Required fields are shown with yellow backgrounds and asterisks.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
Form 19b-4

File No. * SR 2024 - * 47
Amendment No. (req. for Amendments *)

Filing by Nasdaq PHLX LLC

Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Initial *	Amendment *	Withdrawal	Section 19(b)(2) *	Section 19(b)(3)(A) *	Section 19(b)(3)(B) *
✓	☐	☐	☐	✓	☐

Pilot ☐

Extension of Time Period for Commission Action * ☐

Date Expires *

Rule

- ☐ 19b-4(f)(1)
- ☐ 19b-4(f)(2)
- ☐ 19b-4(f)(3)
- ☐ 19b-4(f)(4)
- ☐ 19b-4(f)(5)
- ✓ 19b-4(f)(6)

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010

Section 806(e)(1) * ☐

Section 806(e)(2) * ☐

Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934
Section 3C(b)(2) * ☐

Exhibit 2 Sent As Paper Document ☐

Exhibit 3 Sent As Paper Document ☐

Description

Provide a brief description of the action (limit 250 characters, required when Initial is checked *).

A proposal to expand its co-location services.

Contact Information

Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.

First Name * Brett
Last Name * Kitt
Title * Vice President and Deputy General Counsel
E-mail * Brett.Kitt@Nasdaq.com
Telephone * (301) 978-8132
Fax

Signature

Pursuant to the requirements of the Securities Exchange of 1934, Nasdaq PHLX LLC
has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

Date 09/05/2024

By John Zecca
(Name *)

(Title *)
EVP and Chief Legal Officer

NOTE: Clicking the signature block at right will initiate digitally signing the form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

Date: 2024.09.05
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Required fields are shown with yellow backgrounds and astericks.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EFFS website.

Form 19b-4 Information * Add / Remove / View SR-PHLX-2024-47 19b-4.docx	The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.
Exhibit 1 - Notice of Proposed Rule Change * Add / Remove / View SR-PHLX-2024-47 Exhibit 1.docx	The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)
Exhibit 1A - Notice of Proposed Rule Change, Security-Based Swap Submission, or Advanced Notice by Clearing Agencies * Add / Remove / View	The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)
Exhibit 2- Notices, Written Comments, Transcripts, Other Communications Add / Remove / View	Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G. ☐ Exhibit Sent As Paper Document
Exhibit 3 - Form, Report, or Questionnaire Add / Remove / View	Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change. ☐ Exhibit Sent As Paper Document
Exhibit 4 - Marked Copies Add / Remove / View	The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.
Exhibit 5 - Proposed Rule Text Add / Remove / View SR-PHLX-2024-47 Exhibit 5.docx	The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change
Partial Amendment Add / Remove / View	If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

1. Text of the Proposed Rule Change

(a) Nasdaq PHLX LLC ("Phlx" or "Exchange"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")[1] and Rule 19b-4 thereunder,[2] is filing with the Securities and Exchange Commission ("SEC" or "Commission") a proposal to expand its co-location services.

A notice of the proposed rule change for publication in the Federal Register is attached as Exhibit 1. The text of the proposed rule change is attached as Exhibit 5.

(b) Not applicable.

(c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved by senior management of the Exchange pursuant to authority delegated by the Board of Directors (the "Board"). Exchange staff will advise the Board of any action taken pursuant to delegated authority. No other action is necessary for the filing of the rule change.

Questions and comments on the proposed rule change may be directed to:

Brett Kitt
Vice President and Deputy General Counsel
Nasdaq, Inc.
301-978-8132

1 15 U.S.C. 78s(b)(1).

2 17 CFR 240.19b-4.

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

a. Purpose

The Exchange proposes to expand its co-location services by offering new cabinet, power, and power distribution unit options in the Exchange's expanded data center. [3]

The Exchange's current data center ("NY11") in Carteret, NJ is undergoing an expansion ("NY11-4") in response to demand for power and cabinets. NY11-4 is not a new or distinct co-location facility. Instead, NY11-4 is simply an expansion of the existing Nasdaq NY11 data center,[4] and Nasdaq intends to operate it generally in the same manner as existing aspects of NY11.[5] Client connections to the matching engine will be equal across the board, within and among NY11 and NY11-4. In 2010, the Exchange undertook a similar expansion to its data center, where connectivity to the Exchange remained equalized, as is the case with the NY11-4 expansion.

The Exchange submits this filing to propose offering new services in NY11-4, as described below, and to the extent the Exchange offers additional new services, whether

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[3] The Exchange previous submitted a similar proposal earlier this year, see Securities Exchange Act Release No. 34-100559 (July 18, 2024), 89 FR 69952 (July 24, 2024) (SR-PHLX-2024-32) (the "Prior Proposal"), but withdrew it on August 29, 2024 to allow for the Exchange to address outstanding comments and concerns raised by the Commission Staff and commenters.

[4] NY11-4 is not a standalone facility. Equinix considers the site as NY11 with three expansions: NY11 Phase 1, NY11 Phase 2 and NY11-4.

[5] As discussed below in further detail, one aspect of the data center that will be different (temporarily) in NY11-4 as compared to NY11 is telecommunications access and inter-client connectivity. In NY11-4 at its launch, connections between colocated client cabinets and the carrier cage will be equalized as will be inter-client connectivity. Presently, such connectivity is not equalized in NY11, but the Exchange intends to retrofit NY11 to be equalized in the months ahead.

in the existing NY11 data halls or in the new NY11-4 data hall, the Exchange will submit additional filings with the Commission.

New and Upgraded Services in NY11-4

NY11-4 Expanded Cabinet Optionality: Ultra High Density Cabinet

Currently, co-location customers have the option of obtaining cabinets of various sizes and power densities. Co-location customers may obtain a Half Cabinet,[6] a Low Density Cabinet with power density less than or equal to 2.88 kilowatts ("kW"), a Medium Density Cabinet with power density greater than 2.88 kW and less than or equal to 5 kW, a Medium-High Density Cabinet with power density greater than 5 kW and less than or equal to 7 kW, a High Density Cabinet with power density greater than 7 kW and less than 10 kW, and a Super High Density Cabinet with power density greater than 10 kW and less than or equal to 17.3 kW.

The Exchange proposes to introduce a new cabinet choice in NY11-4, an "Ultra High Density Cabinet," with power density greater than 10 kW and less than or equal to 15 kW. Based on demand, the Exchange wishes to introduce the Ultra High Density Cabinet as an option for customers between the High Density Cabinet and the Super High Density Cabinet. The Ultra High Density Cabinet option would only be offered in NY11-4 because of the power configuration necessary for such cabinets, which is not possible or available in other portions of the data center due to different power distribution. Because of the addition of the Ultra High Density Cabinet option in NY11-4, the Super High Density Cabinet in NY11-4 would have power density greater than 15 kW and less than or equal to 17.3 kW.

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6 Half cabinets are not available to new subscribers. See General 8, Section 1(a).

In addition to the Ultra High Density Cabinet, the Exchange would offer the other, existing cabinet options in NY11-4, with the exception of the Low Density Cabinet and Half Cabinet due to a lack of demand for such cabinets. The cabinets in NY11-4 will include certain features, including but not limited to: uniform, wider cabinets[7] (32” W x 48” D x 91” H), cable management, and a rear split door and combo lock.

