

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-100485; File No. SR-GEMX-2024-16)

July 10, 2024

Self-Regulatory Organizations; Nasdaq GEMX, LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Launch Proximity-On-Demand, a Managed Colocation Solution

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”),¹ and Rule 19b-4 thereunder,² notice is hereby given that on June 28, 2024, Nasdaq GEMX, LLC (“GEMX” or “Exchange”) filed with the Securities and Exchange Commission (“SEC” or “Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to launch Proximity-On-Demand, a managed colocation solution.

The text of the proposed rule change is available on the Exchange’s Website at <https://listingcenter.nasdaq.com/rulebook/gemx/rules>, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to launch Proximity-On-Demand (“POD”), a managed colocation solution. POD will offer colocation customers a convenient variant of colocation where applications are deployed on managed infrastructure in the form of virtual or dedicated servers in the co-location space.

Current Co-Location Offering

The Exchange currently offers colocation services, which include a suite of data center space, power, telecommunication, and other ancillary products and services that allow customers to place their trading and communications equipment in close physical proximity to the quoting and execution facilities of the Exchange. The use of colocation services is entirely voluntary and colocation services are available to all market participants who desire them.

Colocation customers are not provided any separate or superior means of direct access to the Exchange quoting and trading facilities. Nor does the Exchange offer any separate or superior means of access to the Exchange quoting and trading facilities as among colocation customers themselves within the data center (or any future expansions to the data center).³

In addition, all orders sent to the Exchange market enter the marketplace through the same central system quote and order gateway regardless of whether the sender is co-located in the Exchange data center or not. In short, the Exchange has created no special market

³ Although the proposal and launch of POD are not dependent on the expansion of the data center, the Exchange notes that is in the process of expanding its data center in Carteret, New Jersey. Client connections to the matching engine will be equal across the board, within and among the current data center and the expansion.

technology or programming that is available only to co-located customers and the Exchange has organized its systems to minimize, to the greatest extent possible, any advantage for one customer versus another.

Proximity-On-Demand

POD will be an alternative to the traditional offering of space and power for the physical colocation of customers' equipment. The Exchange will continue to offer its traditional colocation services.

With POD, customers will not need to order cabinets and power to install a server or network hardware in the Exchange's data center to be able to set up their systems and access the market directly. Instead, POD will provide customers with a variant of colocation where applications are deployed on a shared computing infrastructure⁴ co-located in the data center,⁵ providing customers with a convenient avenue to do business on the Exchange. With the Exchange's traditional colocation offering, the Exchange provides space and power and customers provide the hardware. With POD, the Exchange will provide the hardware. This allows the Exchange's customers to connect more quickly and with lower cost.

Customers will be able to select a dedicated server or a virtual machine. A dedicated server is single-tenant environment, meaning that only one customer has access to the server hardware. A virtual machine is a computing environment where each customer has exclusive access to their virtualized server, including its operating system and applications. While customers will control their virtual machines independently, the physical hardware resources, such as the CPU, memory, and storage, are shared among multiple virtual machines on the same

⁴ Shared computing infrastructure means that the Exchange would provide the infrastructure, including hardware, that can be used by multiple customers.

⁵ POD will be housed within the same data center as the existing traditional colocation offering and Exchange systems, located in Carteret, New Jersey.

physical server. Hypervisor technology keeps the separate customer operating systems securely segmented from each other, allowing a single server to support multiple virtual machines. This allows quicker deployment times and provides customers with the flexibility to dynamically adjust the amount of compute resources needed without requiring hardware changes. The Exchange anticipates that customers will choose a dedicated server where better performance is required but may prefer a virtual server for short-lived requirements or less performance-sensitive workloads.

The servers (dedicated and virtual) for POD will be located in a cabinet in the colocation space at the data center. Each customer will have their own logical network that is fully isolated and not shared with other customers. Those customers selecting a dedicated server would also have the option to add an analytics service.⁶ The analytics service will provide the ability to monitor network traffic to and from the POD infrastructure, allowing customers access to data about bandwidth usage, latency, and information related to Precision Time Protocol (PTP) timestamped messages.

Access to POD will be available via virtual private network (VPN) or Secure Shell (SSH), similar to how customers would access their fully owned co-located hardware. Customers will be able to choose from several existing options for physical connectivity, including 1G Ultra, 10G, 10G Ultra, and 40G. POD will provide access to the market through the same Extranet network as is used currently by existing colocation customers. To be clear, POD will not afford its users any special advantages relative to users of its traditional colocation services.

⁶ The analytics service is not available for virtual machines because the compute resourcing for operating analytics is incompatible with virtual machines.

Exchanges offer colocation services to facilitate the trading activities of those market participants who believe that colocation enhances the efficiency of their trading. The Exchange believes that the launch of POD will benefit an underserved market segment, including a niche of smaller customers who do not currently co-locate in any form at the data center but wish to do so. These smaller trading firms that do not directly connect and interface with the Exchange may struggle with the complexity, upfront investment, ongoing expense, and knowledge gaps required to code, connect, host and manage their own infrastructure, and trade directly with the Exchange.

