



8011-01

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-87408; File No. SR-NYSECHX-2019-12]

### **Self-Regulatory Organizations; NYSE Chicago, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend the Fee Schedule of NYSE Chicago, Inc. October 28, 2019**

Pursuant to Section 19(b)(1)<sup>1</sup> of the Securities Exchange Act of 1934 (“Act”)<sup>2</sup> and Rule 19b-4 thereunder,<sup>3</sup> notice is hereby given that, on October 15, 2019 the NYSE Chicago, Inc. (“NYSE Chicago” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. 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 amend the Fee Schedule of NYSE Chicago, Inc. to provide for co-location services and fees in connection with its expected migration to the NYSE Pillar platform in the fourth quarter of 2019. The proposed rule change is available on the Exchange’s website at [www.nyse.com](http://www.nyse.com), 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 self-regulatory organization included statements

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<sup>1</sup> 15 U.S.C.78s(b)(1).

<sup>2</sup> 15 U.S.C. 78a.

<sup>3</sup> 17 CFR 240.19b-4.

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 those statements may be examined at 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 parts of such statements.

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

1. Purpose

The Exchange proposes to amend the Fee Schedule to provide for co-location services and fees in connection with its expected migration to the NYSE Pillar platform (“Pillar”) in the fourth quarter of 2019.<sup>4</sup> Pillar is an integrated trading technology platform designed to use a single specification for connecting to the equities and options markets operated by the Exchange’s affiliates New York Stock Exchange LLC (“NYSE”), NYSE American LLC (“NYSE American”), NYSE Arca, Inc. (“NYSE Arca”), and NYSE National, Inc. (“NYSE National” and, together, the “Affiliate SROs”).<sup>5</sup> As detailed below, current Users<sup>6</sup> would not

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<sup>4</sup> Subject to rule approvals, the migration to Pillar is currently anticipated to be on November 4, 2019. See Exchange Act Release Nos. 85297 (March 12, 2019), 84 FR 9854 (March 18, 2019) (SR-CHX-2018-03), and 86709 (August 20, 2019), 84 FR 44654 (August 26, 2019) (SR-CHX-2019-08).

<sup>5</sup> In July 2018, the Exchange and its direct parent company were acquired by NYSE Group, Inc. As a result, the Exchange and the Affiliate SROs are direct or indirect subsidiaries of NYSE Group, Inc. and, indirectly, Intercontinental Exchange, Inc. See Exchange Act Release No. 83635 (July 13, 2018), 83 FR 34182 (July 19, 2018) (SR-CHX-2018-004); see also Exchange Act Release No. 83303 (May 22, 2018), 83 FR 24517 (May 29, 2018) (SR-CHX-2018-004).

<sup>6</sup> Consistent with the Affiliate SRO Price Lists, for purposes of the Exchange’s co-location services, a “User” shall mean any market participant that requests to receive co-location services directly from the Exchange. See Securities Exchange Act Release Nos. 76008 (September 29, 2015), 80 FR 60190 (October 5, 2015) (SR-NYSE-2015-40); 76009 (September 29, 2015), 80 FR 60213 (October 5, 2015) (SR-NYSEMKT-2015-67); and 76010 (September 29, 2015), 80 FR 60197 (October 5, 2015) (SR-NYSEArca-2015-82); and 83351 (May 31, 2018), 83 FR 26314 (June 6, 2018) (SR-NYSENational-2018-07) (“NYSE National Co-location Notice”).

incur any new fees and no incremental co-location revenue is expected under this proposal.

The Affiliate SROs offer co-location services.<sup>7</sup> When a User purchases a co-location service, it is charged once for the service, despite the service being offered by all the Affiliate SROs. Under this proposal, Users purchasing co-location services would continue to pay once, even though all four Affiliate SROs and the Exchange would offer co-location services, and would receive access to the Affiliate SROs and the Exchange in the Mahwah, New Jersey data center (the “data center”).

The Exchange proposes that the additions to the Fee Schedule to provide for co-location services would become operative upon the Exchange’s migration to Pillar.

Currently, the Exchange’s trading and execution systems are not in the data center. Once the migration to Pillar is completed, the trading of all securities on the Exchange will have moved to the data center. As a result of the migration, Users will be able to have low latency connections to the Exchange over the Liquidity Center Network (“LCN”), a local area network available in the data center, and so would be able to co-locate in the data center by “rent[ing] space on premises controlled by the Exchange in order that they may locate their electronic servers in close physical proximity to the Exchange's trading and execution systems.”<sup>8</sup> Absent

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<sup>7</sup> With the exception of NYSE National, the Affiliate SROs initially filed rule changes relating to their co-location services and related fees with the Commission in 2010. See Securities Exchange Act Release Nos. 62960 (September 21, 2010), 75 FR 59310 (September 27, 2010) (SR-NYSE-2010-56); 62961 (September 21, 2010), 75 FR 59299 (September 27, 2010) (SR-NYSEAmex-2010-80); and 63275 (November 8, 2010), 75 FR 70048 (November 16, 2010) (SR-NYSEArca-2010-100). NYSE National initially filed rule changes relating to its co-location services and related fees with the Commission on May 18, 2018. See NYSE National Co-location Notice, supra note 6. If any change to the Affiliate SROs’ colocation services become operative after the present filing is made but before it becomes operative, the Exchange would make an additional rule filing implementing the change, with the intention that the Exchange would offer the same co-location services offered by the Affiliate SROs.

<sup>8</sup> See 75 FR 59310, supra note 7.

this proposal to offer co-location services, market participants' access to the Exchange would solely be available outside of co-location, even after the migration of the Exchange's trading and execution systems to Pillar, and so they would not be able to "reduce latency in transmitting market data and order messages" to the Exchange.<sup>9</sup>

The Exchange operates in a highly competitive environment. The Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. Specifically, in Regulation National Market System ("NMS"), the Commission highlighted the importance of market forces in determining prices and SRO revenues and, also, recognized that current regulation of the market system "has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies."<sup>10</sup>

#### Proposed Services and Fees

The Exchange proposes the same services and fees set forth in the price lists and fee schedules of its Affiliate SROs (collectively, the "Affiliate SRO Price Lists"),<sup>11</sup> with the non-

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<sup>9</sup> See Securities Exchange Act Release No. 61358 (January 14, 2010), 75 CFR 3594 (January 21, 2010), at 3598 (concept release on equity market structure).

<sup>10</sup> See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, 37499 (June 29, 2005)

<sup>11</sup> See "Co-Location Fees" in "New York Stock Exchange Price List 2019" ("NYSE Price List") at [https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE\\_Price\\_List.pdf](https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE_Price_List.pdf); "NYSE American Equities Price List" ("NYSE American Equities Price List") at [https://www.nyse.com/publicdocs/nyse/markets/nyse-american/NYSE\\_American\\_Equities\\_Price\\_List.pdf](https://www.nyse.com/publicdocs/nyse/markets/nyse-american/NYSE_American_Equities_Price_List.pdf); "NYSE American Options Fee Schedule" ("NYSE American Options Fee Schedule") at [https://www.nyse.com/publicdocs/nyse/markets/american-options/NYSE\\_American\\_Options\\_Fee\\_Schedule.pdf](https://www.nyse.com/publicdocs/nyse/markets/american-options/NYSE_American_Options_Fee_Schedule.pdf); "NYSE Arca Equities Fees and Charges" ("NYSE Arca Equities Fee Schedule") at [https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE\\_Arca\\_Marketplace\\_Fees.pdf](https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf); "NYSE Arca Options Fees and Charges" ("NYSE Arca Options Fee Schedule") at <https://www.nyse.com/publicdocs/nyse/markets/arca->

substantive differences described below. No new or novel services or fees are proposed and, as described below, current Users of the Affiliate SROs' co-location services would not incur any new fees.

### *Definitions*

The Exchange proposes to adopt the definitions of "Affiliate," "Aggregate Cabinet Footprint," "Hosted Customer," "Hosting User," and "User" as set forth in the Affiliate SRO Price Lists. Specifically, the Exchange proposes the following definitions:

- An "Affiliate" of a User is any other User or Hosted Customer that is under 50% or greater common ownership or control of the first User.
- "Aggregate Cabinet Footprint" of a User or Hosted Customer is (a) for a User, the total kW of the User's cabinets, including both partial and dedicated cabinets, and (b), for a Hosted Customer, the total kW of the portion of the Hosting User's cabinet, whether partial or dedicated, allocated to such Hosted Customer.
- A "Hosted Customer" means a customer of a Hosting User that is hosted in a Hosting User's co-location space.
- A "Hosting User" means a User of co-location services that hosts a Hosted Customer in the User's co-location space.
- A "User" means any market participant that requests to receive co-location services directly from the Exchange.

As in the Affiliate SRO Price Lists, the Exchange would specify that the definitions were

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[options/NYSE\\_Arca\\_Options\\_Fee\\_Schedule.pdf](https://www.nyse.com/publicdocs/nyse/regulation/nyse/NYSE_National_Schedule_of_Fees.pdf); and "NYSE National, Inc. Schedule of Fees and Rebates" ("NYSE National Fee Schedule") at [https://www.nyse.com/publicdocs/nyse/regulation/nyse/NYSE\\_National\\_Schedule\\_of\\_Fees.pdf](https://www.nyse.com/publicdocs/nyse/regulation/nyse/NYSE_National_Schedule_of_Fees.pdf).

for purposes of the co-location fees only.

### *General Notes*

The Exchange proposes to adopt General Notes 1 through 4 as set forth in the Affiliate SRO Price Lists, subject to the differences discussed below.

General Note 1: General Note 1 of the Affiliate SRO Price Lists provides that a User that incurs co-location fees for a particular co-location service would not be subject to co-location fees for the same co-location service charged by the other Affiliate SROs. The wording of General Note 1 differs among the Affiliate SRO Price Lists both where it references the relevant price list or fee schedule and where it lists the relevant exchange's affiliates.<sup>12</sup>

The Exchange proposes to adopt the following General Note 1:<sup>13</sup>

A User that incurs co-location fees for a particular co-location service pursuant to this Fee Schedule shall not be subject to co-location fees for the same co-location service charged by the Exchange's affiliates the New York Stock Exchange LLC (NYSE), NYSE American LLC (NYSE American), NYSE Arca, Inc. (NYSE Arca) and NYSE National (NYSE National).

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<sup>12</sup> For example, the NYSE Arca Options Fee Schedule provides that “[a] User that incurs co-location fees for a particular co-location service pursuant to this *Fee Schedule* shall not be subject to co-location fees for the same co-location service charged pursuant to the *NYSE Arca Equities Fee Schedule* or by the Exchange’s affiliates *NYSE American LLC (NYSE American)*, *New York Stock Exchange LLC (NYSE)* and *NYSE National, Inc. (NYSE National)*” (emphasis added) while the NYSE Price List provides that “[a] User that incurs co-location fees for a particular co-location service pursuant to this *Price List* shall not be subject to co-location fees for the same co-location service charged by the Exchange’s affiliates *NYSE American LLC (NYSE American)* and *NYSE Arca, Inc. (NYSE Arca)*, and *NYSE National, Inc. (NYSE National)*.” (emphasis added) The Exchange’s proposed text for General Note 1 is consistent with the wording of General Note 1 in the NYSE Price List, with the exception that it will use “this Fee Schedule” instead of “this Price List.”