NY-11 4 Cabinet Power and Power Distribution Units

The Exchange currently provides various cabinet power options, including: 2x20 amp 110 volt, 2x30 amp 110 volt, 2x20 amp 208 volt, 2x30 amp 208 volt, Phase 3 2x 20 amp 208 volt, Phase 3 2x 30 amp 208 volt, 2x60 amp 208 volt, Phase 3 2x 40 amp 208 volt, Phase 3 2x 50 amp 208 volt, Phase 3 2x 60 amp 208 volt, and 2x30 amp 48 volt DC. For NY11-4, the data center operator is bringing in higher voltage power options, which are more consistent with power options used in other data centers across the globe. The Exchange proposes to amend General 8, Section 1(c) to add the cabinet power options for NY11-4, which include: Phase 1 20 amp 240 volt, Phase 1 32 amp 240 volt, Phase 1 40 amp 240 volt, Phase 3 20 amp 415 volt, and Phase 3 32 amp 415 volt. The Exchange also proposes to specify in its Rules that these cabinet power options are specific to NY11-4 and that one of these options must be selected for cabinets in NY11-4. Although different cabinet power options will be offered in NY11 and NY11-4 due to differing power configurations, the new cabinet power options are not inherently preferable to the existing cabinet power options and the Exchange does not anticipate material differences

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7 In the existing data halls, clients may bring their own cabinets or use Exchange-provided cabinets. Because of the cooling system in NY11-4 (hot aisle containment), all cabinets must be uniform and therefore, the Exchange will provide all cabinets. The existing data halls utilize cold aisle containment to manage temperatures. Hot aisle containment is a more effective way to manage heat in the data center.

in equipment performance based on the power distribution. Due to higher voltage options being offered in NY11-4, the data center operator is likely to experience increased power distribution efficiencies across the data center. As between the various cabinet power options, customers choose power based on their preference and capacity needs.

The Exchange also proposes to offer power distribution units ("PDUs")[8] in NY11-4 as a convenience to customers. Rather than sourcing PDUs on a customer-by-customer basis, as the Exchange does for customers in NY11, the Exchange wishes to simplify and standardize its PDU offering in NY11-4 by offering Phase 1 and Phase 3[9] power distribution units. This service is optional and customers may choose to provide their own PDUs appropriate for their power installation choices. The Exchange also proposes to offer a switch monitored PDU add on in NY11-4, which would allow customers to connect remotely to their PDU and control the power sockets. With the switch monitored PDU option, customers would be able to power cycle or shut off power remotely. This option is optional as well and customers may choose to provide their own switch monitored PDU, if desired.

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8 PDUs are devices fitted with multiple outputs designed to distribute electric power. The standardized PDUs would only be offered for NY11-4.

9 Phase 1 PDUs would be compatible with the following power options: Phase 1 20 amp 240 volt, Phase 1 32 amp 240 volt, and Phase 1 40 amp 240 volt. Phase 3 PDUs would be compatible with the following power options: Phase 3 20 amp 415 volt and Phase 3 32 amp 415 volt. Phase 1 and Phase 3 are available in NY11 and NY11-4. Phase 3 PDUs provide greater power density than Phase 1 PDUs by delivering power over three wires as opposed to one wire.

Implementation

Although the timing is subject to change,[10] the Exchange anticipates opening NY11-4 Exchange access on November 4, 2024. In concert with this filing, the Exchange will allow customers to place orders for NY11-4, which would not be fee liable until customers are provided access to the space.[11] The Exchange will submit a fee filing to establish fees for the services described herein. Allowing customers to place orders in advance of opening its doors will allow the Exchange to plan ahead for capacity and demand for services, as well as procure necessary equipment.

Equalization of Telecommunications Connectivity in NY11-4 and NY11

Although the Exchange has constructed NY11-4 to address capacity constraints associated with its existing data center footprint, as well as to enable the provision of upgraded power for customer equipment, an ancillary design feature of NY11-4 will be that it will include, at launch, equalized cabling between customer equipment and equipment owned and operated by third-party telecommunications providers ("telco connectivity"). This design feature is incident, but not strictly relevant to the Proposal at hand. Nevertheless, we discuss it below insofar as it garnered attention in the Prior Proposal, by one commenter, in particular.[12]

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10 The Exchange will announce modifications to the proposed timing via the Nasdaq Customer Portal, which is the web portal used for order and inventory management of colocation services, and email communication to all colocation customers.

11 Charging customers once access is provided is consistent with current practice and allows customers to set up equipment and begin using power.

12 See Ltr. From J. Considine, McKay Brothers LLC, to V. Countryman, SEC, dated July 24, 2024, available at https://www.sec.gov/comments/sr-nasdaq-2024-026/srnasdaq2024026-496995-1434326.pdf (the "McKay Letter"). Akuna Securities LLC also filed a comment letter that largely echoed the arguments in the McKay Letter. See Ltr. From D. DeSalle-Baron, Akuna Securities LLC to V. Countryman, SEC, dated July 24, 2024, available at https://www.sec.gov/comments/sr-nasdaq-2024-026/srnasdaq2024026-497096-1434386.pdf.

Presently, the Exchange does not have equalized telco connectivity in NY11, much like several of its peers, IEX, MEMX, and Cboe, all of which operate through their Secaucus data center without equalized telco connectivity. [13] The present architecture of NY11 is a product of its history and that of technology; the Exchange designed NY11 at a time when latency differences were measured by customers in terms of miles of cable between customer facilities and exchange data centers, rather than in feet or inches within exchange data centers, as is the case today. As the technology paradigm shifted, and as variances in telco connectivity became more meaningful to some market participants, the Exchange reevaluated its design of its data center and determined that telco connectivity equalization would be in the best interests of the markets going forward. Thus, on its own initiative, the Exchange has embarked on an ambitious project to equalize telco connectivity across its entire data center campus, including both its existing NY11 facility and the NY11-4 expansion (the "Equalization Project"). The launch of NY11-4 will constitute phase 1 of the Equalization Project.

The Equalization Project will be complex, time consuming, and costly to complete, especially as to NY11, where the existing facility must be retrofitted with equalized cabling. In NY11, thousands of existing customer cables threaded throughout the facility will need to be removed and replaced with new infrastructure to support equidistant connectivity relative to all other customers' locations in the data center. This painstaking project will cost millions of dollars in design, equipment, and labor costs. Due to its complexity, the Equalization Project cannot and will not be accomplished

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13 The structure of the Secaucus data center is a generally known fact within the industry and one of which the Exchange is itself aware due, among other things, to its own status as a tenant of the Secaucus data center.

instantaneously.[14] Instead, the Exchange estimates that the Project will require 18-24 months to complete, commencing as of the launch of NY11-4. Moreover, it will occur in a methodical and phased manner to ensure proper design, testing, and workmanship, as well as to minimize the customer disruptions that, unfortunately, will be unavoidable during the process. The launch of NY11-4 with equalized telco connectivity will be the first phase of the Equalization Project, with the equalization of NY11 constituting the remaining phases of the Project. For the phased transition of NY11, the Exchange expects the migration to occur in tranches over the course of several weekends at the tail end of the 18-24 project period.

Concerns about the Sequencing of the Equalization Project are Unfounded

In the Prior Proposal, the commenter objected to the Exchange's plan to accomplish the Equalization Project by first launching equalized telco connectivity in NY11-4 before launching it in NY11.[15] The commenter argued that this sequencing of the Equalization Project would be unfairly discriminatory in that it would exacerbate existing inequalities in the Exchange's Data Center while also compelling customers to secure unneeded space in NY11-4 to ensure that they obtain or maintain the closest possible geographic proximity to their telecommunications providers' equipment.[16] These arguments are simply wrong.

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14 The McKay Letter asserts incorrectly and without any evidentiary basis that the Exchange is capable of equalizing telco connectivity quickly and can do so before launching NY11-4 with only a minor ensuing delay to the launch. See id. at 4, n.15. As we explain herein, equalization of NY11 will take many months to accomplish, even at an aggressive pace, including because of factors outside of its control. The Exchange notes, for example, that the fiber needed to re-cable NY11 is in short supply and orders are subject to substantial waiting periods.

15 See id.

16 See id. at 1-2, 5-6.

The Exchange's Plan for the Launch of NY11-4 to Constitute Phase One of the Equalization Project is Fair and Reasonable and in the Best Interests of the Markets

The Exchange's Plan to Proceed with NY11-4 as the First Phase of the Equalization Project is in the Best Interests of the Markets.

The fact of the matter is that the Exchange needs to launch NY11-4 – and needs to do so in November 2024 – to ensure that it remains capable of meeting the growing power and capacity demands of its customers. Regulation SCI requires the Exchange to reasonably anticipate its capacity needs. NY11-4, which has been three years in the making, is a product of the SCI planning process. Delaying the launch of NY11-4 to accommodate the equalization of NY11 would jeopardize the sound and orderly operation of the Exchange's markets. Such a danger readily outweighs any concerns that some may have about the fairness of the Exchange's plan to sequence the Equalization Project, even if such concerns were well-founded, which they are not.

