over others' connectivity. This is yet another reason why it is important for Nasdaq to submit a rule filing for such services, consistent with the express ruling of the D.C. Circuit over three years ago.⁹
- Use of Vague Terms in Agreements/Technical Documentation – Nasdaq speaks of "equidistant" cabling (including in the Agreement discussed in Part III of this letter) rather than "latency neutral" cabling. Similarly, Nasdaq frequently uses ambiguous terms like "fiber," "cable," or "media" in a manner that leaves open the possibility for specialized types of fiber, cable, or media that could provide hidden advantages. Given our experience with Nasdaq's hollow-core fiber offering, we believe the lack of specificity is intentional.

The discovery of Nasdaq's hollow-core fiber offering raises the question of whether there are other mechanisms Nasdaq uses to provide favored market participants with undisclosed latency advantages. For example:

⁷ McKay notes that it recently upgraded its own connections to hollow-core fiber out of competitive necessity, but would happily revert back to the use of a solid-core connection in the interests of promoting a level playing field, provided that no market participants were allowed to use hollow-core fiber connections.

⁸ It should also be made clear which connections within the datacenter that Nasdaq allows use of hollow-core fiber (e.g., from a customer cabinet to the matching engine).

⁹ See [Intercontinental Exchange, Inc. et al v. SEC](#), No. 20-1470 (D.C. Cir. 2022).

- Does Nasdaq allow any service providers or market participants more direct routes to Nasdaq trading systems while others are compelled to traverse multiple meet-me-rooms, switches or other Nasdaq-controlled infrastructure?
- Does Nasdaq allow any market participants to use equidistant, but 30% faster, hollow-core fiber to access the matching engine faster than market participants using standard solid-core fiber?
- Does Nasdaq allow any tenants of the on-premises ATC tower to use hollow-core fiber to access the Nasdaq matching and market data engines?
- In NY11-4, does Nasdaq allow select market participants to use hollow-core fiber for any fiber connections between any two points in the data center and, if so, which ones?
- Is Nasdaq's claim of pursuing "equidistance" using a cleverly selected term to satisfy the obvious market expectation of equalized *latency*?

These questions are not aspersions directed at Nasdaq. Simply put: given Nasdaq's persistent lack of transparency, they can no longer be granted the benefit of the doubt.

As we and others have called for many times, as Nasdaq proceeds with its Equalization Project, it is imperative that Nasdaq equalize the latency of its datacenter campus connections. These kinds of secret advantages erode trust in our markets and are the kinds of practices that the Exchange Act was specifically enacted to guard against.

The appropriate standard is for Nasdaq to truthfully represent that **all cross-connects in the datacenter that are controlled or enabled by Nasdaq have been equalized to within one foot AND one nanosecond of each other**. This is the current industry standard for exchange controlled datacenters. Without committing to this standard the Equalization Project will be pointless.¹⁰ Despite repeated prompting, Nasdaq has not yet publicly committed to such a standard.

III. Nasdaq's New "Network Operating Agreement" Is Anticompetitive

Nasdaq recently introduced a contract that governs activity in NY11-4: the Nasdaq Network Operator Agreement (the "**Agreement**"). The Agreement applies to any telecommunications ("telco") provider and/or market data vendor (collectively, "vendor"), which includes a number of Nasdaq member broker-dealers, colocating at Nasdaq's facilities. Nasdaq has not previously required such vendors to enter into any such agreement.

We do not object in principle to an agreement governing vendors' functions on Nasdaq's campus. However, many of the Agreement's provisions are anticompetitive and unreasonably discriminatory. Just a few of the concerning provisions in the Agreement are set forth below:

- *Unilateral Ability for Nasdaq to Change Any Term of the Agreement* – Nasdaq "reserves the right, at its sole discretion, to modify the terms of this Agreement (including any fees) from time

¹⁰ This is particularly important as we are already hearing about a possible expansion to NY11-5, which could provide yet another opportunity for Nasdaq to provide latency advantages to select market participants over others.

to time by sending [notice] to Vendor’s email”¹¹ Vendor redress is limited to cancelling the contract and thereby forfeiting their business, which in turn reduces competition.