<sup>13</sup> The Exchange expects that each Affiliate SRO will submit a proposed rule change to update General Note 1 to include NYSE Chicago as a provider of co-location services and to remove the definition of NYSE Chicago from General Note 4.

General Note 2: The Exchange proposes the same General Note 2 as in the Affiliate SRO Price Lists, setting forth the requirements for qualifying for a “Partial Cabinet Solution” bundle.<sup>14</sup> The proposed text is as follows:

To qualify for a Partial Cabinet Solution bundle, a User must meet the following conditions: (1) it must purchase only one Partial Cabinet Solution bundle; (2) the User and its Affiliates must not currently have a Partial Cabinet Solution bundle; and (3) after the purchase of the Partial Cabinet Solution bundle, the User, together with its Affiliates, will have an Aggregate Cabinet Footprint of no more than 2 kW.

- A User requesting a Partial Cabinet Solution bundle will be required to certify to the Exchange (a) whether any other Users or Hosted Customers are Affiliates of the certifying User, and (b) that after the purchase of the Partial Cabinet Solution bundle, the User, together with its Affiliates, would have an Aggregate Cabinet Footprint of no more than 2 kW. The certifying User will be required to inform the Exchange immediately of any event that causes another User or Hosted Customer to become an Affiliate. The Exchange shall review available information regarding the entities and may request additional information to verify the Affiliate status of a User or Hosted Customer. The Exchange shall approve a request for a Partial Cabinet Solution bundle unless it determines that the certification is not accurate.

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<sup>14</sup> See Securities Exchange Act Release Nos. 77072 (February 5, 2016), 81 FR 7394 (February 11, 2016) (SR-NYSE-2015-53); 77071 (February 5, 2016), 81 FR 7382 (February 11, 2016) (SR-NYSEMKT-2015-89); and 77070 (February 5, 2016), 81 FR 7401 (February 11, 2016) (SR-NYSEArca-2015-102); and NYSE National Co-location Notice, supra note 6, at 26315.

- If a User that has purchased a Partial Cabinet Solution bundle becomes affiliated with one or more other Users or Hosted Customers and thereby no longer meets the conditions for access to the Partial Cabinet Solution bundle, or if the User otherwise ceases to meet the conditions for access to the Partial Cabinet Solution bundle, the Exchange will no longer offer it to such User and the User will be charged for each of the services individually, at the price for each such service set out in the Fee Schedule. Such price change would be effective as of the date that the User ceased to meet the conditions.

In addition, a User that changes its Partial Cabinet Solution bundle from one option to another will not be subject to a second initial charge, but will be required to pay the difference, if any, between the bundles' initial charges.

General Note 3: The Exchange proposes the same General Note 3 as in the Affiliate SRO Price Lists, setting forth the provisions relating to the use of a waitlist.<sup>15</sup> The proposed text is as follows:

The initial and monthly charge for 2 bundles of 24 cross connects will be waived for a User that is waitlisted for a cage for the duration of the waitlist period, provided that the cross connects may only be used to connect the User's non-contiguous cabinets. The charge will no longer be waived once a User is removed from the waitlist.

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<sup>15</sup> See Securities Exchange Act Release Nos. 77681 (April 21, 2016), 81 FR 24915 (April 27, 2016 (SR-NYSE-2016-13); 77680 (April 21, 2016), 81 FR 24905 (April 27, 2016) (NYSEMKT-2016-17); and 77682 (April 21, 2016), 81 FR 24913 (April 27, 2016) (NYSEArca-2016-21); and NYSE National Co-location Notice, supra note 6, at 26315.

- If a waitlist is created, a User seeking a new cage will be placed on the waitlist based on the date a signed order for the cage is received.
- A User that turns down a cage because it is not the correct size will remain on the waitlist. A User that requests to be removed or that turns down a cage that is the size that it requested will be removed from the waitlist.
- A User that is removed from the waitlist but subsequently requests a cage will be added back to the bottom of the waitlist, provided that, if the User was removed from the waitlist because it turned down a cage that is the size that it requested, it will not receive a second waiver of the charge.

General Note 4: Proposed General Note 4 would establish that, when a User purchases access to the Liquidity Center Network (“LCN”) or the internet protocol (“IP”) network, the two local area networks available in the data center,<sup>16</sup> a User would receive (a) the ability to access the trading and execution systems of the Exchange and Affiliate SROs (“Exchange Systems”) as well as of Global OTC (the “Global OTC System”) and (b) connectivity to any of the listed data products (“Included Data Products”) that it selects. The proposed General Note 4 would be the same as the General Note 4 in the Affiliate SRO Price Lists.<sup>17</sup>

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<sup>16</sup> See Securities Exchange Act Release Nos. 79730 (January 4, 2017), 82 FR 3045 (January 10, 2017) (SR-NYSE-2016-92); 79728 (January 4, 2017), 82 FR 3035 (January 10, 2017) (SR-NYSEMKKT-2016-126); and 79729 (January 4, 2017), 82 FR 3061 (January 10, 2017) (SR-NYSEArca-2016-172); and NYSE National Co-location Notice, supra note 6, at 26316.

<sup>17</sup> See Securities Exchange Act Release Nos. 85952 (May 29, 2019), 84 FR 25880 (June 4, 2019) (SR-NYSE-2019-31); 85960 (May 29, 2019), 84 FR 25848 (June 4, 2019) (SR-NYSEAmer-2019-21); 85958 (May 29, 2019), 84 FR 25858 (June 4, 2019) (SR-NYSEArca-2019-40); and 85959 (May 29, 2019), 84 FR 25887 (June 4, 2019) (SR-NYSENat-2019-13); see also Securities Exchange Act Release Nos. 85300 (March 13, 2019), 84 FR 10152 (March 19, 2019) (SR-NYSE-2019-11); 85302 (March 13, 2019), 84 FR 10164 (March 19, 2019) (SR-NYSEAmer-2019-02); 85306 (March 13, 2019), 84 FR 10159 (March 19, 2019) (SR-NYSEArca 2019-11); 85305 (March 13, 2019), 84 FR

The Exchange proposes to adopt the following General Note 4:

When a User purchases access to the LCN or IP network, it receives the ability to access the trading and execution systems of the NYSE, NYSE American, NYSE Arca, NYSE Chicago, Inc. (NYSE Chicago), and NYSE National (together, the Exchange Systems) as well as of Global OTC (the “Global OTC System”), subject, in each case, to authorization by the NYSE, NYSE American, NYSE Arca, NYSE Chicago, NYSE National or Global OTC, as applicable. Such access includes access to the customer gateways that provide for order entry, order receipt (i.e. confirmation that an order has been received), receipt of drop copies and trade reporting (i.e. whether a trade is executed or cancelled), as well as for sending information to shared data services for clearing and settlement. A User can change the access it receives at any time, subject to authorization by NYSE, NYSE American, NYSE Arca, NYSE Chicago, NYSE National or Global OTC. NYSE, NYSE American, NYSE Arca, NYSE Chicago and NYSE National also offer access to Exchange Systems to their members, such that a User does not have to purchase access to the LCN or IP network to obtain access to Exchange Systems. Global OTC offers access to the Global OTC System to its subscribers, such that a User does not have to purchase access to the LCN or IP network to obtain access to the Global OTC System.

When a User purchases access to the LCN or IP network it receives connectivity to any of the Included Data Products that it selects, subject to any technical

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10154 (March 19, 2019) (SR-NYSENat-2019-05; 83404 (June 11, 2018), 83 FR 28048 (June 15, 2018) (SR-NYSE-2018-23); 83402 (June 11, 2018), 83 FR 28041 (June 15, 2018) (SR-NYSEAmer-2018-23); and 83403 (June 11, 2018), 83 FR 28053 (June 15, 2018) (SR-NYSEArca-2018-36).

provisioning requirements and authorization from the provider of the data feed.

Market data fees for the Included Data Products are charged by the provider of the data feed. A User can change the Included Data Products to which it receives connectivity at any time, subject to authorization from the provider of the data feed. The Exchange is not the exclusive method to connect to the Included Data Products.

The Included Data Products are as follows:

NMS feeds
NYSE: NYSE Alerts NYSE BBO NYSE Integrated Feed NYSE OpenBook NYSE Order Imbalances NYSE Trades
NYSE American: NYSE American Alerts NYSE American BBO NYSE American Integrated Feed NYSE American OpenBook NYSE American Order Imbalances NYSE American Trades
NYSE American Options
NYSE Arca: NYSE ArcaBook NYSE Arca BBO NYSE Arca Integrated Feed NYSE Arca Order Imbalances NYSE Arca Trades
NYSE Arca Options
NYSE Best Quote and Trades (BQT)
NYSE Bonds
NYSE Chicago
NYSE National

*Cabinet-Related Fees*

The Exchange proposes the same services and fees set forth in the Affiliate SRO Price

Lists under “Initial Fee per Cabinet”; “Monthly Fee per Cabinet”; “Cabinet Upgrade Fee”; “PNU Cabinet”; and “Cage Fees” (collectively, the “Cabinet-Related Fees”).

Initial Fee per Cabinet and Monthly Fee per Cabinet: As in the Affiliate SRO Price Lists, the Exchange proposes that, to house its servers and other equipment in the data center, a User have the option of an entire cabinet dedicated solely to that User (“dedicated cabinet”) or a partial cabinet alternative (“partial cabinet”).<sup>18</sup> Partial cabinets would be made available in increments of eight-rack units of space. Users would pay an initial fee and a monthly fee based on the number of kilowatts (“kW”).

Cabinet Upgrade Fee: Users that require additional power allocation may prefer to maintain their hardware within one of their existing cabinets rather than add an additional cabinet. Specifically, Users may develop their hardware infrastructure within a particular cabinet in such a way that, if expansion of such hardware is needed, it can be accomplished within the space constraints of that particular cabinet. If this type of User requires additional power allocation, it would likely want to modify its existing cabinet in this manner, rather than taking an additional dedicated cabinet due to the expense of re-developing its infrastructure within such additional dedicated cabinet. Accordingly, as in the Affiliate SRO Price Lists, the Exchange would offer Users the option of a “Cabinet Upgrade” and related fee, pursuant to which the Exchange would accommodate requests for additional power allocation beyond the typical amount that the Exchange allocates per dedicated cabinet, at which point the Exchange must

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<sup>18</sup> See Securities Exchange Act Release Nos. 71122 (December 18, 2013), 78 FR 77739 (December 24, 2013) (SR-NYSE-2013-81); 71131 (December 18, 2013), 78 FR 77750 (December 24, 2013) (SR-NYSEMKT-2013-103); and 71130 (December 18, 2013), 78 FR 77765 (December 24, 2013) (SR-NYSEArca-2013-143) and NYSE National Co-location Notice, supra note 6, at 26316.

upgrade the cabinet's power capacity.<sup>19</sup>

The Exchange notes that the Cabinet Upgrade Fees in the Affiliate SRO Price Lists have a parenthetical setting forth lower fees for a User that submitted a written order for a Cabinet Upgrade by January 31, 2014, provided that the Cabinet Upgrade became fully operational by March 31, 2014. Because a User that incurs co-location fees for a particular co-location service would not be subject to co-location fees for the same co-location service charged by the Affiliate SROs and such Users may already be subject to this different charge based on the Price List of an Affiliate SRO, the Exchange proposes to maintain the information regarding the lower price on its Fee Schedule.