We note that our customers generally support this view. One customer sent the Exchange a letter stating the following about the Exchange's plans:

> As noted in your August 12, 2024, comment letter response to the SEC, the addition of NY11-4 is needed to meet the growing customer demands for space, power, and upgraded technological capabilities. OMC echoes these concerns as one of those customers, with an immediate and significant need to expand its colocation space to accommodate the growing demands of OMC's business. OMC is a registered member of the Nasdaq Stock Market and eight other options and equities exchanges operated by Nasdaq (the "Exchanges"), with more than half of those memberships added within roughly the last year. As a registered Market Maker for hundreds of listed symbols, OMC actively provides liquidity across the Exchanges. Also, as a Designated Liquidity Provider, OMC plays a key role in supporting the active and efficient trading of many new and existing products listed on the Exchanges. To support this significant amount of trading activity on the Exchanges, OMC urgently needs the additional colocation space made available in NY11-4. Any halt or delay of the NY11-4 launch would

> prevent OMC's planned expansion and would endanger OMC's ability to grow and meet the liquidity provision demands of the Exchanges and their customers.[17]

The Exchange's Sequencing Plan is Also Pragmatic and Efficient

Expanding the existing data center by building a new wing (NY11-4) from scratch afforded the Exchange an opportunity to design the expansion efficiently with telco connectivity equalization incorporated therein from the outset. This approach avoids the need to later engage in a wasteful process of retrofitting NY11-4 for telco connectivity equalization – a process in which the Exchange must now engage with respect to NY11.

Launching NY11-4 Before Equalizing NY11 Will Not Worsen Inequality

The latency profile of a customer collocating in NY11-4 would be no better than that of the lowest latency customer and no worse than that of the highest latency customer colocating presently in NY11. In fact, the launch of a full-equalized NY11-4 before equalizing NY11 would actually diminish the overall average latency differential among collocated customers' telecom provider connections because NY11-4 introduces connections at a single latency value in between the slowest and fastest latencies. That is, the shortest current telco connection possible into NY11 is 160 ft while the longest current telco connection possible into NY11 is 680 feet; the equidistant telco connections into NY11-4 will be 590 feet, which falls between these two extremes.

Moreover, although the Exchange does not know the precise latency profiles of each of its colocation customers, it has provided those customers with the latency profile for NY11-4 and interhall connectivity through its distribution of a technical specification document via the Customer Portal. This technical specification document will allow

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[17] Ltr. From F. Zucek, Old Mission, to B. Kitt, Nasdaq, dated Aug. 21, 2024.

customers to determine for themselves whether their current location in NY11 or alternative space in NY11-4 will optimize their latency profile. It will provide a means for customers to plan ahead and avoid undesirable outcomes associated with the launch of NY11-4. Contrary to assertions made by the commenter in connection with the Prior Proposal,[18] the technical specification document alleviates uncertainty that might otherwise compel customers to waste money to secure unnecessary space in NY11-4 as a defensive means of assuring themselves the most advantageous position available in the Exchange's data center campus.

Any Advantage Attainable from the Launch of NY11-4 First Will Be Temporary

Even if a customer was to gain a latency advantage from the launch of NY11-4 before equalization of NY11, such an advantage would be temporary given the fact that equalization of NY11 will follow soon after the launch of NY11-4. The fleeting nature of any such advantage should also disincentivize colocation customers from engaging in a "land grab" for what they perceive to be the most geographically advantageous space in NY11-4. Indeed, the Exchange sees no evidence of such a land grab actually occurring with respect to customers' expressions of interest in NY11-4, notwithstanding warnings to that effect from the same commenter. As of the date of submission of this filing, only roughly 10 percent of existing customers, representing a mix of business models and latency sensitive activities, have requested space in NY11-4. Moreover, interest in

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18 See McKay Ltr., supra, at 3-4 (asserting that "introduction of NY11-4 before equalizing NY11 will compel many customers to establish a third point of presence —at a cost in incremental fees paid to Nasdaq alone of at least $2.5 million on a three-year commitment—to eliminate the risk that the NY11-4 connection is a superior connection to one (or both) of their existing NY11 points of presence.").

NY11-4 thus far involves a mix of customers wanting to expand upon their existing space in NY11 and others that want to move their existing space in NY11 entirely to NY11-4.

Equalizing NY11 First Will Not Avoid Creating Temporary Customer Disparities

Finally, the commenter's argument is incorrect that equalizing NY11 before launching NY11-4 would avoid creating disparities among customers with respect to their telco connections.[19] Equalizing telecommunications connectivity in NY11 before launching NY11-4 would not avoid the reality that full telco connectivity equalization – however accomplished – will require the introduction of temporary disparities in the lengths of the cables running between telecommunications providers and customers in the data center complex. Even if the Exchange were to pursue equalization of NY11 first, doing so would necessarily entail certain customers in NY11 experiencing changes to their telco cable lengths before others during the phased transition period. Thus, re-sequencing the Equalization Project to start with NY11 will do nothing to affect these temporary customer disparities, but instead will needlessly place the markets at risk by delaying the availability of expanded data center capacity.

b. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,[20] in general, and furthers the objectives of Section 6(b)(5) of the Act,[21] 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

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19 See id. at 2.

20 15 U.S.C. 78f(b).

21 15 U.S.C. 78f(b)(5).

market system, and, in general to protect investors and the public interest. Today, the Exchange offers various cabinet choices and power options in the data center for colocation customers. The proposal would expand the cabinet and power options available, by introducing an additional cabinet option, the Ultra High Density Cabinet, and new power choices. The proposal would benefit the public interest by providing customers more cabinet and power options to choose from, thereby enhancing their ability to tailor their colocation operations to the requirements of their business operations. In general, the proposal is consistent with the Act because the Exchange's expansion of the data center and expansion of available power and cabinets will enable the Exchange to meet customer needs and address demand for both cabinets and power. In lieu of collocating directly with the Exchange, market participants may choose not to collocate at all or to collocate indirectly through a vendor.

The Exchange also believes that the proposal will not be unfairly discriminatory, consistent with the objectives of Section 6(b)(5) of the Act[22] because the expanded cabinet and power options in the data center would be offered equally to all customers. Although certain optionality is only offered in NY11-4 because of different power configurations in NY11-4 as compared to NY11, NY11-4 is merely an expansion of the data center, and any customer may order cabinets and power in NY11-4 (and across the data center broadly) on the same terms as any other customer.

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22 Id.

<u>The Equalization Project is Consistent with the Act</u>

In addition to the above, and although not strictly relevant to the proposal at hand, the Exchange also believes that the Equalization Project, as outlined above and which will begin with the launch of NY11-4, is consistent with the Act.

Concerns about the Sequencing of the Equalization Project are Unfounded

In the Prior Proposal, the commenter objected to the Exchange's plan to accomplish the Equalization Project by first launching equalized telco connectivity in NY11-4 before launching it in NY11.[23] The commenter argued that this sequencing of the Equalization Project would be unfairly discriminatory in that it would exacerbate existing inequalities in the Exchange's Data Center while also compelling customers to secure unneeded space in NY11-4 to ensure that they obtain or maintain the closest possible geographic proximity to their telecommunications providers' equipment.[24] These arguments are simply wrong.

The Exchange's Plan for the Launch of NY11-4 to Constitute Phase One of the Equalization Project is Fair and Reasonable and in the Best Interests of the Markets

<u>The Exchange's Plan to Proceed with NY11-4 as the First Phase of the Equalization Project is in the Best Interests of the Markets.</u>

The fact of the matter is that the Exchange needs to launch NY11-4 – and needs to do so in November 2024 – to ensure that it remains capable of meeting the growing power and capacity demands of its customers. Regulation SCI requires the Exchange to reasonably anticipate its capacity needs. NY11-4, which has been three years in the

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23 <u>See</u> McKay Ltr., <u>supra</u>.

24 <u>See</u> <u>id</u>. at 1-2, 5-6.

making, is a product of the SCI planning process. Delaying the launch of NY11-4 to accommodate the equalization of NY11 would jeopardize the sound and orderly operation of the Exchange's markets. Such a danger readily outweighs any concerns that some may have about the fairness of the Exchange's plan to sequence the Equalization Project, even if such concerns were well-founded, which they are not.