- *Prohibits Competition* – Nasdaq strictly limits services that a vendor can provide to only the distribution of market data or provision of connectivity.
 - We and other vendors compete by disseminating feeds from other NMS markets. If the Agreement is not modified, Nasdaq would have a contractual basis to eliminate vendors offering market data from other markets in favor of a Nasdaq-affiliated provider of such services.
 - We recently released an innovative sub-nanosecond “Time Sync” service to address an industry-wide challenge of clock drift and to promote members’ compliance with regulatory requirements such as CAT reporting. If the Agreement is allowed, Nasdaq would have a contractual basis for eliminating all competition for an affiliated provider service. The restriction obviously harms competition and innovation.
 - This provision would also prohibit a variety of other services a vendor might offer (some of which we offer in other datacenters) including (i) hosting colocation customer’s equipment within a vendor’s allocated space; (ii) routing services; (iii) news feeds; (iv) trading systems as a service (TSaaS) where a vendor hosts trading software for clients; (v) internet connectivity; and (vi) countless future innovations. If the Agreement is not modified, Nasdaq could contractually eliminate all competition in these service categories.
- *Unduly Limits Vendors’ Ability to Help Customers Make Informed Choices* – The Agreement mandates that, with certain limited exceptions, all information disclosed orally or in writing from Nasdaq is “Confidential Information,” the disclosure of which can trigger immediate, unilateral termination by Nasdaq.
 - Telco providers/data vendors like the Firm frequently rely on technical specifications and other materials made available by exchanges to inform customers of their connectivity options through detailed discussions. All of Nasdaq’s technical documentation, including with respect to NY11-4, are considered confidential and therefore a vendor risks a potential violation for discussing such information.
 - We doubt Nasdaq-affiliated vendor services are subject to such limitations.
 - These contractual limitations could also preclude a letter like this one raising Exchange Act concerns. Indeed, the installation of hollow-core fiber involved information disclosed from Nasdaq to us as a vendor.¹²

¹¹ The full amendment provision is as follows: “Nasdaq reserves the right, at its sole discretion, to modify the terms of this Agreement (including any fees) from time to time by sending to Vendor’s email address indicated on the most recent Schedule signed by both Nasdaq and Vendor. The modified Agreement and/or fees will become effective sixty (60) days after Nasdaq’s notification. Vendor does not agree to the Agreement and/or fees, Vendor may, within thirty (30) days of Nasdaq’s notification, terminate this Agreement and all associated Schedules by supplying at least thirty (30) days’ written notice to Nasdaq, without penalty for early termination, in which case Nasdaq shall terminate Vendor’s connection to Nasdaq Co-Location Service Area and de-list Vendor from Nasdaq’s approved vendors list for relevant Data Center(s).”

¹² We have been told by Nasdaq that no negotiation of the terms of this Agreement are allowed. We have not yet signed the Agreement.

- *Anticompetitive, Unilateral Nasdaq Termination Rights* – The Agreement provides that “Nasdaq, in its sole discretion, may terminate this Agreement without liability: (a) With immediate effect if Vendor is engaged in activities that Nasdaq reasonably determines may be detrimental to the business, reputation, customers or services of Nasdaq and its Affiliates”
 - This expansive provision provides tremendous latitude to allow Nasdaq to terminate a vendor’s presence where Nasdaq believes a vendor is competitive or otherwise “detrimental” to Nasdaq’s or its affiliates’ services anywhere in the world across any business function.

We believe these provisions are, at a minimum, inconsistent with Rule 603(a)(2) under the Exchange Act (the “**Vendor Display Rule**”), which requires that a national securities exchange that disseminates quotation information to any person do so on terms that are not unreasonably discriminatory.¹³ The Nasdaq provisions are further inconsistent with Nasdaq’s obligations under Sections 6(b)(5) and (8) of the Exchange Act to remove impediments to and perfect the mechanism of a free and open market, to not permit unfair discrimination and to not impose inappropriate burdens on competition.¹⁴

The Agreement’s provisions have a chilling effect on competition that directly impacts Nasdaq members who would be limited in their choice of vendors and the services offered from Nasdaq’s campus. Market participants may find one day that their vendor – through a typical vendor-client implementation discussion – has lost access to Nasdaq colocation space or data feeds.