PNU Fee: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users the option of an unused cabinet for which power is not utilized (“PNU cabinet”) and charge a monthly fee.<sup>20</sup> A User may wish to have a PNU cabinet it reserves for future use. Although PNU cabinets do not use power, when the Exchange establishes a PNU cabinet, it would include wiring, circuitry, and hardware and allocate kW's of unused power capacity. This would allow the PNU cabinet to be powered and used promptly upon the User's request.

Cage Fee: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users the use of cages to house their cabinets within the data center, with initial and monthly charges based on the size of the cage.<sup>21</sup> A cage would typically be purchased by a User that has several

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<sup>19</sup> See id.

<sup>20</sup> See Securities Exchange Act Release Nos. 70913 (November 21, 2013), 78 FR 70987 (November 27, 2013) (SR-NYSE-2013-74); 70914 (November 21, 2013), 78 FR 71000 (November 27, 2013) (SR-NYSEMKT-2013-93); and 70916 (November 21, 2013), 78 FR 70989 (November 21, 2013) (SR-NYSEArca-2013-124) and NYSE National Co-location Notice, supra note 6, at 26316.

<sup>21</sup> See Securities Exchange Act Release Nos. 67666 (August 15, 2012), 77 FR 50742 (August 22, 2012) (SR-NYSE-2012-18); 67665 (August 15, 2012), 77 FR 50734 (August 22, 2012) (SR-NYSEMKT-2012-11); 67669 (August 15, 2012), 77 FR 50746 (August

cabinets within the data center and that wishes to enhance privacy around its cabinets, e.g., so that other Users cannot see what type of hardware is being utilized.

The Exchange proposes to add the following fees and language to its Fee Schedule:

<b>Initial Fee per Cabinet</b>	
Dedicated Cabinet	\$5,000
8-Rack Unit of a Partial Cabinet	\$2,500
<b>Monthly Fee per Cabinet</b>	
<b>Dedicated Cabinet</b>	
<b>Number of kW</b>	<b>Per kW Fee Monthly</b>
4 - 8	\$1,200
9 - 20	\$1,050
21 – 40	\$950
41 +	\$900
<b>8-Rack Unit of a Partial Cabinet</b>	
<b>Number of kW</b>	<b>Total Fee Monthly</b>
1	\$1,500
2	\$2,700
<b>Cabinet Upgrade Fee</b>	
Dedicated Cabinet	\$9,200 (\$4,600 for a User that submitted a written order for a Cabinet Upgrade by January 31, 2014, provided that the Cabinet Upgrade became fully operational by March 31, 2014)
<b>PNU Cabinet</b>	monthly charge of \$360 per kW allocated to PNU Cabinet
<b>Cage Fees</b>	
2 – 14 Cabinets	\$5,000 initial charge plus \$2,700 monthly charge
15 – 28 Cabinets	\$10,000 initial charge plus

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22, 2012) (SR-NYSEArca-2012-62); and 67667 (August 15, 2012), 77 FR 50743 (August 22, 2012) (SR-NYSEArca-2012-63); and NYSE National Co-location Notice, supra note 6, at 26316.

	\$4,100 monthly charge
29+ Cabinets	\$15,000 initial charge plus \$5,500 monthly charge

*Access and Service Fees*

The Exchange proposes to adopt the same services and fees set forth in the Affiliate SRO Price Lists under “LCN Access”; “Bundled Network Access”; “Partial Cabinet Solution bundles”; “IP Network Access”; “Testing and Certification IP Network Access”; “Wireless Connections for Third Party Data”; “Virtual Control Circuit between two Users”; “Hosting Fee”; “Data Center Fiber Cross Connect”; “Connection to Time Protocol Feed” and “Expedite Fee” (collectively, the “Access and Service Fees”).

LCN Access: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users the option to purchase 1 Gb, 10 Gb, 40 Gb, and 10 Gb LX LCN circuits, with initial and monthly charges.<sup>22</sup> As in the Affiliate SRO Price Lists, the Exchange proposes that a User that purchases five 10 Gb LCN connections would only be charged the initial fee for a sixth 10 Gb LCN connection and would not be charged the monthly fee that would otherwise be applicable. This would apply to a User that purchases six 10 Gb LCN connections at one time as well as to a User that purchases six 10 Gb LCN connections at separate times.<sup>23</sup>

Bundled Network Access: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users two “Bundled Network Access” options, with initial and monthly charges.<sup>24</sup> Both bundles would include two LCN connections, two IP network connections, and two optic connections to outside access centers. One bundle would have 1 Gb connections, and the other

<sup>22</sup> See note 16, *supra*.

<sup>23</sup> See note 21, *supra*.

<sup>24</sup> See note 16, *supra*.

10 Gb connections.

Partial Cabinet Solution Bundles: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users four “Partial Cabinet Solution” bundles.<sup>25</sup> Each Partial Cabinet Solution bundle option would include a one or two kW partial cabinet, one LCN connection, one IP network connection, two fiber cross connections, and connectivity to either the Network Time Protocol (“NTP”) or Precision Timing Protocol (“PTP”) time feed. The power of the partial cabinet and Gb of the network connections would vary by bundle.<sup>26</sup> A User and its Affiliates would be limited to one Partial Cabinet Solution bundle at a time, and must have an Aggregate Cabinet Footprint of 2 kW or less to qualify. As noted above, such requirements would be set forth in General Note 2.<sup>27</sup> Finally, a User purchasing a Partial Cabinet Solution bundle would be subject to a 90-day minimum commitment, after which period it would be subject to the 60-day rolling time period.

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<sup>25</sup> See note 14, *supra*; Securities Exchange Act Release Nos. 84893 (December 20, 2018), 83 FR 67455 (December 28, 2018) (SR-NYSE-2018-63); 84925 (December 21, 2018), 83 FR 67754 (December 31, 2018) (SR-NYSEAmer-2018-55); 84893 (December 20, 2018), 83 FR 67455 (December 28, 2018) (SR-NYSEArca-2018-93); and 84895 (December 20, 2018), 83 FR 67405 (December 28, 2018) (SR-NYSENat-2018-26).

<sup>26</sup> The Affiliate SROs have filed to amend two of the Partial Cabinet Solution bundles by replacing the 10 Gb LCN connection with a LCN 10 Gb LX connection. According to the Affiliate SROs, the change is expected to become operative during the fourth quarter of 2019, and the implementation date will be announced through a customer notice. See Securities Exchange Act Release Nos. 86550 (August 1, 2019), 84 FR 38696 (August 7, 2019) (SR-NYSE-2019-41); 86548 (August 1, 2019), 84 FR 38704 (August 7, 2019) (SR-NYSEAmer-2019-28); 86547 (August 1, 2019), 84 FR 38708 (August 7, 2019) (SR-NYSEArca-2019-54); and 86549 (August 1, 2019), 84 FR 38700 (August 7, 2019) (SR-NYSENat-2019-17). The Exchange proposes to include notes to the Partial Cabinet Solution bundles in the Fee Schedule indicating the expected change.

<sup>27</sup> See text accompanying note 14, *supra*.

IP Network Access: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users the option to purchase 1 Gb, 10 Gb, and 40 Gb IP network circuits, with initial and monthly charges.<sup>28</sup>

Testing and Certification IP Network Access: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users access to an IP network circuit for testing and certification at no charge.<sup>29</sup> The circuit could only be used for testing and certification, and the testing and certification period would be limited to three months.

Wireless Connections for Third Party Data: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users a means to receive market data feeds from third party markets (“Wireless Third Party Data”) through a wireless connection, for an initial and monthly fee.<sup>30</sup> Fees would be subject to a 30-day testing period, during which the monthly charge per connection would be waived. The wireless connections would include the use of one port for connectivity to the Wireless Third Party Data. If a User that has more than one wireless connection wishes to use more than one port to connect to the Wireless Third Party Data, the Exchange proposes to make such additional ports available for a monthly fee per port.<sup>31</sup>

Virtual Control Circuit between two Users: As in the Affiliate SRO Price Lists, the

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<sup>28</sup> See note 16, *supra*. See also Securities Exchange Act Release Nos. 74222 (February 6, 2015), 80 FR 7888 (February 12, 2015) (SR-NYSE-2015-05); 74220 (February 6, 2015), 80 FR 7894 (February 12, 2015) (SR-NYSEMKT-2015-08); and 74219 (February 6, 2015), 80 FR 7899 (February 12, 2015) (SR-NYSEArca-2015-03) and NYSE National Co-location Notice, *supra* note 6, at 26317.

<sup>29</sup> See *id.* 80 FR at 7888, 80 FR at 7894, 80 FR at 7899, and NYSE National Co-location Notice, *supra* note 6, at 26318.

<sup>30</sup> See Securities Exchange Act Release Nos. 76748 (December 23, 2015), 80 FR 81609 (December 30, 2015) (SR-NYSE-2015-52); 76750 (December 23, 2015), 80 FR 81648 (December 30, 2015) (SR-NYSEMKT-2015-85); and 76749 (December 23, 2015), 80 FR 81640 (December 30, 2015) (SR-NYSEArca-2015-99); and NYSE National Co-location Notice, *supra* note 6, at 26318.

<sup>31</sup> *Id.*

Exchange proposes to offer Users “Virtual Control Circuits” (“VCCs”) between two Users for a monthly charge based on the size of the VCC.<sup>32</sup> VCCs are connections between two points over dedicated bandwidth using the IP network. A VCC is a two-way connection which the two participants can use for any purpose. The Exchange would bill the User requesting the VCC, but would not set up a VCC until the other User confirmed that it wishes to have the VCC set up.

Hosting Fee: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users a hosting service for a monthly fee per cabinet per Hosted Customer for each cabinet in which such Hosted Customer is hosted.<sup>33</sup> “Hosting” would be a service offered by a User to another entity in the User's space within the data center and could include, for example, a User supporting such other entity's technology, whether hardware or software, through the User's co-location space. A Hosting User would be required to be a User pursuant to the definition of User proposed above. Since only Users could be Hosting Users, a Hosted Customer would not be able to provide hosting services to any other entities in the space in which it is hosted.

Data Center Fiber Cross Connect: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users fiber cross connects for an initial and monthly charge.<sup>34</sup> A User would be able to use cross connects between its cabinets or between its cabinet(s) and the cabinets of separate Users within the data center. A cross connect would be used to connect cabinets of separate Users when, for example, a User receives technical support, order routing, and/or market data delivery services from another User in the data center. Cross connects may be

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<sup>32</sup> See Securities Exchange Act Release Nos. 80311 (March 24, 2017), 82 FR 15749 (March 30, 2017) (SR-NYSE-2016-45); 80309 (March 24, 2017), 82 FR 15725 (March 30, 2017) (SR-NYSEMKT-2016-63); and 80310 (March 24, 2017), 82 FR 15763 (March 30, 2017) (SR-NYSEArca-2016-89); and NYSE National Co-location Notice, supra note 6, at 26318.

<sup>33</sup> See note 6, supra.

<sup>34</sup> See note 21, supra.

bundled (i.e., multiple cross connects within a single sheath) such that a single sheath can hold either one cross connect or several cross connects in multiples of six (e.g., six or 12 cross connects). The Exchange is proposing fees for bundled cross connects that correspond to the number of cross connects in the bundle.