We note that our customers generally support this view. One customer sent the Exchange a letter stating the following about the Exchange's plans:

> As noted in your August 12, 2024, comment letter response to the SEC, the addition of NY11-4 is needed to meet the growing customer demands for space, power, and upgraded technological capabilities. OMC echoes these concerns as one of those customers, with an immediate and significant need to expand its colocation space to accommodate the growing demands of OMC's business. OMC is a registered member of the Nasdaq Stock Market and eight other options and equities exchanges operated by Nasdaq (the "Exchanges"), with more than half of those memberships added within roughly the last year. As a registered Market Maker for hundreds of listed symbols, OMC actively provides liquidity across the Exchanges. Also, as a Designated Liquidity Provider, OMC plays a key role in supporting the active and efficient trading of many new and existing products listed on the Exchanges. To support this significant amount of trading activity on the Exchanges, OMC urgently needs the additional colocation space made available in NY11-4. Any halt or delay of the NY11-4 launch would prevent OMC's planned expansion and would endanger OMC's ability to grow and meet the liquidity provision demands of the Exchanges and their customers.[25]

<u>The Exchange's Sequencing Plan is Also Pragmatic and Efficient</u>

Expanding the existing data center by building a new wing (NY11-4) from scratch afforded the Exchange an opportunity to design the expansion efficiently with telco connectivity equalization incorporated therein from the outset. This approach avoids the need to later engage in a wasteful process of retrofitting NY11-4 for telco connectivity equalization – a process in which the Exchange must now engage with respect to NY11.

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25 Ltr. From F. Zucek, Old Mission, to B. Kitt, Nasdaq, dated Aug. 21, 2024.

Launching NY11-4 Before Equalizing NY11 Will Not Worsen Inequality

The latency profile of a customer collocating in NY11-4 would be no better than that of the lowest latency customer and no worse than that of the highest latency customer colocating presently in NY11. In fact, the launch of a full-equalized NY11-4 before equalizing NY11 would actually diminish the overall average latency differential among collocated customers' telecom provider connections because NY11-4 introduces connections at a single latency value in between the slowest and fastest latencies. That is, the shortest current telco connection possible into NY11 is 160 ft while the longest current telco connection possible into NY11 is 680 feet; the equidistant telco connections into NY11-4 will be 590 feet, which falls between these two extremes.

Moreover, although the Exchange does not know the precise latency profiles of each of its colocation customers, it has provided those customers with the latency profile for NY11-4 and interhall connectivity through its distribution of a technical specification document via the Customer Portal. This technical specification document will allow customers to determine for themselves whether their current location in NY11 or alternative space in NY11-4 will optimize their latency profile. It will provide a means for customers to plan ahead and avoid undesirable outcomes associated with the launch of NY11-4. Contrary to assertions made by the commenter in connection with the Prior Proposal,[26] the technical specification document alleviates uncertainty that might otherwise compel customers to waste money to secure unnecessary space in NY11-4 as a

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[26] See McKay Ltr., supra, at 3-4 (asserting that "introduction of NY11-4 before equalizing NY11 will compel many customers to establish a third point of presence —at a cost in incremental fees paid to Nasdaq alone of at least $2.5 million on a three-year commitment—to eliminate the risk that the NY11-4 connection is a superior connection to one (or both) of their existing NY11 points of presence.").

defensive means of assuring themselves the most advantageous position available in the Exchange's data center campus.

Any Advantage Attainable from the Launch of NY11-4 First Will Be Temporary

Even if a customer was to gain a latency advantage from the launch of NY11-4 before equalization of NY11, such an advantage would be temporary given the fact that equalization of NY11 will follow soon after the launch of NY11-4. The fleeting nature of any such advantage should also disincentivize colocation customers from engaging in a "land grab" for what they perceive to be the most geographically advantageous space in NY11-4. Indeed, the Exchange sees no evidence of such a land grab actually occurring with respect to customers' expressions of interest in NY11-4, notwithstanding warnings to that effect from the same commenter. As of the date of submission of this filing, only roughly 10 percent of existing customers, representing a mix of business models and latency sensitive activities, have requested space in NY11-4. Moreover, interest in NY11-4 thus far involves a mix of customers wanting to expand upon their existing space in NY11 and others that want to move their existing space in NY11 entirely to NY11-4.

Equalizing NY11 First Will Not Avoid Creating Temporary Customer Disparities

Finally, the commenter's argument is incorrect that equalizing NY11 before launching NY11-4 would avoid creating disparities among customers with respect to their telco connections.[27] Equalizing telecommunications connectivity in NY11 before launching NY11-4 would not avoid the reality that full telco connectivity equalization – however accomplished – will require the introduction of temporary disparities in the

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27 See id. at 2.

lengths of the cables running between telecommunications providers and customers in the data center complex.

Even if the Exchange were to pursue equalization of NY11 first, doing so would necessarily entail certain customers in NY11 experiencing changes to their telco cable lengths before others during the phased transition period. Thus, re-sequencing the Equalization Project to start with NY11 will do nothing to affect these temporary customer disparities, but instead will needlessly place the markets at risk by delaying the availability of expanded data center capacity.

4. 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 as a means to facilitate the trading and other market activities of those market participants who believe that colocation enhances the efficiency of their operations. As part of its colocation offering, the Exchange currently offers similar cabinets and power, as do other exchanges.

Nothing in the Proposal burdens intra-market competition because the Exchange's colocation services, including those proposed herein, are available to any customer and customers that wish to order cabinets and power 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 based on the requirements of its business operations.

Additionally, and although not strictly relevant to the Proposal, nothing about the Equalization Plan, as described above, would impose an undue burden on competition. The Exchange intends for the Equalization Plan to facilitate increased competition among its colocation customers by eliminating telco connectivity disparities that currently provide some customers with latency advantages relative to others. For the reasons discussed above, the Exchange believes that it is fair and necessary to sequence the Equalization Project by beginning with the launch of NY11-4 with an equalized design, rather than with NY11. Specifically, the timely launch of NY11-4 is necessary for the Exchange to meet its capacity needs and those of its customers, while retrofitting NY11 will be a complex process that will require many months to complete. Moreover, the current sequencing plan will not worsen existing inequalities, but instead will improve the overall average disparity in telco cable lengths in the data center. Even though the sequencing plan will cause some customers to be subject to telco connectivity equalization before others, this result is unavoidable even if the Exchange were to equalize NY11 first. Any customer advantage or disadvantage that might arise from the Equalization Project would be temporary. Finally, the Exchange has been transparent about its plans and afforded opportunities to customers to make informed choices about how to mitigate any adverse consequences, competitive or otherwise.

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

The Exchange received a written letter of support from Old Mission Capital LLC, dated August 21, 2024.

6. Extension of Time Period for Commission Action

Not Applicable.

7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(iii)[28] of the Act and Rule 19b-4(f)(6) thereunder[29] in that it effects a change that: (i) does not significantly affect the protection of investors or the public interest; (ii) does not impose any significant burden on competition; and (iii) by its terms, does not become operative for 30 days after the date of the filing, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest.

The Exchange believes that the proposed rule change would not significantly affect the protection of investors or the public interest. The proposal would benefit the public interest by expanding upon existing colocation services that the Exchange offers today, providing customers more cabinet and power options to choose from, thereby enhancing their ability to tailor their colocation operations to the requirements of their business operations and allowing the Exchange to meet customer needs. The launch of NY11-4 with equalized telco connectivity, meanwhile, will serve the public interest by starting the process of eliminating existing disparities among customers with respect to telco connectivity in the Exchange's data center complex. As discussed above, sequencing the launch of NY11-4 prior to equalizing NY11 will not exacerbate existing inequality nor will it serve any productive purpose other than to delay the launch of NY11-4 and endanger the ability of the Exchange to meet its capacity needs.

[28] 15 U.S.C. 78s(b)(3)(A)(iii).

[29] 17 CFR 240.19b-4(f)(6).