The Exchange notes that similar services are currently offered by, and customers may obtain such service from, managed service providers that operate at the Carteret data center. For example, Pico and Options-IT currently offer managed service colocation at the Carteret data center.⁷ In addition to managed service providers currently offering POD-like services at the data center, additional providers offer similar services in other locations and will likely be in the Carteret data center in the future as well.⁸ ICE offers a comparable service, “Compute on Demand,”⁹ in select locations, including at NY4 (located in Secaucus, New Jersey).¹⁰ Customers

⁷ See <https://www.pico.net/infrastructure/colocation-hosting/>; <https://www.options-it.com/products/trading-infrastructure/exchange-colos/>.

⁸ See, e.g., <https://deploy.equinox.com/product/bare-metal/>; <https://tnsi.com/resource/fin/tns-dedicated-server-comprehensive-cloud-server-management-press-release/>.

⁹ See <https://www.ice.com/fixed-income-data-services/access-and-delivery/connectivity-and-feeds/hosting-managed-services#demand>. Compute on Demand provides customers with a managed solution and is a delivery model in which computing resources are made available to customers on an on-demand basis. ICE offers Compute on Demand in collaboration with Beeks. The Exchange also intends to launch POD in partnership with Beeks. Beeks will provide the hardware that will allow the Exchange to offer POD. In addition, the Johannesburg Stock Exchange currently offers an advanced managed infrastructure as a service solution, similar to POD, in collaboration with Beeks. See <https://beeksgroup.com/news/johannesburg-stock-exchange-jse-choose-beeks-and-ipc-to-power-private-cloud-deployments-for-their-customers/>.

¹⁰ Cboe affiliated exchanges utilize the Equinix NY4 data center in Secaucus, NJ.

of ICE's Compute on Demand could (and presumably do) connect to national securities exchanges.

POD will provide customers with increased options for colocation. POD will be entirely optional and available to all market participants who desire to subscribe to POD. It is a business decision of each firm whether to subscribe to POD. Rather than choosing POD, customers may choose to (1) directly co-locate at the data center by ordering cabinet space and power, and placing their equipment at the data center; (2) co-locate through a third party; or (3) not co-locate at all.

Implementation

The Exchange intends to submit a fee filing in the future to establish fees for POD, including fees for a dedicated server, a dedicated server with analytics, and a virtual machine. Implementation of the proposal described herein to offer POD would coincide with the subsequent fee filing.

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,¹¹ in general, and furthers the objectives of Section 6(b)(5) of the Act,¹² in particular, in that it is designed to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general to protect investors and the public interest because POD would provide customers with increased optionality to access the Exchange. The Exchange operates in a highly competitive market in which exchanges offer colocation services to facilitate the trading activities of those customers who believe that colocation enhances the efficiency of their trading. POD is a voluntary variant

¹¹ 15 U.S.C. 78f(b).

¹² 15 U.S.C. 78f(b)(5).

of colocation where customers can directly access the market without needing to procure physical hardware independently, instead they can use a shared computing infrastructure co-located in the data center.

The Exchange believes that the launch of POD will benefit an underserved market segment, including smaller customers who do not currently co-locate in any form at the data center but wish to do so. These smaller trading firms that do not directly connect and interface with the Exchange may struggle with the complexity, upfront investment, ongoing expense, and knowledge gaps required to code, connect, host and manage their own infrastructure, and trade directly with the Exchange. As such, the Exchange believes that the proposal would further the objective of removing impediments to and perfecting the mechanism of a free and open market and a national market system.

The proposal would benefit the public interest by providing customers more colocation options to choose from, thereby enhancing their ability to tailor their colocation operations to the requirements of their business operations. As noted above, POD will be entirely optional and available to all market participants who desire to subscribe to POD. Rather than choosing to co-locate via POD, customers may choose to (1) directly co-locate at the data center by ordering cabinet space and power, and placing their equipment at the data center; (2) co-locate through a third party; or (3) not co-locate at all. Services comparable to POD are currently offered by, and customers may obtain such service from, any managed service providers that operate at the Carteret data center.

Again, POD will offer its users no special advantages relative to users of the Exchange's traditional colocation services. Though POD will allow customers to use Exchange-provided hardware to access the Exchange, POD does not otherwise fundamentally differ from current

connectivity to the Exchange. The Exchange is not proposing to change the nature of the services provided today. Rather, POD will differ as to who provides the hardware.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.

Nothing in the proposal imposes any burden on the ability of other exchanges to compete. The Exchange operates in a highly competitive market in which exchanges and other vendors offer colocation services to facilitate the trading and other market activities of those market participants who believe that colocation enhances the efficiency of their operations.

Nothing in the Proposal burdens intra-market competition because POD will be available to any customer and customers that wish to co-locate via POD can do so on a non-discriminatory basis. Use of any colocation service is completely voluntary, and each market participant is able to determine whether to use colocation services, including POD, based on the requirements of its business operations. POD will offer its users no special advantages relative to users of the Exchange's traditional colocation services.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time

as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A)(iii) of the Act¹³ and subparagraph (f)(6) of Rule 19b-4 thereunder.¹⁴

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-GEMX-2024-16 on the subject line.

¹³ 15 U.S.C. 78s(b)(3)(A)(iii).

¹⁴ 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

Paper Comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090.

All submissions should refer to file number SR-GEMX-2024-16. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright

protection. All submissions should refer to file number SR-GEMX-2024-16 and should be submitted on or before [INSERT DATE 21 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁵

Vanessa A. Countryman,
Secretary.

¹⁵ 17 CFR 200.30-3(a)(12).