Connection to Time Protocol Feed: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users the option to purchase connectivity to one or more of three time feeds, with monthly and initial charges.<sup>35</sup> Each proposed time feed would provide a feed with the current time of day using one of three different time protocols: GPS Time Source, the Network Time Protocol Feed (“NTP”), and the Precision Time Protocol (“PTP”). Users may make use of time feeds to receive time and to synchronize clocks between computer systems or throughout a computer network, and time feeds may assist Users in other functions, including record keeping or measuring response times. Only the NTP and PTP time feeds would be available to partial cabinet Users, whereas dedicated cabinet Users would have access to all three time feeds. The NTP feed would only be available on the LCN.

Expedite Fee: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users the option to expedite the completion of co-location services purchased or ordered by the User, for which the Exchange would charge an “Expedite Fee.”<sup>36</sup>

The Exchange proposes to add the following fees and language to its Fee Schedule:

Type of Service	Description	Amount of Charge
LCN Access	1 Gb Circuit	\$6,000 per connection initial charge plus \$5,000 monthly per connection

<sup>35</sup> See note 14, *supra*.

<sup>36</sup> See note 21, *supra*.

Type of Service	Description	Amount of Charge
LCN Access	10 Gb Circuit	\$10,000 per connection initial charge plus \$14,000 monthly per connection. A User that purchases 5 10 GB LCN Circuits will receive the 6th 10 GB LCN Circuit without an additional monthly charge
LCN Access	10 Gb LX Circuit	\$15,000 per connection initial charge plus \$22,000 monthly per connection.
LCN Access	40 Gb Circuit	\$15,000 per connection initial charge plus \$22,000 monthly per connection.
Bundled Network Access (2 LCN connections, 2 IP network connections, and 2 optic connections to outside access center)	1 Gb Bundle	\$25,000 initial charge plus \$13,000 monthly charge
	10 Gb Bundle	\$50,000 initial charge plus \$53,000 monthly charge
Partial Cabinet Solution bundles  Note: A User and its Affiliates are limited to one Partial Cabinet Solution bundle at a time. A User and its Affiliates must have an Aggregate Cabinet Footprint of 2 kW or less to qualify for a	Option A: 1 kW partial cabinet, 1 LCN connection (1 Gb), 1 IP network connection (1 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol	\$7,500 initial charge per bundle plus monthly charge per bundle as follows: <ul style="list-style-type: none"> <li>• For Users that order on or before December 31, 2019: \$3,000 monthly for first 24 months of service, and \$6,000 monthly thereafter</li> <li>• For Users that order after December 31, 2019: \$6,000 monthly</li> </ul>

Type of Service	Description	Amount of Charge
Partial Cabinet Solution bundle. See Note 2 under “General Notes.”	Option B: 2 kW partial cabinet, 1 LCN connection (1 Gb), 1 IP network connection (1 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol	\$7,500 initial charge per bundle plus monthly charge per bundle as follows: <ul style="list-style-type: none"> <li>For Users that order on or before December 31, 2019: \$3,500 monthly for first 24 months of service, and \$7,000 monthly thereafter</li> <li>For Users that order after December 31, 2019: \$7,000 monthly</li> </ul>
	Option C: 1 kW partial cabinet, 1 LCN connection (10 Gb),* 1 IP network connection (10 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol  * The LCN connection (10 Gb) will be replaced with an LCN connection (10 Gb LX) on a date to be announced by customer notice, expected to be during the fourth quarter of 2019.	\$10,000 initial charge per bundle plus monthly charge per bundle as follows: <ul style="list-style-type: none"> <li>For Users that order on or before December 31, 2019: \$7,000 monthly for first 24 months of service, and \$14,000 monthly thereafter</li> <li>For Users that order after December 31, 2019: \$14,000 monthly</li> </ul>

Type of Service	Description	Amount of Charge
	<p>Option D: 2 kW partial cabinet, 1 LCN connection (10 Gb),* 1 IP network connection (10 Gb), 2 fiber cross connections and either the Network Time Protocol Feed or Precision Timing Protocol</p> <p>* The LCN connection (10 Gb) will be replaced with an LCN connection (10 Gb LX) on a date to be announced by customer notice, expected to be during the fourth quarter of 2019.</p>	<p>\$10,000 initial charge per bundle plus monthly charge per bundle as follows:</p> <ul style="list-style-type: none"> <li>• For Users that order on or before December 31, 2019: \$7,500 monthly for first 24 months of service, and \$15,000 monthly thereafter</li> <li>• For Users that order after December 31, 2019: \$15,000 monthly</li> </ul>
IP Network Access	1 Gb Circuit	\$2,500 per connection initial charge plus \$2,500 monthly per connection
IP Network Access	10 Gb Circuit	\$10,000 per connection initial charge plus \$11,000 monthly per connection
IP Network Access	40 Gb Circuit	\$10,000 per connection initial charge plus \$18,000 monthly per connection
Testing and certification IP Network Access	IP network circuit for testing and certification. Circuit can only be used for testing and certification and testing and certification period is limited to three months.	No charge.

Type of Service	Description	Amount of Charge
Wireless Connection for Third Party Data	Wireless connection of Cboe Pitch BZX Gig shaped data and Cboe Pitch BYX Gig shaped data	<p>\$5,000 per connection initial charge plus monthly charge per connection of \$6,000</p> <p>Fees are subject to a 30-day testing period, during which the monthly charge per connection is waived.</p>
Wireless Connection for Third Party Data	Wireless connection of Cboe EDGX Gig shaped data and Cboe EDGA Gig shaped data	<p>\$5,000 per connection initial charge plus monthly charge per connection of \$6,000</p> <p>Fees are subject to a 30-day testing period, during which the monthly charge per connection is waived.</p>
Wireless Connection for Third Party Data	Wireless connection of NASDAQ Totalview-ITCH data	<p>\$5,000 per connection initial charge plus monthly charge per connection of \$8,500</p> <p>Fees are subject to a 30-day testing period, during which the monthly charge per connection is waived.</p>
Wireless Connection for Third Party Data	Wireless connection of NASDAQ BX Totalview-ITCH data	<p>\$5,000 per connection initial charge plus monthly charge per connection of \$6,000</p> <p>Fees are subject to a 30-day testing period, during which the monthly charge per connection is waived.</p>
Wireless Connection for Third Party Data	Wireless connection of NASDAQ Totalview Ultra (FPGA)	<p>\$5,000 per connection initial charge plus monthly charge per connection of \$11,000</p> <p>Fees are subject to a 30-day testing period, during which the monthly charge per connection is waived.</p>

Type of Service	Description	Amount of Charge
Wireless Connection for Third Party Data	Wireless connection of NASDAQ Totalview-ITCH and BX Totalview-ITCH data	\$5,000 per connection initial charge plus monthly charge per connection of \$12,000  Fees are subject to a 30-day testing period, during which the monthly charge per connection is waived.
Wireless Connection for Third Party Data	Wireless connection of NASDAQ Totalview Ultra (FPGA) and BX Totalview-ITCH data	\$5,000 per connection initial charge plus monthly charge per connection of \$14,500  Fees are subject to a 30-day testing period, during which the monthly charge per connection is waived.
Wireless Connection for Third Party Data	Wireless connection of Toronto Stock Exchange (TSX)	\$5,000 per connection initial charge plus monthly charge per connection of \$8,500  Fees are subject to a 30-day testing period, during which the monthly charge per connection is waived.
Wireless Connection for Third Party Data	Port for wireless connection	\$3,000 monthly charge per port, excluding first port
Virtual Control Circuit between two Users	1Mb	\$200 monthly charge
	3Mb	\$400 monthly charge
	5Mb	\$500 monthly charge
	10Mb	\$800 monthly charge
	25Mb	\$1,200 monthly charge
	50Mb	\$1,800 monthly charge
	100Mb	\$2,500 monthly charge
Hosting Fee		\$1,000 monthly charge per cabinet per Hosted Customer for each cabinet in which such Hosted Customer is hosted
Data Center Fiber Cross	Furnish and install 1 cross connect	\$500 initial charge plus \$600 monthly charge

Type of Service	Description	Amount of Charge
Connect	Furnish and install bundle of 6 cross connects	\$500 initial charge plus \$1,800 monthly charge
	Furnish and install bundle of 12 cross connects	\$500 initial charge plus \$3,000 monthly charge
	Furnish and install bundle of 18 cross connects	\$500 initial charge plus \$3,840 monthly charge
	Furnish and install bundle of 24 cross connects	\$500 initial charge plus \$4,680 monthly charge See General Note 3.
Connection to Time Protocol Feed	Network Time Protocol Feed (Note: LCN only)	\$300 initial charge plus \$100 monthly charge
	Precision Time Protocol	\$1,000 initial charge plus \$250 monthly charge
	GPS Time Source (Note: dedicated cabinets only)	\$3,000 initial charge plus \$400 monthly charge
Expedite Fee	Expedited installation/completion of a User's co-location service	\$4,000 per request

*Service-Related Fees*

The Exchange proposes to adopt the same services and fees set forth in the Affiliate SRO Price Lists under “Change Fee”; “Initial Install Services”; “Hot Hands Service”; “Shipping and Receiving”; “Badge Request”; “External Cabinet Cable Tray”; “Custom External Cabinet Cable Tray” and “Visitor Security Escort” (collectively, the “Service-related Fees”) and related note, as follows.

Change Fee: As in the Affiliate SRO Price Lists, the Exchange proposes to charge a User a “Change Fee” if the User requests a change to one or more existing co-location services that

the Exchange has already established or completed for the User.<sup>37</sup> The Change Fee would be charged per order. If a User ordered two or more services at one time (for example, through submitting an order form requesting multiple services) the User would be charged a one-time Change Fee, which would cover the multiple services.

Initial Install Services: As in the Affiliate SRO Price Lists, the Exchange proposes to charge a User an “Initial Install Services” fee for the installation of a dedicated or partial cabinet.<sup>38</sup> The proposed fee would be lower for a partial cabinet. The Initial Install Services fee would include initial racking of equipment in the cabinet, provision of cables and labor. The number of hours would depend on whether the cabinet was partial or dedicated.

Hot Hands Service: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users a “Hot Hands” service, which would allow Users to use on-site data center personnel to maintain User equipment, support network troubleshooting, rack and stack a server in a User’s cabinet; power recycling; and install and document the fitting of cable in a User’s cabinet(s).<sup>39</sup> The Hot Hands fee would be charged per half hour.

Shipping and Receiving: As in the Affiliate SRO Price Lists, the Exchange proposes to offer Users shipping and receiving services, with a per shipment fee for the receipt of one shipment of goods at the data center from the User or supplier.<sup>40</sup>

Badge Request: As in the Affiliate SRO Price Lists, the Exchange proposes to offer

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<sup>37</sup> See id.

<sup>38</sup> See note 18, supra.

<sup>39</sup> See Securities Exchange Act Release Nos. 72721 (July 30, 2014), 79 FR 45562 (August 5, 2014) (SR-NYSE-2014-37); 72719 (July 30, 2014), 79 FR 45502 (August 5, 2014) (SR-NYSEMKT-2014-61); and 72720 (July 30, 2014), 79 FR 45577 (August 5, 2014) (SR-NYSEArca-2014-81); and NYSE National Co-location Notice, supra note 6, at 26320.

<sup>40</sup> See note 7, supra.