The Exchange further believes that the proposed change would not impose any significant burden on competition. All customers would have the option to collocate and order cabinets and power, as is the case today. Customers that wish to order cabinets and power can do so on a non-discriminatory basis. Meanwhile, the Equalization project will promote competition among the Exchange's colocation customers by equalizing their telco connectivity and eliminating existing disparities that otherwise provide some customers with competitive advantages over others.

Furthermore, Rule 19b-4(f)(6)(iii)[30] requires a self-regulatory organization to give the Commission written notice of its intent to file a proposed rule change under that subsection at least five business days prior to the date of filing, or such shorter time as designated by the Commission. The Exchange has provided such notice.

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.

8. <u>Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission</u>

Not applicable.

9. <u>Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act</u>

Not applicable.

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[30] 17 CFR 240.19b-4(f)(6)(iii).

10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act

Not applicable.

11. Exhibits

1. Notice of Proposed Rule Change for publication in the Federal Register.

5. Text of the proposed rule change.

EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION
(Release No. ; File No. SR-Phlx-2024-47)

September __, 2024

Self-Regulatory Organizations; Nasdaq PHLX LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Expand its Co-Location Services

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 September 5, 2024, Nasdaq PHLX LLC ("Phlx" 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 expand its co-location services.

The text of the proposed rule change is available on the Exchange's Website at https://listingcenter.nasdaq.com/rulebook/phlx/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

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[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b-4.

the places specified in 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 expand its co-location services by offering new cabinet, power, and power distribution unit options in the Exchange's expanded data center. [3]

The Exchange's current data center ("NY11") in Carteret, NJ is undergoing an expansion ("NY11-4") in response to demand for power and cabinets. NY11-4 is not a new or distinct co-location facility. Instead, NY11-4 is simply an expansion of the existing Nasdaq NY11 data center,[4] and Nasdaq intends to operate it generally in the same manner as existing aspects of NY11.[5] Client connections to the matching engine will be equal across the board, within and among NY11 and NY11-4. In 2010, the Exchange undertook a similar expansion to its data center, where connectivity to the Exchange remained equalized, as is the case with the NY11-4 expansion.

The Exchange submits this filing to propose offering new services in NY11-4, as described below, and to the extent the Exchange offers additional new services, whether

[3] The Exchange previous submitted a similar proposal earlier this year, see Securities Exchange Act Release No. 34-100559 (July 18, 2024), 89 FR 69952 (July 24, 2024) (SR-PHLX-2024-32) (the "Prior Proposal"), but withdrew it on August 29, 2024 to allow for the Exchange to address outstanding comments and concerns raised by the Commission Staff and commenters.

[4] NY11-4 is not a standalone facility. Equinix considers the site as NY11 with three expansions: NY11 Phase 1, NY11 Phase 2 and NY11-4.

[5] As discussed below in further detail, one aspect of the data center that will be different (temporarily) in NY11-4 as compared to NY11 is telecommunications access and inter-client connectivity. In NY11-4 at its launch, connections between colocated client cabinets and the carrier cage will be equalized as will be inter-client connectivity. Presently, such connectivity is not equalized in NY11, but the Exchange intends to retrofit NY11 to be equalized in the months ahead.

in the existing NY11 data halls or in the new NY11-4 data hall, the Exchange will submit additional filings with the Commission.

New and Upgraded Services in NY11-4

NY11-4 Expanded Cabinet Optionality: Ultra High Density Cabinet

Currently, co-location customers have the option of obtaining cabinets of various sizes and power densities. Co-location customers may obtain a Half Cabinet,[6] a Low Density Cabinet with power density less than or equal to 2.88 kilowatts ("kW"), a Medium Density Cabinet with power density greater than 2.88 kW and less than or equal to 5 kW, a Medium-High Density Cabinet with power density greater than 5 kW and less than or equal to 7 kW, a High Density Cabinet with power density greater than 7 kW and less than 10 kW, and a Super High Density Cabinet with power density greater than 10 kW and less than or equal to 17.3 kW.

The Exchange proposes to introduce a new cabinet choice in NY11-4, an "Ultra High Density Cabinet," with power density greater than 10 kW and less than or equal to 15 kW. Based on demand, the Exchange wishes to introduce the Ultra High Density Cabinet as an option for customers between the High Density Cabinet and the Super High Density Cabinet. The Ultra High Density Cabinet option would only be offered in NY11-4 because of the power configuration necessary for such cabinets, which is not possible or available in other portions of the data center due to different power distribution. Because of the addition of the Ultra High Density Cabinet option in NY11-4, the Super High Density Cabinet in NY11-4 would have power density greater than 15 kW and less than or equal to 17.3 kW.

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6 Half cabinets are not available to new subscribers. See General 8, Section 1(a).

In addition to the Ultra High Density Cabinet, the Exchange would offer the other, existing cabinet options in NY11-4, with the exception of the Low Density Cabinet and Half Cabinet due to a lack of demand for such cabinets. The cabinets in NY11-4 will include certain features, including but not limited to: uniform, wider cabinets[7] (32" W x 48" D x 91" H), cable management, and a rear split door and combo lock.

NY-11 4 Cabinet Power and Power Distribution Units

The Exchange currently provides various cabinet power options, including: 2x20 amp 110 volt, 2x30 amp 110 volt, 2x20 amp 208 volt, 2x30 amp 208 volt, Phase 3 2x 20 amp 208 volt, Phase 3 2x 30 amp 208 volt, 2x60 amp 208 volt, Phase 3 2x 40 amp 208 volt, Phase 3 2x 50 amp 208 volt, Phase 3 2x 60 amp 208 volt, and 2x30 amp 48 volt DC. For NY11-4, the data center operator is bringing in higher voltage power options, which are more consistent with power options used in other data centers across the globe. The Exchange proposes to amend General 8, Section 1(c) to add the cabinet power options for NY11-4, which include: Phase 1 20 amp 240 volt, Phase 1 32 amp 240 volt, Phase 1 40 amp 240 volt, Phase 3 20 amp 415 volt, and Phase 3 32 amp 415 volt. The Exchange also proposes to specify in its Rules that these cabinet power options are specific to NY11-4 and that one of these options must be selected for cabinets in NY11-4. Although different cabinet power options will be offered in NY11 and NY11-4 due to differing power configurations, the new cabinet power options are not inherently preferable to the existing cabinet power options and the Exchange does not anticipate material differences in equipment performance based on the power distribution. Due to higher voltage

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7 In the existing data halls, clients may bring their own cabinets or use Exchange-provided cabinets. Because of the cooling system in NY11-4 (hot aisle containment), all cabinets must be uniform and therefore, the Exchange will provide all cabinets. The existing data halls utilize cold aisle containment to manage temperatures. Hot aisle containment is a more effective way to manage heat in the data center.

options being offered in NY11-4, the data center operator is likely to experience increased power distribution efficiencies across the data center. As between the various cabinet power options, customers choose power based on their preference and capacity needs.

The Exchange also proposes to offer power distribution units ("PDUs")[8] in NY11-4 as a convenience to customers. Rather than sourcing PDUs on a customer-by-customer basis, as the Exchange does for customers in NY11, the Exchange wishes to simplify and standardize its PDU offering in NY11-4 by offering Phase 1 and Phase 3[9] power distribution units. This service is optional and customers may choose to provide their own PDUs appropriate for their power installation choices. The Exchange also proposes to offer a switch monitored PDU add on in NY11-4, which would allow customers to connect remotely to their PDU and control the power sockets. With the switch monitored PDU option, customers would be able to power cycle or shut off power remotely. This option is optional as well and customers may choose to provide their own switch monitored PDU, if desired.

Implementation

Although the timing is subject to change,[10] the Exchange anticipates opening NY11-4 Exchange access on November 4, 2024. In concert with this filing, the

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8 PDUs are devices fitted with multiple outputs designed to distribute electric power. The standardized PDUs would only be offered for NY11-4.

9 Phase 1 PDUs would be compatible with the following power options: Phase 1 20 amp 240 volt, Phase 1 32 amp 240 volt, and Phase 1 40 amp 240 volt. Phase 3 PDUs would be compatible with the following power options: Phase 3 20 amp 415 volt and Phase 3 32 amp 415 volt. Phase 1 and Phase 3 are available in NY11 and NY11-4. Phase 3 PDUs provide greater power density than Phase 1 PDUs by delivering power over three wires as opposed to one wire.