Nasdaq operates from the position of a monopoly with respect to its market data and connectivity to its systems because market participants are required by the Order Protection Rule to both access the Nasdaq exchange and to consume its market data.¹⁵ Consequently, the Agreement represents an adhesion contract in which vendors have no choice but to accept Nasdaq’s terms. It is for this reason that Exchange Act principles, the Vendor Display Rule, and Commission oversight are necessary checks against an exchange’s natural monopoly over access to markets and market data. We therefore urge the Commission to require Nasdaq to eliminate anticompetitive limitations in the Agreement.

IV. Conclusion

The offering of hollow-core fiber reflects a continued pattern and practice by Nasdaq of offering secret speed advantages to select market participants and imposing anticompetitive burdens on those not provided the offering.¹⁶ The unreasonably discriminatory terms of the Network Operating Agreement

¹³ 17 CFR 242.603(a)(2). While the Vendor Display Rule does not expressly apply to telco operators providing connectivity to market participants to transmit orders, the rule should be construed consistently across data transmission vendors. Both market data vendors and telco providers perform the same core function of transporting information to/from an exchange. The Commission would surely never contemplate that an exchange could unreasonably discriminate against vendors providing connectivity services necessary to access an exchange yet would be prohibited from doing so with respect to the dissemination of market data.

¹⁴ 15 U.S.C. 78f(b)(5) and (8).

¹⁵ 17 CFR 242.611.

¹⁶ This pattern and practice includes Nasdaq (i) still not having submitted a rule filing for its Nasdaq Wireless Services despite an express D.C. Circuit ruling requiring as much; (ii) prioritizing the expansion to NY11-4 before equalizing its existing facilities knowing that many members already maintain two points of presence in NY11; and (iii) only acquiescing to the “Equalization Project” after pressure from commenters despite it being obvious that continued maintenance of unequal facilities is completely inconsistent with the Exchange Act.

further reflect attempts by Nasdaq to limit competition and inappropriately advantage services provided by its affiliates over those provided by unaffiliated vendors. We know of no other NMS exchange that fails to comply in this regard with the Exchange Act, and Nasdaq does so routinely. Commission oversight is the only check against these practices.

We therefore urge the Commission to require Nasdaq to do the following:

- (1) *Submit a Hollow-Core Fiber Rule Filing* – with comprehensive fee information, as is required under the Exchange Act. Alternatively, Nasdaq must be compelled to withdraw the offering entirely and reestablish the status quo ante;
- (2) *Publicly Commit to “Latency Equalization” and Its Eighteen-Month Timeline* – publicly commit as part of its Equalization Project to equalize cross-connects to within one foot *and* one nanosecond of each other, and to complete the Equalization Project on the eighteen-month timeline it discussed previously;
- (3) *Treat Network Operators Equally* – not use its position to unfairly discriminate against telco providers and market data vendors against which Nasdaq affiliates compete, including in the terms of any Agreement used to govern vendor operations at the NY11-4 data center;
- (4) *Make Public Disclosures Regarding Latency* – for any products or services offered by Nasdaq or another exchange—in particular connectivity services—require Nasdaq (and other exchanges) to provide or make public latency distribution and performance metrics to allow market participants to make informed decisions.

We reiterate our call for a level playing field with respect to exchange connectivity and market data distribution. We have additional concerns regarding NY11-4 on which we may comment separately. Thank you again for the opportunity to comment on these developments. Please contact us with any questions.

Sincerely,



Jim Considine
Chief Financial Officer
McKay Brothers, LLC

cc: The Hon. Mark T. Uyeda, Acting Chairman
The Hon. Hester M. Peirce, Commissioner
The Hon. Caroline A. Crenshaw, Commissioner

Mr. David Saltiel, Acting Director, Division of Trading and Markets
Ms. Andrea Orr, Deputy Director, Division of Trading and Markets
Mr. David S. Shillman, Associate Director, Division of Trading and Markets
Mr. Eric Juzenas, Associate Director, Division of Trading and Markets