Users the option to obtain a permanent data center site access badge for a User representative.<sup>41</sup>

External Cabinet Cable Tray: As in the Affiliate SRO Price Lists, the Exchange proposes to offer to engineer, furnish and install a Rittal 5"H x 12"W cable tray on a cabinet for a flat fee per tray.<sup>42</sup>

Custom External Cabinet Cable Tray: As in the Affiliate SRO Price Lists, the Exchange proposes to offer to engineer, furnish and install 4" H x 24" W custom basket cable tray above a client's cabinet rows for a fee per linear foot.<sup>43</sup>

Visitor Security Escort: As in the Affiliate SRO Price Lists, the Exchange proposes that User representatives be required to be accompanied by a visitor security escort during visits to the data center, unless visiting the User's cage. A fee per visit would be charged.<sup>44</sup> The proposed requirement would include User representatives who have a permanent data center site access badge.

In order to be able to meet its obligation to accommodate demand, and in particular to make available more contiguous, larger spaces for new and existing Users, if necessary, the Exchange would exercise its right to move some Users' equipment within the data center ("Migration"). To manage the process for a future Migration, the Exchange proposes to put the same Migration procedures in place as the Affiliate SROs, as follow:<sup>45</sup>

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<sup>41</sup> Id.

<sup>42</sup> Id.

<sup>43</sup> Id.

<sup>44</sup> See note 15, supra.

<sup>45</sup> See Securities Exchange Act Release Nos. 76269 (October 26, 2015), 80 FR 66942 (October 30, 2015) (SR-NYSE-2015-42); 76268 (October 26, 2015), 80 FR 66944 (October 30, 2015) (SR-NYSEMKT-2015-70); and 76270 (October 26, 2015), 80 FR 66958 (October 30, 2015) (SR-NYSEArca-2015-85); and NYSE National Co-location Notice, supra note 6, at 26321.

- First, the Exchange would identify Users that would be required to move in the Migration based on (a) the current location of the User and its current equipment and power requirements and (b) the availability of another location in the Data Center that would accommodate the equipment and power requirements for which such User currently subscribes. No User would be required to move more than once within any 12-month period.
- Second, the Exchange would notify a User in writing (the “Notice”) that the User's equipment and network connections in the Data Center were to be moved as part of the Migration. The Notice would identify the 90-day period during which the User must move its equipment, which period would commence at least 60 days from the date of the Notice. The exact date or dates for the move for each User would be agreed upon between the User and the Exchange. If a move date or dates cannot be agreed on, the Exchange would schedule the move for a date or dates no later than 180 days after the date of the Notice.
- Third, each User's move would be facilitated by the Exchange in cooperation with the User, including the un-racking and re-racking of all of the User's equipment, and the re-installation of the User's networking connections, and the Exchange would make reasonable efforts to ensure that the moves take place outside of the Exchange's hours for business.
- Fourth, in connection with facilitating each User's move, the Exchange proposes to waive certain fees. Specifically, the Exchange proposes to waive:
  - the monthly recurring fees for the User's existing space, based on the rate of the monthly recurring fees that the User is paying as of the date of the

Notice, for the month during which the User's move takes place. This waiver of the monthly recurring fees would mean that the User would not incur these fees for the period of overlapping use of the equipment and services in the old and the new locations, as long as the move is completed within one month.

- all Service-Related Fees that the User would incur if such a move were to take place at a User's request with respect to the User's existing services and equipment.
- for the month following the completion of a User's move, the monthly recurring charges for that User, based on the rate of the monthly recurring fees that the User is paying as of the date of the Notice, in consideration for the Migration.

The Exchange proposes to add a note to each Service-Related Fee outlining the Migration process, as in the Affiliate SRO Price Lists.<sup>46</sup> The Exchange proposes to add the following fees and note to its Fee Schedule:

<b>Type of Service</b>	<b>Description</b>	<b>Amount of Charge</b>
Change Fee***	Change to a co-location service that has already been installed/completed for a User	\$950 per request
Initial Install Services*** (Required per cabinet)	Dedicated Cabinet: Includes initial racking of equipment in cabinet and provision of cables (4 hrs).	\$800 per dedicated cabinet

<sup>46</sup> The Exchange notes that, while the other Affiliate SRO Price Lists use three asterisks to identify the Service-Related Fees and the corresponding note, the NYSE Amex Options Fee Schedule uses the numeral "1". The Exchange proposes to use three asterisks.

Type of Service	Description	Amount of Charge
	Partial Cabinet: Includes initial racking of equipment in cabinet and provision of cables (2 hrs).	\$400 per eight-rack unit in a partial cabinet
Hot Hands Service***	Allows Users to use on-site data center personnel to maintain User equipment, support network troubleshooting, rack and stack, power recycling, and install and document cable.	\$100 per half hour
Shipping and Receiving***	Receipt of one shipment of goods at data center from User/supplier. Includes coordination of shipping and receiving.	\$100 per shipment
Badge Request***	Request for provision of a permanent data center site access badge for a User representative.	\$50 per badge
External Cabinet Cable Tray***	Engineer, furnish and install Rittal 5"H x 12"W cable tray on cabinet.	\$400 per tray
Custom External Cabinet Cable Tray***	Engineer, furnish and install 4" H x 24" W custom basket cable tray above client's cabinet rows.	\$100 per linear foot
Visitor Security Escort***	All User representatives are required to be accompanied by a visitor security escort during visits to the data center, unless visiting the User's cage. Requirement includes User representatives who have a permanent data center site access badge.	\$75 per visit

\*\*\* These fees are waived for the move of a User's equipment within the Data Center when incurred in connection with such a move required by the Exchange

(“Migration Move”). A User selected by the Exchange for a Migration Move will receive written notice (the “Notice”). The Notice will identify the 90-day period during which a User must move its equipment, which period would commence at least 60 days from the date of the Notice. Monthly recurring fees for the User’s existing space based on the rate of the monthly recurring fees that the User was paying as of the date of the Notice are also waived for the month during which a User’s Migration Move takes place, so the User would not incur these fees for the period of overlapping use of equipment and services in the old and new locations. In addition, the monthly recurring charges are waived for the month following the completion of a User’s Migration Move, based on the rate of the monthly recurring fees that the User was paying as of the date of the Notice. No User will be required to move more than once within any 12-month period.

*Connectivity to Third Party Systems, Data Feeds, Testing and Certification Feeds, and DTCC*

The Exchange proposes to adopt the same services and fees set forth in the Affiliate SRO Price Lists under “Connectivity to Third Party Systems, Data Feeds, Testing and Certification Feeds, and DTCC.”<sup>47</sup>

Connectivity to Third Party Systems: As in the Affiliate SRO Price Lists, the Exchange proposes to provide that Users may obtain access to the trading and execution services of Third Party markets and other content service providers (“Third Party Systems”) of multiple third party markets and other content service providers for a fee.<sup>48</sup> Users would connect to Third Party

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<sup>47</sup> See note 32, *supra*.

<sup>48</sup> See *id.* See also Securities Exchange Release Nos. 83706 (July 25, 2018), 83 FR 37033 (July 31, 2018) (SR-NYSE-2018-32; 83707 (July 25, 2018), 83 FR 36985 (July 31, 2018) (SR-NYSEAmer-2018-35); 83708 (July 25, 2018), 83 FR 36980 (July 31, 2018) (SR-

Systems over the IP network.

In order to obtain access to a Third Party System, a User would enter into an agreement with the relevant third party content service provider, pursuant to which the third party content service provider would charge the User for access to the Third Party System. The Exchange would then establish a unicast connection between the User and the relevant third party content service provider over the IP network. The Exchange would charge the User for the connectivity to the Third Party System. A User would only receive, and would only be charged for, access to Third Party Systems for which it enters into agreements with the third party content service provider.

With the exception of the ICE feed, the Exchange would have no ownership interest in the Third Party Systems. Establishing a User's access to a Third Party System would not give the Exchange any right to use the Third Party Systems. Connectivity to a Third Party System would not provide access or order entry to the Exchange's execution system, and a User's connection to a Third Party System would not be through the Exchange's execution system.

The Exchange would charge a monthly recurring fee for connectivity to a Third Party System. Specifically, when a User requested access to a Third Party System, it would identify the applicable third party market or other content service provider and what bandwidth connection it required.

The Exchange proposes to add the following fees and language to its Fee Schedule:

*Connectivity to Third Party Systems*

Pricing for access to the execution systems of third party markets and other service providers (Third Party Systems) is for connectivity only. Connectivity to

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NYSEArca-2018-52); and 83709 (July 25, 2018), 83 FR 37028 (July 31, 2018) (SR-NYSENat-2018-15).

Third Party Systems is subject to any technical provisioning requirements and authorization from the provider of the data feed. Connectivity to Third Party Systems is over the IP network. Any applicable fees are charged independently by the relevant third party content service provider. The Exchange is not the exclusive method to connect to Third Party Systems.

<b>Bandwidth of connection to Third Party System</b>	<b>Monthly recurring fee per connection to Third Party System</b>
1Mb	\$200
3Mb	\$400
5Mb	\$500
10Mb	\$800
25Mb	\$1,200
50Mb	\$1,800
100Mb	\$2,500
200 Mb	\$3,000
1 Gb	\$3,500

<b>Third Party Systems</b>
Americas Trading Group (ATG)
BM&F Bovespa
Boston Options Exchange (BOX)
Canadian Securities Exchange (CSE)
Cboe BYX Exchange (CboeBYX), Cboe BZX Exchange (CboeBZX), Cboe EDGA Exchange (CboeEDGA), and Cboe EDGX Exchange (CboeEDGX)
Cboe Exchange (Cboe) and Cboe C2 Exchange (C2)
Chicago Mercantile Exchange (CME Group)
Credit Suisse
Euronext Optiq Cash and Derivatives Unicast (EUA)
Euronext Optiq Cash and Derivatives Unicast (Production)
Investors Exchange (IEX)
ITG TriAct Matchnow
Miami International Securities Exchange
MIAX PEARL
Nasdaq
NASDAQ Canada (CXC, CXD, CX2)

NASDAQ ISE
Neo Aequitas
NYFIX Marketplace
Omega
OneChicago
OTC Markets Group
TMX Group

Connectivity to Third Party Data Feeds: As in the Affiliate SRO Price Lists, the Exchange proposes to provide that Users may obtain connectivity to data feeds from third party markets and other content service providers (“Third Party Data Feeds”) for a fee.<sup>49</sup> The Exchange would receive Third Party Data Feeds from multiple national securities exchanges and other content service providers at its data center. It would then provide connectivity to that data to Users for a fee. With the exceptions of Global OTC and ICE Data Global Index, Users would connect to Third Party Data Feeds over the IP network.

In order to connect to a Third Party Data Feed, a User would enter into a contract with the relevant third party market or other content service provider, pursuant to which the content service provider would charge the User for the Third Party Data Feed. The Exchange would receive the Third Party Data Feed over its fiber optic network and, after the data provider and User enter into the contract and the Exchange receives authorization from the data provider, the Exchange would re-transmit the data to the User over the User's port. The Exchange would charge the User for the connectivity to the Third Party Data Feed. A User would only receive, and would only be charged for, connectivity to the Third Party Data Feeds for which it entered into contracts.

With the exception of the ICE Data Services, ICE and Global OTC feeds, the Exchange would have no affiliation with the sellers of the Third Party Data Feeds. It would have no right to

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<sup>49</sup>

Id.

use the Third Party Data Feeds other than as a redistributor of the data. The Third Party Data Feeds would not provide access or order entry to the Exchange's execution system. With the exception of the ICE feeds, the Third Party Data Feeds would not provide access or order entry to the execution systems of the third party generating the feed. The Exchange would receive Third Party Data Feeds via arms-length agreements and would have no inherent advantage over any other distributor of such data.