10 The Exchange will announce modifications to the proposed timing via the Nasdaq Customer Portal, which is the web portal used for order and inventory management of colocation services, and email communication to all colocation customers.

Exchange will allow customers to place orders for NY11-4, which would not be fee liable until customers are provided access to the space.[11] The Exchange will submit a fee filing to establish fees for the services described herein. Allowing customers to place orders in advance of opening its doors will allow the Exchange to plan ahead for capacity and demand for services, as well as procure necessary equipment.

Equalization of Telecommunications Connectivity in NY11-4 and NY11

Although the Exchange has constructed NY11-4 to address capacity constraints associated with its existing data center footprint, as well as to enable the provision of upgraded power for customer equipment, an ancillary design feature of NY11-4 will be that it will include, at launch, equalized cabling between customer equipment and equipment owned and operated by third-party telecommunications providers ("telco connectivity"). This design feature is incident, but not strictly relevant to the Proposal at hand. Nevertheless, we discuss it below insofar as it garnered attention in the Prior Proposal, by one commenter, in particular.[12]

Presently, the Exchange does not have equalized telco connectivity in NY11, much like several of its peers, IEX, MEMX, and Cboe, all of which operate through their Secaucus data center without equalized telco connectivity.[13] The present architecture of NY11 is a product of its history and that of technology; the Exchange designed NY11 at a

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11 Charging customers once access is provided is consistent with current practice and allows customers to set up equipment and begin using power.

12 See Ltr. From J. Considine, McKay Brothers LLC, to V. Countryman, SEC, dated July 24, 2024, available at https://www.sec.gov/comments/sr-nasdaq-2024-026/srnasdaq2024026-496995-1434326.pdf (the "McKay Letter"). Akuna Securities LLC also filed a comment letter that largely echoed the arguments in the McKay Letter. See Ltr. From D. DeSalle-Baron, Akuna Securities LLC to V. Countryman, SEC, dated July 24, 2024, available at https://www.sec.gov/comments/sr-nasdaq-2024-026/srnasdaq2024026-497096-1434386.pdf.

13 The structure of the Secaucus data center is a generally known fact within the industry and one of which the Exchange is itself aware due, among other things, to its own status as a tenant of the Secaucus data center.

time when latency differences were measured by customers in terms of miles of cable between customer facilities and exchange data centers, rather than in feet or inches within exchange data centers, as is the case today. As the technology paradigm shifted, and as variances in telco connectivity became more meaningful to some market participants, the Exchange reevaluated its design of its data center and determined that telco connectivity equalization would be in the best interests of the markets going forward. Thus, on its own initiative, the Exchange has embarked on an ambitious project to equalize telco connectivity across its entire data center campus, including both its existing NY11 facility and the NY11-4 expansion (the "Equalization Project"). The launch of NY11-4 will constitute phase 1 of the Equalization Project.

The Equalization Project will be complex, time consuming, and costly to complete, especially as to NY11, where the existing facility must be retrofitted with equalized cabling. In NY11, thousands of existing customer cables threaded throughout the facility will need to be removed and replaced with new infrastructure to support equidistant connectivity relative to all other customers' locations in the data center. This painstaking project will cost millions of dollars in design, equipment, and labor costs. Due to its complexity, the Equalization Project cannot and will not be accomplished instantaneously.[14] Instead, the Exchange estimates that the Project will require 18-24 months to complete, commencing as of the launch of NY11-4. Moreover, it will occur in a methodical and phased manner to ensure proper design, testing, and workmanship, as

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[14] The McKay Letter asserts incorrectly and without any evidentiary basis that the Exchange is capable of equalizing telco connectivity quickly and can do so before launching NY11-4 with only a minor ensuing delay to the launch. See id. at 4, n.15. As we explain herein, equalization of NY11 will take many months to accomplish, even at an aggressive pace, including because of factors outside of its control. The Exchange notes, for example, that the fiber needed to re-cable NY11 is in short supply and orders are subject to substantial waiting periods.

well as to minimize the customer disruptions that, unfortunately, will be unavoidable during the process. The launch of NY11-4 with equalized telco connectivity will be the first phase of the Equalization Project, with the equalization of NY11 constituting the remaining phases of the Project. For the phased transition of NY11, the Exchange expects the migration to occur in tranches over the course of several weekends at the tail end of the 18-24 project period.

Concerns about the Sequencing of the Equalization Project are Unfounded

In the Prior Proposal, the commenter objected to the Exchange's plan to accomplish the Equalization Project by first launching equalized telco connectivity in NY11-4 before launching it in NY11.[15] The commenter argued that this sequencing of the Equalization Project would be unfairly discriminatory in that it would exacerbate existing inequalities in the Exchange's Data Center while also compelling customers to secure unneeded space in NY11-4 to ensure that they obtain or maintain the closest possible geographic proximity to their telecommunications providers' equipment.[16] These arguments are simply wrong.

The Exchange's Plan for the Launch of NY11-4 to Constitute Phase One of the Equalization Project is Fair and Reasonable and in the Best Interests of the Markets

<u>The Exchange's Plan to Proceed with NY11-4 as the First Phase of the Equalization Project is in the Best Interests of the Markets.</u>

The fact of the matter is that the Exchange needs to launch NY11-4 – and needs to do so in November 2024 – to ensure that it remains capable of meeting the growing power and capacity demands of its customers. Regulation SCI requires the Exchange to

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15 See id.

16 See id. at 1-2, 5-6.

reasonably anticipate its capacity needs. NY11-4, which has been three years in the making, is a product of the SCI planning process. Delaying the launch of NY11-4 to accommodate the equalization of NY11 would jeopardize the sound and orderly operation of the Exchange's markets. Such a danger readily outweighs any concerns that some may have about the fairness of the Exchange's plan to sequence the Equalization Project, even if such concerns were well-founded, which they are not.

We note that our customers generally support this view. One customer sent the Exchange a letter stating the following about the Exchange's plans:

> As noted in your August 12, 2024, comment letter response to the SEC, the addition of NY11-4 is needed to meet the growing customer demands for space, power, and upgraded technological capabilities. OMC echoes these concerns as one of those customers, with an immediate and significant need to expand its colocation space to accommodate the growing demands of OMC's business. OMC is a registered member of the Nasdaq Stock Market and eight other options and equities exchanges operated by Nasdaq (the "Exchanges"), with more than half of those memberships added within roughly the last year. As a registered Market Maker for hundreds of listed symbols, OMC actively provides liquidity across the Exchanges. Also, as a Designated Liquidity Provider, OMC plays a key role in supporting the active and efficient trading of many new and existing products listed on the Exchanges. To support this significant amount of trading activity on the Exchanges, OMC urgently needs the additional colocation space made available in NY11-4. Any halt or delay of the NY11-4 launch would prevent OMC's planned expansion and would endanger OMC's ability to grow and meet the liquidity provision demands of the Exchanges and their customers.[17]

<u>The Exchange's Sequencing Plan is Also Pragmatic and Efficient</u>

Expanding the existing data center by building a new wing (NY11-4) from scratch afforded the Exchange an opportunity to design the expansion efficiently with telco connectivity equalization incorporated therein from the outset. This approach avoids the need to later engage in a wasteful process of retrofitting NY11-4 for telco connectivity equalization – a process in which the Exchange must now engage with respect to NY11.

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17 Ltr. From F. Zucek, Old Mission, to B. Kitt, Nasdaq, dated Aug. 21, 2024.

Launching NY11-4 Before Equalizing NY11 Will Not Worsen Inequality

The latency profile of a customer collocating in NY11-4 would be no better than that of the lowest latency customer and no worse than that of the highest latency customer colocating presently in NY11. In fact, the launch of a full-equalized NY11-4 before equalizing NY11 would actually diminish the overall average latency differential among collocated customers' telecom provider connections because NY11-4 introduces connections at a single latency value in between the slowest and fastest latencies. That is, the shortest current telco connection possible into NY11 is 160 ft while the longest current telco connection possible into NY11 is 680 feet; the equidistant telco connections into NY11-4 will be 590 feet, which falls between these two extremes.