The Exchange would charge a monthly recurring fee for connectivity to each Third Party Data Feed. The monthly recurring fee would be per Third Party Data Feed, with the exception that the monthly recurring fee for the ICE Data Services Consolidated Feeds (including the ICE Data Services Consolidated Feeds Shared Farm feeds), SR Labs–SuperFeeds and MSCI feeds would vary by the bandwidth of the connection. Depending on its needs and bandwidth, a User may opt to receive all or some of the feeds or services included in a Third Party Data Feed.

Third Party Data Feed providers may charge redistribution fees. The Exchange proposes that, when it receives a redistribution fee, it pass through the charge to the User, without change to the fee. The fee would be labeled as a pass-through of a redistribution fee on the User's invoice. As in the Affiliate SRO Price Lists, the Exchange proposes to add language to the Fee Schedule accordingly.

The Exchange proposes that it not charge Users that are third party markets or content providers for connectivity to their own feeds, as it understands that such parties generally receive their own feeds for purposes of diagnostics and testing. As in the Affiliate SRO Price Lists, the Exchange proposes to add language to the Fee Schedule accordingly.

The Exchange proposes to add the following fees and language to its Fee Schedule:

*Connectivity to Third Party Data Feeds*

Pricing for data feeds from third party markets and other content service providers (Third Party Data Feeds) is for connectivity only. Connectivity to Third Party Data Feeds is subject to any technical provisioning requirements and authorization from the provider of the data feed. Connectivity to Third Party Data Fees is over the IP network, with the exception that Users can connect to Global OTC and ICE Data Global Index over the IP network or LCN. Market data fees are charged independently by the relevant third party market or content service provider. The Exchange is not the exclusive method to connect to Third Party Data Feeds.

Third Party Data Feed providers may charge redistribution fees. When the Exchange receives a redistribution fee, it passes through the charge to the User, without change to the fee. The fee is labeled as a pass-through of a redistribution fee on the User's invoice. The Exchange does not charge third party markets or content providers for connectivity to their own feeds.

<b>Third Party Data Feed</b>	<b>Monthly Recurring Connectivity Fee per Third Party Data Feed</b>
BM&F Bovespa	\$3,000
Boston Options Exchange (BOX)	\$1,000
Canadian Securities Exchange (CSE)	\$1,000
Cboe BZX Exchange (CboeBZX) and Cboe BYX Exchange (CboeBYX)	\$2,000
Cboe EDGX Exchange (CboeEDGX) and Cboe EDGA Exchange (CboeEDGA)	\$2,000
Cboe Exchange (Cboe) and Cboe C2 Exchange (C2)	\$2,000

CME Group	\$3,000
Euronext Optiq Compressed Cash	\$900
Euronext Optiq Compressed Derivatives	\$600
Euronext Optiq Shaped Cash	\$1,200
Euronext Optiq Shaped Derivatives	\$900
Financial Industry Regulatory Authority (FINRA)	\$500
Global OTC	\$100
ICE Data Global Index	\$100
ICE Data Services Consolidated Feed $\leq$ 100 Mb	\$200
ICE Data Services Consolidated Feed $>$ 100 Mb to $\leq$ 1 Gb	\$500
ICE Data Services Consolidated Feed $>$ 1 Gb	\$1,000
ICE Data Services Consolidated Feed Shared Farm $\leq$ 100Mb	\$200
ICE Data Services Consolidated Feed Shared Farm $>$ 100 Mb to $\leq$ 1 Gb	\$500
ICE Data Services Consolidated Feed Shared Farm $>$ 1 Gb	\$1,000
ICE Data Services PRD	\$200
ICE Data Services PRD CEP	\$400
Intercontinental Exchange (ICE)	\$1,500
Investors Exchange (IEX)	\$1,000
ITG TriAct Matchnow	\$1,000
Miami International Securities Exchange/MIAX PEARL	\$2,000
Montréal Exchange (MX)	\$1,000
MSCI 5 Mb	\$500
MSCI 25 Mb	\$1,200
NASDAQ Stock Market	\$2,000
NASDAQ OMX Global Index Data Service	\$100
NASDAQ OMDF	\$100
NASDAQ UQDF & UTDF	\$500
NASDAQ Canada (CXC, CXD, CX2)	\$1,500
NASDAQ ISE	\$1,000
Neo Aequitas	\$1,200
Omega	\$1,000
OneChicago	\$1,000
OTC Markets Group	\$1,000
SR Labs – SuperFeed $<$ 500 Mb	\$250
SR Labs – SuperFeed $>$ 500 Mb to $<$ 1.25 Gb	\$800
SR Labs – SuperFeed $>$ 1.25 Gb	\$1,000
TMX Group	\$2,500

Connectivity to Third Party Testing and Certification Feeds: As in the Affiliate SRO

Price Lists, the Exchange proposes to provide that Users may obtain connectivity to third party testing and certification feeds.<sup>50</sup> Certification feeds would be used to certify that a User conforms to any of the relevant content service provider's requirements for accessing Third Party Systems or receiving Third Party Data, while testing feeds would provide Users an environment in which to conduct tests with non-live data. Such feeds, which would solely be used for certification and testing and do not carry live production data, would be available over the IP network.

The Exchange proposes to add the following fees and language to its Fee Schedule:

*Connectivity to Third Party Testing and Certification Feeds*

The Exchange provides connectivity to third party testing and certification feeds provided by third party markets and other content service providers. Pricing for third party testing and certification feeds is for connectivity only. Connectivity to third party testing and certification feeds is subject to any technical provisioning requirements and authorization from the provider of the data feed. Connectivity to third party testing and certification feeds is over the IP network. Any applicable fees are charged independently by the relevant third party market or content service provider. The Exchange is not the exclusive method to connect to third party testing and certification feeds.

Connectivity to third party certification and testing feeds	\$100 monthly recurring fee per feed
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Connectivity to DTCC: As in the Affiliate SRO Price Lists, the Exchange proposes to provide Users connectivity to Depository Trust & Clearing Corporation (“DTCC”) for clearing,

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<sup>50</sup> Id.

fund transfer, insurance, and settlement services.<sup>51</sup>

In order to connect to DTCC, a User would enter into a contract with DTCC, pursuant to which DTCC would charge the User for the services provided. The Exchange would receive the DTCC feed over its fiber optic network and, after DTCC and the User entered into the services contract and the Exchange received authorization from DTCC, the Exchange would provide connectivity to DTCC to the User over the User's IP network port. The Exchange would charge the User for the connectivity to DTCC.

Connectivity to DTCC would not provide access or order entry to the Exchange's execution system, and a User's connection to DTCC would not be through the Exchange's execution system.

The Exchange proposes to add the following fees and language to its Fee Schedule:

*Connectivity to DTCC*

Pricing for connectivity to DTCC feeds is for connectivity only. Connectivity to DTCC feeds is subject to any technical provisioning requirements and authorization from DTCC. Connectivity to DTCC feeds is over the IP network. Any applicable fees are charged independently by DTCC. The Exchange is not the exclusive method to connect to DTCC feeds.

5 Mb connection to DTCC	\$500 monthly recurring fee
50 Mb connection to DTCC	\$2,500 monthly recurring fee

Application of Proposed Change

As noted above, none of the proposed services and fees are new or novel. Current Users would not incur any new fees and the Exchange does not expect to attract any new Users as a

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<sup>51</sup> Id.

result of the proposed change, for the following reasons.

First, as stated in the proposed Fee Schedule, a User that incurs co-location fees for a particular co-location service would not be subject to fees for the same service charged by the Affiliate SROs.<sup>52</sup> In other words, even though all four Affiliate SROs and the Exchange would offer co-location services, a User that purchased services would only be charged once. This would be true irrespective of whether the User were a member of all, some, or none of the Affiliate SROs and the Exchange.

Second, the Exchange expects that a current User that starts to trade on the Exchange or connect to its market data as a result of the proposed change would not incur any new fees. Access to trade on the Exchange and connectivity to its data products comes with connections to the local area networks in the data center for no additional fee<sup>53</sup>--and Users that trade or connect to market data would already have a connection to the local area networks, either directly or through another User.

Third, the Exchange does not expect any market participants to become Users in order to connect to the Exchange's data feed. Under the proposed change any authorized User would be able to obtain a lower latency connection to the Exchange's data feeds. However, in the first eight months of 2019, the Exchange averaged less than 0.6% market share of executed volume of non-auction equity trading.<sup>54</sup> Given the small volume of trades on the Exchange and the fact that

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<sup>52</sup> Co-location fees already work in this manner. See Securities Exchange Act Release Nos. 70206 (August 15, 2013), 78 FR 51765 (August 21, 2013) (SR-NYSE-2013-59); 70176 (August 13, 2013), 78 FR 50471 (August 19, 2013) (SR-NYSEMKT-2013-67); and 70173 (August 13, 2013), 78 FR 50459 (August 19, 2013) (SR-NYSEArca-2013-80); and NYSE National Co-location Notice, supra note 6, at 26314.

<sup>53</sup> See 84 FR 10152, 84 FR 10164, 84 FR 10159, and 84 FR 10154, supra note 17.

<sup>54</sup> Based on Cboe U.S. Equities Market Volume Summary, the Exchange's market share of intraday trading (excluding auctions) for the months of January 2019, February 2019, March 2019, April 2019, May 2019, June 2019, July 2019 and August 2019 was 0.52%,

the NMS feeds include NYSE Chicago data, the Exchange does not believe that a lower latency connection to Exchange data would be sufficient reason for a firm to become a User.

Finally, the Exchange believes that, as a practical matter, only Participants<sup>55</sup> would be interested in becoming new Users in order to trade on the Exchange, as non-Participants cannot trade on the Exchange. The pool of relevant Participants is small: only nine Participants are not also members of one or more of the Affiliate SROs.<sup>56</sup> Of those nine Participants, two are already Users, and therefore, as explained above, would not be subject to any new or different fees as a result of this filing. The Exchange does not expect that any of the remaining seven Participants would opt to become Users in order to trade on the Exchange.<sup>57</sup> Simply put, the Exchange does not expect that low latency access to such a small market would be sufficient reason for a firm to

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0.52%, 0.56%, 0.50%, 0.50%, 0.48%, 0.46% and 0.43%, respectively. See [http://markets.cboe.com/us/equities/market\\_share/](http://markets.cboe.com/us/equities/market_share/).

<sup>55</sup> A “Participant” is, except as otherwise described in the Rules of the Exchange, “any Participant Firm that holds a valid Trading Permit and any person associated with a Participant Firm who is registered with the Exchange under Articles 16 and 17 as a Market Maker Authorized Trader or Institutional Broker Representative, respectively.” Article I, Rule 1(s). A Participant is considered a “member” of the Exchange for purposes of the Act. “Institutional Broker” means a member of the Exchange who is registered as an Institutional Broker pursuant to the provisions of Article 17 and has satisfied all Exchange requirements to operate as an Institutional Broker on the Exchange. Article 1, Rule 1(n). See 84 FR 44654, note 6, supra, at notes 7 and 11.

<sup>56</sup> The other Participants are a member of one or more of the Affiliate SROs. The Exchange believes that if such a Participant’s business model required co-location, that Participant would already be co-located, given its membership in one or more Affiliate SROs.

<sup>57</sup> The seven Participants are all either Institutional Brokers or trade through a third party clearing firm. Institutional Brokers’ usage of the Exchange is largely conducted in a non-automated fashion through manual tools such as the Exchange’s Brokerplex interface. See Article 17, Rule 3, Interpretations and Policies .01 (“Institutional Brokers essentially are order-entry firms that act primarily as brokers for other broker-dealers or institutional customers”); and 84 FR 44654, note 6, supra, at 44661-44662 and 44666. The remaining Participants trade through a third party, which increases latency, suggesting that co-location is not a priority for their business model. For these reasons, the Exchange does not expect the seven Participants to opt to become Users in order to trade on the Exchange.

become a User.

The proposed change is not targeted at, or expected to be limited in applicability to, a specific segment of market participant, as co-location is available to any market participant that wishes to be a User. If, contrary to the Exchange's beliefs, a market participant elects to co-locate in response to the proposed change, that new User would be subject to the same fees as all other Users--the same fees it would be subject to today, irrespective of what type or size of market participant it is.

As with the Affiliate SROs' co-location services, Users that receive co-location services from the Exchange would not receive any means of access to the Exchange's trading and execution systems that is separate from or superior to that of Users that do not receive co-location services.<sup>58</sup> All orders sent to the Exchange would enter the Exchange's trading and execution systems through the same order gateway regardless of whether the sender is co-located in the Exchange's data center or not. In addition, co-located Users would not receive any market data or data service product that is not available to all Users. However, Users that receive co-location services normally would expect reduced latencies in sending orders to the Exchange and receiving market data from the Exchange.

As with the co-location services of the Affiliate SROs, (i) neither a User nor any of the User's customers would be permitted to submit orders directly to the Exchange unless such User or customer is a member organization, a Sponsored Participant or an agent thereof (e.g., a service bureau providing order entry services); (ii) use of the proposed co-location services would be completely voluntary and available to all Users on a non-discriminatory basis; and (iii) a User would only incur one charge for the particular co-location service described herein, regardless of

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<sup>58</sup> See note 52, supra.

whether the User connects only to the Exchange or to the Exchange and one or more of the Affiliate SROs.<sup>59</sup>

The proposed changes are not otherwise intended to address any other issues, and the Exchange is not aware of any problems that member organizations would have in complying with the proposed change.

## 2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,<sup>60</sup> in general, and furthers the objectives of Sections 6(b)(4) and (5) of the Act,<sup>61</sup> in particular, because it provides for the equitable allocation of reasonable dues, fees, and other charges among its members, issuers and other persons using its facilities and does not unfairly discriminate between customers, issuers, brokers or dealers. In addition, it is designed to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to, and perfect the mechanisms of, a free and open market and a national market system and, in general, to protect investors and the public interest and because it is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

### The Proposed Rule Change is Reasonable

The Exchange believes that the proposed rule change is reasonable for the following reasons.

As noted above, the Exchange operates in a highly competitive market. The Commission has repeatedly expressed its preference for competition over regulatory intervention in

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<sup>59</sup>

Id.

<sup>60</sup> 15 U.S.C. 78f(b).

<sup>61</sup> 15 U.S.C. 78f(b)(4) and (5).

determining prices, products, and services in the securities markets. Specifically, in Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO revenues and, also, recognized that current regulation of the market system “has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies.”<sup>62</sup>

With respect to co-location, the Exchange operates in a highly competitive market in which exchanges offer co-location services as a means to facilitate the trading and other market activities of those market participants who believe that co-location enhances the efficiency of their operations. Accordingly, fees charged for co-location services would be constrained by the active competition for the order flow of, and other business from, such market participants. If a particular exchange charges excessive fees for colocation services, affected market participants will opt to terminate their colocation arrangements with that exchange, and adopt a possible range of alternative strategies, including placing their servers in a physically proximate location outside the exchange's data center (which could be a competing exchange), or pursuing strategies less dependent upon the lower exchange-to-participant latency associated with co-location. Accordingly, the exchange charging excessive fees would stand to lose not only co-location revenues but also the liquidity of the formerly co-located trading firms, which could have additional follow-on effects on the market share and revenue of the affected exchange.

Importantly, with respect to co-location services and fees, all market participants can be Users, irrespective of whether or not they are Participants or members of any of the Affiliate SROs.<sup>63</sup> In addition, the proposed changes are neither new nor novel, as the Exchange proposes

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<sup>62</sup> See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, 37499 (June 29, 2005).

<sup>63</sup> See note 6, *supra*.

to adopt the same services and fees set forth in the Affiliate SRO Price Lists, with the non-substantive differences described above. As a result, the proposed rule change would simply offer market participants the same services and fees to which they already have access. The sole substantive change that would result from the Exchange offering co-location services would be that Users would be able to have low latency connections to the Exchange. In other words, the sole change would be a benefit to market participants, with no change in the related costs. If the proposed rule change is not operative, the Exchange will not offer co-location, and market participants will not be able to receive that benefit.

In addition, the Exchange believes that the proposed rule change is reasonable because, for the reasons discussed above, current Users would not incur any new fees and the Exchange does not expect to attract any new Users as a result of the proposed change. Even though all four Affiliate SROs and the Exchange would offer co-location services, a User that purchased services would only be charged once. This would be true irrespective of whether the User were a member of all, some, or none of the Affiliate SROs and the Exchange. As noted above, the Exchange expects that a current User that starts to trade on the Exchange or connects to its market data as a result of the proposed change would not incur any new fees. With respect to market participants that are not current Users, the Exchange does not expect any of them to become Users in order to connect to the Exchange's data feed or trade on the Exchange.

The Exchange believes that the proposed co-location services and fees are reasonable because under the proposed change the Exchange would provide market participants with the option to co-locate, but would not require it. The co-location services, including various options for cabinets, LCN and IP network access, connectivity to Included Data Products, Third Party Data Feeds, third party testing and certification feeds, DTCC and Wireless Third Party Data

(collectively, “Connectivity”), access to Exchange Systems and Third Party Systems (together, “Access”), hosting, and services, would be provided as conveniences to Users.

As is true now, use of any co-location service would be completely voluntary, and each market participant would be able to determine whether to use co-location services based on the requirements of its business operations. If it chose to co-locate, it would be able to determine what size of cabinet, form, and latency of network, would best suit its needs. Users would not be required to use any of their bandwidth for Access or Connectivity unless they wished to do so. Rather, a User would only receive the services it selected, and a User could change what services it receives at any time, subject, in the case of Access and Connectivity, to authorization from the relevant third party system or data provider, Affiliate SRO or the Exchange.

As alternatives to using co-location, a market participant would be able to access or connect to Exchange Systems, Third Party Systems, Included Data Products, Third Party Data Feeds, third party testing and certification feeds, DTCC and Wireless Third Party Data through a Hosting User or a connection to an Exchange access center outside the data center, third party access center, or third party vendor. The market participant could make such connection through a third party telecommunication provider, third party wireless network, the Secure Financial Transaction Infrastructure (“SFTI”) network, or a combination thereof.

The proposed Fee Schedule would set forth: (a) the relevant definitions and General Notes, including a detailed description of the Access and Connectivity Users receive with their purchase of access to the LCN or IP network; (b) the Cabinet-Related Fees; (c) the Access and Service Fees; (d) the Service-related Fees; (e) a description of the Migration; and (f) information regarding connectivity to Third Party Systems, Third Party Data Feeds, third party testing and certification feeds, and DTCC. Such Fee Schedule text would make the description of co-

location services and fees accessible and transparent, providing market participants with clarity as to what services were offered within co-location and what the related fees would be.

The Exchange believes that charging distinct fees for different co-location services would be reasonable because not all Users would need, or wish, to utilize the same co-location services. The proposed variety of services would allow Users to select which co-location services to use, based on their business needs, and Users would only be charged for the services that they selected. By charging only those Users that utilize a co-location service the related fee, those Users that directly benefit from a service would support its cost.

Similarly, the Exchange believes the proposed fees are reasonable because they would allow the Exchange to defray or cover the costs associated with offering different co-location services while providing Users the benefit of such services, including the benefits of, among other things, choosing among the array of different options for cabinets, power, LCN and IP network access, Connectivity, Access, hosting and services; having an efficient connection to clearing, fund transfer, insurance, and settlement services; and having an environment in which to conduct tests with nonlive data and to certify conformance to any applicable technical requirements.

The Exchange believes that the proposed charges are reasonable because the Exchange would offer co-location services as conveniences to Users, but in order to do so would have to provide, maintain and operate the data center facility hardware and technology infrastructure. The Exchange would need to expand the network infrastructure to keep pace with the number of services available to Users, including any increasing demand for bandwidth, and to establish any additional administrative controls. The Exchange would have to handle the installation, administration, monitoring, support and maintenance of such services, including by responding

to any production issues. In addition, in order to provide connectivity to Third Party Data Feeds, Third Party Systems, third party testing and certification feeds and DTCC, the Exchange would have to maintain multiple connections to each Third Party Data Feed, Third Party System, and DTCC, allowing the Exchange to provide resilient and redundant connections; adapt to any changes made by the relevant third party; and cover any applicable fees (other than redistribution fees) charged by the relevant third party, such as port fees.

The Exchange believes it is reasonable that redistribution fees charged by providers of Third Party Data Feeds would be passed through to the User, without change to the fee. If not passed through, the cost of the re-distribution fees would be factored into the proposed fees for connectivity to Third Party Data Feeds. The Exchange believes that passing through the fees makes them more transparent to the User, allowing the User to better assess the cost of the connectivity to a Third Party Data Feed by seeing the individual components of the cost, i.e. the Exchange's fee and the redistribution fee.

The Exchange believes that it is reasonable to not charge third party markets or content providers for connectivity to their own Third Party Data Feeds, as the Exchange understands that such parties generally receive their own feeds for purposes of diagnostics and testing. The Exchange believes that facilitating such diagnostics and testing would remove impediments to, and perfect the mechanisms of, a free and open market and a national market system and, in general, protect investors and the public interest.

#### The Proposed Rule Change is Equitable

The Exchange believes the proposed rule change is an equitable allocation of its fees and credits for the following reasons.

The Exchange believes that the proposed co-location services and fees are reasonable because under the proposed change the Exchange would provide market participants with the option to co-locate, but would not require it. The co-location services, including various options for cabinets, LCN and IP network access, Connectivity, Access, hosting, and services, would be provided as conveniences to Users.

As is true now, use of any co-location service would be completely voluntary, and each market participant would be able to determine whether to use co-location services based on the requirements of its business operations. If it chose to co-locate, it would be able to determine what size of cabinet, form, and latency of network, would best suit its needs. Users would not be required to use any of their bandwidth for Access or Connectivity unless they wished to do so. Rather, a User would only receive the services it selected, and a User could change what services it receives at any time, subject, in the case of Access and Connectivity, to authorization from the relevant third party system or data provider, Affiliate SRO or the Exchange.

In addition to the co-location services being completely voluntary, they would be available to all Users on an equal basis (i.e., the same co-location services would be available to all Users). All Users that voluntarily elected to receive a co-location service would be charged the same amount for the same service.