Moreover, although the Exchange does not know the precise latency profiles of each of its colocation customers, it has provided those customers with the latency profile for NY11-4 and interhall connectivity through its distribution of a technical specification document via the Customer Portal. This technical specification document will allow customers to determine for themselves whether their current location in NY11 or alternative space in NY11-4 will optimize their latency profile. It will provide a means for customers to plan ahead and avoid undesirable outcomes associated with the launch of NY11-4. Contrary to assertions made by the commenter in connection with the Prior Proposal,[18] the technical specification document alleviates uncertainty that might otherwise compel customers to waste money to secure unnecessary space in NY11-4 as a

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18 See McKay Ltr., supra, at 3-4 (asserting that "introduction of NY11-4 before equalizing NY11 will compel many customers to establish a third point of presence —at a cost in incremental fees paid to Nasdaq alone of at least $2.5 million on a three-year commitment—to eliminate the risk that the NY11-4 connection is a superior connection to one (or both) of their existing NY11 points of presence.").

defensive means of assuring themselves the most advantageous position available in the Exchange's data center campus.

Any Advantage Attainable from the Launch of NY11-4 First Will Be Temporary

Even if a customer was to gain a latency advantage from the launch of NY11-4 before equalization of NY11, such an advantage would be temporary given the fact that equalization of NY11 will follow soon after the launch of NY11-4. The fleeting nature of any such advantage should also disincentivize colocation customers from engaging in a "land grab" for what they perceive to be the most geographically advantageous space in NY11-4. Indeed, the Exchange sees no evidence of such a land grab actually occurring with respect to customers' expressions of interest in NY11-4, notwithstanding warnings to that effect from the same commenter. As of the date of submission of this filing, only roughly 10 percent of existing customers, representing a mix of business models and latency sensitive activities, have requested space in NY11-4. Moreover, interest in NY11-4 thus far involves a mix of customers wanting to expand upon their existing space in NY11 and others that want to move their existing space in NY11 entirely to NY11-4.

Equalizing NY11 First Will Not Avoid Creating Temporary Customer Disparities

Finally, the commenter's argument is incorrect that equalizing NY11 before launching NY11-4 would avoid creating disparities among customers with respect to their telco connections.[19] Equalizing telecommunications connectivity in NY11 before launching NY11-4 would not avoid the reality that full telco connectivity equalization – however accomplished – will require the introduction of temporary disparities in the

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19 See id. at 2.

lengths of the cables running between telecommunications providers and customers in the data center complex. Even if the Exchange were to pursue equalization of NY11 first, doing so would necessarily entail certain customers in NY11 experiencing changes to their telco cable lengths before others during the phased transition period. Thus, re-sequencing the Equalization Project to start with NY11 will do nothing to affect these temporary customer disparities, but instead will needlessly place the markets at risk by delaying the availability of expanded data center capacity.

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,[20] in general, and furthers the objectives of Section 6(b)(5) of the Act,[21] 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. Today, the Exchange offers various cabinet choices and power options in the data center for colocation customers. The proposal would expand the cabinet and power options available, by introducing an additional cabinet option, the Ultra High Density Cabinet, and new power choices. The proposal would benefit the public interest by providing customers more cabinet and power options to choose from, thereby enhancing their ability to tailor their colocation operations to the requirements of their business operations. In general, the proposal is consistent with the Act because the Exchange's expansion of the data center and expansion of available power and cabinets will enable the Exchange to meet customer needs and address demand for both cabinets and power.

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[20] 15 U.S.C. 78f(b).

[21] 15 U.S.C. 78f(b)(5).

In lieu of collocating directly with the Exchange, market participants may choose not to collocate at all or to collocate indirectly through a vendor.

The Exchange also believes that the proposal will not be unfairly discriminatory, consistent with the objectives of Section 6(b)(5) of the Act[22] because the expanded cabinet and power options in the data center would be offered equally to all customers. Although certain optionality is only offered in NY11-4 because of different power configurations in NY11-4 as compared to NY11, NY11-4 is merely an expansion of the data center, and any customer may order cabinets and power in NY11-4 (and across the data center broadly) on the same terms as any other customer.

The Equalization Project is Consistent with the Act

In addition to the above, and although not strictly relevant to the proposal at hand, the Exchange also believes that the Equalization Project, as outlined above and which will begin with the launch of NY11-4, is consistent with the Act.

Concerns about the Sequencing of the Equalization Project are Unfounded

In the Prior Proposal, the commenter objected to the Exchange's plan to accomplish the Equalization Project by first launching equalized telco connectivity in NY11-4 before launching it in NY11.[23] The commenter argued that this sequencing of the Equalization Project would be unfairly discriminatory in that it would exacerbate existing inequalities in the Exchange's Data Center while also compelling customers to secure unneeded space in NY11-4 to ensure that they obtain or maintain the closest

22 Id.

23 See McKay Ltr., supra.

possible geographic proximity to their telecommunications providers' equipment.[24] These arguments are simply wrong.

The Exchange's Plan for the Launch of NY11-4 to Constitute Phase One of the Equalization Project is Fair and Reasonable and in the Best Interests of the Markets

<u>The Exchange's Plan to Proceed with NY11-4 as the First Phase of the Equalization Project is in the Best Interests of the Markets.</u>

The fact of the matter is that the Exchange needs to launch NY11-4 – and needs to do so in November 2024 – to ensure that it remains capable of meeting the growing power and capacity demands of its customers. Regulation SCI requires the Exchange to reasonably anticipate its capacity needs. NY11-4, which has been three years in the making, is a product of the SCI planning process. Delaying the launch of NY11-4 to accommodate the equalization of NY11 would jeopardize the sound and orderly operation of the Exchange's markets. Such a danger readily outweighs any concerns that some may have about the fairness of the Exchange's plan to sequence the Equalization Project, even if such concerns were well-founded, which they are not.

We note that our customers generally support this view. One customer sent the Exchange a letter stating the following about the Exchange's plans:

> As noted in your August 12, 2024, comment letter response to the SEC, the addition of NY11-4 is needed to meet the growing customer demands for space, power, and upgraded technological capabilities. OMC echoes these concerns as one of those customers, with an immediate and significant need to expand its colocation space to accommodate the growing demands of OMC's business. OMC is a registered member of the Nasdaq Stock Market and eight other options and equities exchanges operated by Nasdaq (the "Exchanges"), with more than half of those memberships added within roughly the last year. As a registered Market Maker for hundreds of listed symbols, OMC actively provides liquidity across the Exchanges. Also, as a Designated Liquidity Provider, OMC plays a key

24 <u>See</u> <u>id</u>. at 1-2, 5-6.

> role in supporting the active and efficient trading of many new and existing products listed on the Exchanges. To support this significant amount of trading activity on the Exchanges, OMC urgently needs the additional colocation space made available in NY11-4. Any halt or delay of the NY11-4 launch would prevent OMC's planned expansion and would endanger OMC's ability to grow and meet the liquidity provision demands of the Exchanges and their customers.[25]

<u>The Exchange's Sequencing Plan is Also Pragmatic and Efficient</u>

Expanding the existing data center by building a new wing (NY11-4) from scratch afforded the Exchange an opportunity to design the expansion efficiently with telco connectivity equalization incorporated therein from the outset. This approach avoids the need to later engage in a wasteful process of retrofitting NY11-4 for telco connectivity equalization – a process in which the Exchange must now engage with respect to NY11.

<u>Launching NY11-4 Before Equalizing NY11 Will Not Worsen Inequality</u>

The latency profile of a customer collocating in NY11-4 would be no better than that of the lowest latency customer and no worse than that of the highest latency customer colocating presently in NY11. In fact, the launch of a full-equalized NY11-4 before equalizing NY11 would actually diminish the overall average latency differential among collocated customers' telecom provider connections because NY11-4 introduces connections at a single latency value in between the slowest and fastest latencies. That is, the shortest current telco connection possible into NY11 is 160 ft while the longest current telco connection possible into NY11 is 680 feet; the equidistant telco connections into NY11-4 will be 590 feet, which falls between these two extremes.