Further, by having the Fee Schedule set forth the same co-location services and fees offered by the Affiliate SROs, with only non-substantive differences from the Affiliate SRO Price Lists, Users would benefit from having consistent products and pricing across the Exchange and the four Affiliate SROs. As is true for the Affiliate SROs and as specified in the proposed Fee Schedule, a User that incurred co-location fees for a particular co-location service

pursuant thereto would not be subject to co-location fees for the same co-location service charged by the Affiliate SROs.

The Exchange believes that the proposal to establish procedures and waive certain fees in connection with the movement of equipment at the data center in a Migration would provide for the equitable allocation of reasonable fees because, pursuant to the proposed procedures for selecting which Users would be required to move within the data center, a User would be required to move only if the Exchange would be able to accommodate such User's current space and power requirements at the new location, so as to minimize the disruption to the User. The Exchange believes that the waiver of overlapping monthly recurring charges, the waiver of the Service-Related Fees, and the waiver of one month of monthly recurring charges in a Migration would be reasonable because Users would be moving at the Exchange's request and the waivers would help to alleviate the burden on the Users that are required to move.

#### The Proposed Rule Change is Not Unfairly Discriminatory

The Exchange believes that the proposed change is not unfairly discriminatory for the following reasons.

As is true now, use of any co-location service would be completely voluntary, and each market participant would be able to determine whether to use co-location services based on the requirements of its business operations. In addition to the co-location services being completely voluntary, they would be available to all Users on an equal basis (i.e., the same co-location services would be available to all Users). All Users that voluntarily elected to receive a co-location service would be charged the same amount for the same service.

The Exchange believes that charging distinct fees for different co-location services is not unfairly discriminatory because not all Users would need, or wish, to utilize the same co-location

services. The proposed variety of services would allow Users to select which co-location services to use, based on their business needs, and Users would only be charged for the services that they selected. By charging only those Users that utilize a co-location service the related fee, those Users that directly benefit from a service would support its cost.

The Exchange believes that the proposed charges are not unfairly discriminatory because the Exchange would offer co-location services as conveniences to Users, but in order to do so would have to provide, maintain and operate the data center facility hardware and technology infrastructure. The Exchange would need to expand the network infrastructure to keep pace with the number of services available to Users, including any increasing demand for bandwidth, and to establish any additional administrative controls. The Exchange would have to handle the installation, administration, monitoring, support and maintenance of such services, including by responding to any production issues. In addition, in order to provide connectivity to Third Party Data Feeds, Third Party Systems, third party testing and certification feeds and DTCC, the Exchange would have to maintain multiple connections to each Third Party Data Feed, Third Party System, and DTCC, allowing the Exchange to provide resilient and redundant connections; adapt to any changes made by the relevant third party; and cover any applicable fees (other than redistribution fees) charged by the relevant third party, such as port fees.

#### The Proposed Rule Change would Protect Investors and the Public Interest

The Exchange believes that the proposed rule change relating to co-location would perfect the mechanisms of a free and open market and a national market system and, in general, protect investors and the public interest for the following reasons.

The proposed Fee Schedule would set forth: (a) the relevant definitions and General Notes, including a detailed description of the Access and Connectivity Users receive with their

purchase of access to the LCN or IP network; (b) the Cabinet-Related Fees; (c) the Access and Service Fees; (d) the Service-related Fees; (e) a description of the Migration; and (f) information regarding connectivity to Third Party Systems, Third Party Data Feeds, third party testing and certification feeds, and DTCC. Such Fee Schedule text would make the description of co-location services and fees accessible and transparent, providing market participants with clarity as to what services were offered within co-location and what the related fees would be.

Providing connectivity to testing and certification feeds would provide Users an environment in which to conduct tests with non-live data, including testing for upcoming releases and product enhancements or the User's own software development, and allow Users to certify conformance to any applicable technical requirements.

The Exchange believes that it is reasonable to not charge third party markets or content providers for connectivity to their own Third Party Data Feeds, as the Exchange understands that such parties generally receive their own feeds for purposes of diagnostics and testing. Similarly, providing connectivity to DTCC would provide efficient connection to clearing, fund transfer, insurance, and settlement services.

Finally, the Exchange believes that the proposal to establish procedures and waive certain fees in connection with the movement of equipment at the data center in a Migration would allow the Exchange to have sufficient space in the data center to accommodate demand on an equitable basis for the foreseeable future. The Exchange believes that the waiver of overlapping monthly recurring charges, the waiver of the Service-Related Fees, and the waiver of one month of monthly recurring charges in a Migration would be reasonable because Users would be moving at the Exchange's request and the waivers would help to alleviate the burden on the Users that are required to move.

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For the foregoing reasons, the Exchange believes that the proposal is consistent with the Act.

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

In accordance with Section 6(b)(8) of the Act,<sup>64</sup> the Exchange believes that the proposed rule change would not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act because all of the proposed services are completely voluntary.

In accordance with Section 6(b)(8) of the Act,<sup>65</sup> the Exchange believes that the proposed rule change would not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Intramarket Competition

The Exchange believes that the proposed rule change would not have an impact on intramarket competition because the proposed rule change would simply offer market participants the same services and fees to which they already have access. The sole substantive change that would result from the Exchange offering co-location services would be that Users would be able to have low latency connections to the Exchange. In other words, the only change would be a benefit to market participants, with no change in the related costs. If the proposed rule change is not operative, the Exchange will not offer co-location, and market participants will not be able to receive that benefit.

Further, current Users would not incur any new fees and the Exchange does not expect to attract any new Users as a result of the proposed change. Accordingly, the proposed rule change

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<sup>64</sup> 15 U.S.C. 78f(b)(8).

<sup>65</sup> 15 U.S.C. 78f(b)(8).

would not have an impact on intramarket competition. Even though all four Affiliate SROs and the Exchange would offer co-location services, a User that purchased services would only be charged once. This would be true irrespective of whether the User were a member of all, some, or none of the Affiliate SROs and the Exchange. As noted above, the Exchange expects that a current User that starts to trade on the Exchange or connects to its market data as a result of the proposed change would not incur any new fees. With respect to market participants that are not current Users, the Exchange does not expect any of them to become Users in order to connect to the Exchange's data feed or trade on the Exchange. Finally, as noted above, the Exchange believes that, as a practical matter, only Participants would be interested in becoming new Users in order to trade on the Exchange, as non-Participants cannot trade on the Exchange. The pool of relevant Participants is small: only nine Participants are not also members of one or more of the Affiliate SROs.<sup>66</sup> Of those nine Participants, two are already Users, and therefore, as explained above, would not be subject to any new or different fees as a result of this filing. The Exchange does not expect that any of the remaining seven Participants would opt to become Users in order to trade on the Exchange.<sup>67</sup> Simply put, the Exchange does not expect that low latency access to such a small market would be sufficient reason for a firm to become a User.

The proposed co-location services would be available to all Users on an equal basis. All Users that voluntarily selected to receive co-location services, including cabinets, LCN and IP network access, Connectivity, Access and other services, would be charged the same amount for the same services. In the case of a Migration, all Users would be subject to the same proposed procedures for selecting which Users would be required to move within the data center and what fees would be affected.

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<sup>66</sup> See note 56, supra.

<sup>67</sup> See note 57, supra.

The proposed co-location services would provide market participants with the option to co-locate, but would not require it. Use of any co-location services would be completely voluntary, and each market participant would be able to determine whether to use co-location services based on the requirements of its business operations. In this way, the proposed changes would enhance competition by providing market participants with additional options for their business operations.

#### Intermarket Competition

As noted above, the proposed rule change would simply offer market participants the same services and fees to which they already have access, as currently a User that purchases access to the LCN or IP network receives the ability to access the trading and execution systems of the Exchange and connectivity to the Included Data Products of the Exchange. The sole substantive change that would result from the Exchange offering co-location services would be that Users would be able to have low latency connections to the Exchange. As a result, there would be no material burden on competition with respect to other national securities exchanges.

In addition, there would be no material burden on intermarket competition because, for the reasons discussed above, current Users would not incur any new fees and the Exchange does not expect to attract any new Users as a result of the proposed change. In the first eight months of 2019, the Exchange averaged less than 0.6% market share of executed volume of non-auction equity trading.<sup>68</sup> Given the small market share of the Exchange, it does not believe that the proposed rule change would affect the competitive landscape among the national securities exchanges.

The Exchange operates in a highly competitive market in which exchanges offer co-

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<sup>68</sup> See note 54, supra.

location services as a means to facilitate the trading and other market activities of those market participants who believe that co-location enhances the efficiency of their operations.

Accordingly, fees charged for co-location services are constrained by the active competition for the order flow of, and other business from, such market participants. If a particular exchange charges excessive fees for co-location services, affected market participants will opt to terminate their co-location arrangements with that exchange, and adopt a possible range of alternative strategies, including placing their servers in a physically proximate location outside the exchange's data center (which could be a competing exchange), or pursuing strategies less dependent upon the lower exchange-to- participant latency associated with co-location. Accordingly, the exchange charging excessive fees would stand to lose not only co-location revenues but also the liquidity of the formerly co-located trading firms, which could have additional follow-on effects on the market share and revenue of the affected exchange.

For the reasons described above, the Exchange believes that the proposed rule change reflects this competitive environment.

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

No written comments were solicited or received with respect to the proposed rule change.

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

The Exchange has filed the proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act<sup>69</sup> and Rule 19b-4(f)(6) thereunder.<sup>70</sup> Because the 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 prior to 30 days from the date on which it was

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<sup>69</sup> 15 U.S.C. 78s(b)(3)(A)(iii).

<sup>70</sup> 17 CFR 240.19b-4(f)(6).

filed, or such shorter time as the Commission may designate, if consistent with the protection of investors and the public interest, the proposed rule change has become effective pursuant to Section 19(b)(3)(A) of the Act and Rule 19b-4(f)(6)(iii) thereunder.<sup>71</sup>

A proposed rule change filed under Rule 19b-4(f)(6)<sup>72</sup> normally does not become operative prior to 30 days after the date of the filing. However, pursuant to Rule 19b-4(f)(6)(iii),<sup>73</sup> the Commission may designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has requested that the Commission waive the 30-day operative delay. The Exchange asserts that waiver of the operative delay would be consistent with the protection of investors and the public interest because it would allow the Exchange to provide the proposed co-location services immediately upon the Exchange's migration to Pillar. For the same reason, the Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest. Accordingly, the Commission waives the 30-day operative delay and designates the proposed rule change operative upon filing.<sup>74</sup>

At any time within 60 days of the filing of such 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

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<sup>71</sup> 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6)(iii) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change, along with a brief description and text of 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.

<sup>72</sup> 17 CFR 240.19b-4(f)(6).

<sup>73</sup> 17 CFR 240.19b-4(f)(6)(iii).

<sup>74</sup> For purposes only of waiving the 30-day operative delay, the Commission also has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings under Section 19(b)(2)(B)<sup>75</sup> of the Act to determine whether the proposed rule change 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 (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-NYSECHX-2019-12 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-NYSECHX-2019-12. This file number should be included on the subject line if e-mail 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 (<http://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

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<sup>75</sup> 15 U.S.C. 78s(b)(2)(B).

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 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-NYSECHX-2019-12 and should be submitted on or before **[INSERT DATE 21 DAYS FROM PUBLICATION IN THE FEDERAL REGISTER]**.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>76</sup>

**Jill M. Peterson,**

*Assistant Secretary.*

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<sup>76</sup> 17 CFR 200.30-3(a)(12).

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