Moreover, although the Exchange does not know the precise latency profiles of each of its colocation customers, it has provided those customers with the latency profile

[25] Ltr. From F. Zucek, Old Mission, to B. Kitt, Nasdaq, dated Aug. 21, 2024.

for NY11-4 and interhall connectivity through its distribution of a technical specification document via the Customer Portal. This technical specification document will allow customers to determine for themselves whether their current location in NY11 or alternative space in NY11-4 will optimize their latency profile. It will provide a means for customers to plan ahead and avoid undesirable outcomes associated with the launch of NY11-4. Contrary to assertions made by the commenter in connection with the Prior Proposal,[26] the technical specification document alleviates uncertainty that might otherwise compel customers to waste money to secure unnecessary space in NY11-4 as a defensive means of assuring themselves the most advantageous position available in the Exchange's data center campus.

Any Advantage Attainable from the Launch of NY11-4 First Will Be Temporary

Even if a customer was to gain a latency advantage from the launch of NY11-4 before equalization of NY11, such an advantage would be temporary given the fact that equalization of NY11 will follow soon after the launch of NY11-4. The fleeting nature of any such advantage should also disincentivize colocation customers from engaging in a "land grab" for what they perceive to be the most geographically advantageous space in NY11-4. Indeed, the Exchange sees no evidence of such a land grab actually occurring with respect to customers' expressions of interest in NY11-4, notwithstanding warnings to that effect from the same commenter. As of the date of submission of this filing, only roughly 10 percent of existing customers, representing a mix of business models and

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[26] See McKay Ltr., supra, at 3-4 (asserting that "introduction of NY11-4 before equalizing NY11 will compel many customers to establish a third point of presence —at a cost in incremental fees paid to Nasdaq alone of at least $2.5 million on a three-year commitment—to eliminate the risk that the NY11-4 connection is a superior connection to one (or both) of their existing NY11 points of presence.").

latency sensitive activities, have requested space in NY11-4. Moreover, interest in NY11-4 thus far involves a mix of customers wanting to expand upon their existing space in NY11 and others that want to move their existing space in NY11 entirely to NY11-4.

Equalizing NY11 First Will Not Avoid Creating Temporary Customer Disparities

Finally, the commenter's argument is incorrect that equalizing NY11 before launching NY11-4 would avoid creating disparities among customers with respect to their telco connections.[27] Equalizing telecommunications connectivity in NY11 before launching NY11-4 would not avoid the reality that full telco connectivity equalization – however accomplished – will require the introduction of temporary disparities in the lengths of the cables running between telecommunications providers and customers in the data center complex.

Even if the Exchange were to pursue equalization of NY11 first, doing so would necessarily entail certain customers in NY11 experiencing changes to their telco cable lengths before others during the phased transition period. Thus, re-sequencing the Equalization Project to start with NY11 will do nothing to affect these temporary customer disparities, but instead will needlessly place the markets at risk by delaying the availability of expanded data center capacity.

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.

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27 See id. at 2.

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 as a means to facilitate the trading and other market activities of those market participants who believe that colocation enhances the efficiency of their operations. As part of its colocation offering, the Exchange currently offers similar cabinets and power, as do other exchanges.

Nothing in the Proposal burdens intra-market competition because the Exchange's colocation services, including those proposed herein, are available to any customer and customers that wish to order cabinets and power 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 based on the requirements of its business operations.

Additionally, and although not strictly relevant to the Proposal, nothing about the Equalization Plan, as described above, would impose an undue burden on competition. The Exchange intends for the Equalization Plan to facilitate increased competition among its colocation customers by eliminating telco connectivity disparities that currently provide some customers with latency advantages relative to others. For the reasons discussed above, the Exchange believes that it is fair and necessary to sequence the Equalization Project by beginning with the launch of NY11-4 with an equalized design, rather than with NY11. Specifically, the timely launch of NY11-4 is necessary for the Exchange to meet its capacity needs and those of its customers, while retrofitting NY11 will be a complex process that will require many months to complete. Moreover, the current sequencing plan will not worsen existing inequalities, but instead will improve the overall average disparity in telco cable lengths in the data center. Even though the sequencing plan will cause some customers to be subject to telco connectivity equalization before others, this result is unavoidable even if the Exchange were to equalize NY11 first. Any customer advantage or disadvantage that might arise from the Equalization Project would be temporary. Finally, the Exchange has been transparent about its plans and afforded opportunities to customers to make informed choices about how to mitigate any adverse consequences, competitive or otherwise.

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

The Exchange received a written letter of support from Old Mission Capital LLC, dated August 21, 2024.

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 Act[28] and subparagraph (f)(6) of Rule 19b-4 thereunder.[29]

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

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28 15 U.S.C. 78s(b)(3)(A)(iii).

29 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.

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-Phlx-2024-47 on the subject line.

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-Phlx-2024-47. 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-Phlx-2024-47 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.[30]

Sherry R. Haywood,

Assistant Secretary.

[30] 17 CFR 200.30-3(a)(12).

EXHIBIT 5

Deleted text is [bracketed]. New text is underlined.

NASDAQ PHLX LLC RULES

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General Equity and Options Rules

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General 8 Connectivity

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Section 1. Co-Location Services

The following charges are assessed for co-location services:[1]

(a) Cabinets

Cabinet with Power			
Description	**NY11 Installation Fee**	**NY11-4 Installation Fee**	**Ongoing Monthly Fee**
Super High Density Cabinet (>10kW - <=17.3kW)****	$4,748***	TBD[†]	$8,440**
Ultra High Density Cabinet (>10kW - <=15kW)	N/A	TBD[†]	TBD
High Density Cabinet (>7kW - <10kW)	$3,693	TBD[†]	$4,748**
Medium-High Density Cabinet (>5kW - <=7kW)	$3,693	TBD[†]	$3,693**
Medium Density Cabinet (>2.88kW - <=5kW)	$3,693	TBD[†]	$2,638**
Low Density Cabinet (<=2.88kW)	$3,693	N/A	$2,110**
Half Cabinet*			$2,110
*Not available to new subscribers.			
**Discount of 15% of fee available to users of 25 or more full cabinets who commit to a 3 year term; Discount of 10% of fee available to users of 25 or more full cabinets who commit to a 2 year term.			

***Includes larger cabinet (30" W x 48" D x 96" H). Standard installation fee of $3,693 would apply if smaller cabinet (24"W x 42"D x 84"H) is requested.
****In NY11-4, the Super High Density Cabinet is >15 kW - <=17.3 kW.
† Includes larger cabinet (32" W x 48" D x 91" H).
Note: Cabinet power cap is based on the available power at 80% of the breakered capacity of all circuit pairs within a cabinet (where a primary/redundant circuit pair is considered a single circuit).

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(c) Power

Cabinet Power		
Description	**Installation Fee**	**Ongoing Monthly Fee**
2x20 amp 110 volt	$2,110	$0
2x30 amp 110 volt	$2,110	$0
2x20 amp 208 volt	$2,110	$0
2x30 amp 208 volt	$2,110	$0
Phase 3 2x 20 amp 208 volt	$3,165	$0
Phase 3 2x 30 amp 208 volt	$3,165	$0
2 x 60 amp 208 volt	$3,165	$0
Phase 3 2x 40 amp 208 volt	$3,165	$0
Phase 3 2x 50 amp 208 volt	$3,165	$0
Phase 3 2x 60 amp 208 volt	$3,165	$0
2x30 amp 48 volt DC	$3,165	$0
Phase 1 20 amp 240 volt*	TBD	TBD
Phase 1 32 amp 240 volt*	TBD	TBD
Phase 1 40 amp 240 volt*	TBD	TBD
Phase 3 20 amp 415 volt*	TBD	TBD
Phase 3 32 amp 415 volt*	TBD	TBD

**NY11-4 only. One of these options must be selected for Cabinets in NY11-4.*

(d) Additional Charges/Services

Additional Items		
Description	**Installation Fee**	**Ongoing Monthly Fee**
* * * * *	* * * * *	* * * * *
Power Cords - C14 to C19 - 2 to 4 feet	$10.55	$0

PDU – Phase 1*	TBD	TBD
PDU – Phase 3*	TBD	TBD
Switch Monitored PDU Add On*	TBD	TBD
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**NY11-4 only.*

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