Additions <u>underscored</u>
Deletions [bracketed]

FEE SCHEDULE OF NYSE CHICAGO, INC.

Updated through [February 21] o, 2019

FEES, ASSESSMENTS, CREDITS AND REBATES

MINOR RULE VIOLATION PLAN RECOMMENDED FINE SCHEDULE (Pursuant to Article 12, Rule 8(h))

*The number of violations shall be calculated on a 24-month rolling basis.

Co-Location Fees

Definitions

The following definitions are for purposes of Co-Location Fees only:

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.

General Notes

- 1. 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, Inc. (NYSE National).
- 2. 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 certificating 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 certificating 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.
 - 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 Price List. 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.

- 3. 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.
 - 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.
- 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 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

Initial Fee per Cabinet	
<u>Dedicated Cabinet</u>	<u>\$5,000</u>
8-Rack Unit of a Partial Cabinet	\$2,500
Monthly Fee per Cabinet	
<u>Dedicated Cabinet</u>	
Number of kWs	PerkW Fee Monthly
4 - 8	<u>\$1,200</u>
9 - 20	<u>\$1,050</u>
21 - 40	<u>\$950</u>
<u>41+</u>	<u>\$900</u>
8-Rack Unit of a Partial Cabinet	
Number of kWs	Total Fee Monthly
1	\$1,500
2	\$2,700
Cabinet Upgrade Fee	
<u>Dedicated Cabinet</u>	\$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)
PNU Cabinet	monthly charge of \$360 per kW allocated to PNU Cabinet
Cage Fees	
2– 14 Cabinets	\$5,000 initial charge plus \$2,700 monthly charge
<u>15 – 28 Cabinets</u>	\$10,000 initial charge plus \$4,100 monthly charge
29+ Cabinets	\$15,000 initial charge plus \$5,500 monthly charge

Type of Service	<u>Description</u>	Amount of Charge
LCN Access	1 Gb Circuit	\$6,000 per connection initial charge plus \$5,000 monthly per connection
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,	1 Gb Bundle	\$25,000 initial charge plus \$13,000 monthly charge
and 2 optic connections to outside access center)	10 Gb Bundle	\$50,000 initial charge plus \$53,000 monthly charge

\$7,500 initial charge per bundle plus monthly charge per bundle as Option A: follows: 1 kW partial cabinet, 1 LCN For Users that order on or connection (1 Gb), 1 IP network before December 31, 2019: connection (1 Gb), 2 fiber cross \$3,000 monthly for first 24 connections and either the months of service, and Network Time Protocol Feed or \$6,000 monthly thereafter Precision Timing Protocol • For Users that order after December 31, 2019: \$6,000 monthly Partial Cabinet Solution \$7,500 initial charge per bundle bundles plus monthly charge per bundle as follows: Option B: Note: A User and its 2 kW partial cabinet, 1 LCN For Users that order on or Affiliates are limited to connection (1 Gb), 1 IP network before December 31, 2019: one Partial Cabinet connection (1 Gb), 2 fiber cross \$3,500 monthly for first 24 Solution bundle at a connections and either the months of service, and time. A User and its Network Time Protocol Feed or \$7,000 monthly thereafter Affiliates must have an Precision Timing Protocol • For Users that order after Aggregate Cabinet December 31, 2019: \$7,000 Footprint of 2 kW or monthly less to qualify for a Option C: \$10,000 initial charge per bundle Partial Cabinet Solution 1 kW partial cabinet, 1 LCN plus monthly charge per bundle as bundle. See Note 2 connection (10 Gb),* 1 IP follows: under "General Notes." network connection (10 Gb), 2 For Users that order on or fiber cross connections and before December 31,2019: either the Network Time \$7,000 monthly for first 24 Protocol Feed or Precision months of service, and Timing Protocol \$14,000 monthly thereafter For Users that order after * The LCN connection (10 Gb) December 31, 2019: will be replaced with an LCN \$14,000 monthly connection (10 Gb LX) on a date to be announced by customer notice, expected to be during the fourth quarter of 2019.

	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 * 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: • For Users that order on or before December 31,2019: \$7,500 monthly for first 24 months of service, and \$15,000 monthly thereafter • For Users that order after December 31, 2019: \$15,000 monthly
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.
Wireless Connection for Third Party Data	Wireless connection of Cboe Pitch BZX Gig shaped data and Cboe Pitch BYX Gig shaped data	\$5,000 per connection initial charge plus monthly charge per connection of \$6,000 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 Cboe EDGX Gig shaped data and Cboe EDGA Gig shaped data	\$5,000 per connection initial charge plus monthly charge per connection of \$6,000 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-ITCH data	\$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	Wireless connection of NASDAQ BX Totalview-ITCH data	\$5,000 per connection initial charge plus monthly charge per connection of \$6,000 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)	\$5,000 per connection initial charge plus monthly charge per connection of \$11,000 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-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
	<u>1Mb</u>	\$200 monthly charge
	<u>3Mb</u>	\$400 monthly charge
Virtual Control Circuit	<u>5Mb</u>	\$500 monthly charge
between two Users	<u>10Mb</u>	\$800 monthly charge
	<u>25Mb</u>	\$1,200 monthly charge
	<u>50Mb</u>	\$1,800 monthly charge
	<u>100Mb</u>	\$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

	Furnish and install 1 cross	\$500 initial charge plus \$600
	connect	monthly charge
Data Center Fiber	Furnish and install bundle of 6	\$500 initial charge plus \$1,800
Cross Connect	cross connects	monthly charge
Closs Connect	Furnish and install bundle of 12	\$500 initial charge plus \$3,000
	cross connects	monthly charge

	Furnish and install bundle of 18 cross connects Furnish and install bundle of 24 cross connects	\$500 initial charge plus \$3,840 monthly charge \$500 initial charge plus \$4,680 monthly charge
	Network Time Protocol Feed (Note: LCN only)	See General Note 3. \$300 initial charge plus \$100 monthly charge
Connection to Time Protocol Feed	Precision Time Protocol GPS Time Source	\$1,000 initial charge plus \$250 monthly charge \$3,000 initial charge plus \$400
	(Note: dedicated cabinets only)	monthly charge
Expedite Fee	Expedited installation/completion of a User's co-location service	\$4,000 per request
Change Fee***	Change to a co-location service that has already been installed/completed for a User	\$950 per request
Initial Install Services***	Dedicated Cabinet: Includes initial racking of equipment in cabinet and provision of cables (4 hrs).	\$800 per dedicated cabinet
(Required per cabinet)	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
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*** 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 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.

Co-Location: Connectivity to Third Party Systems, Data Feeds, Testing and Certification Feeds, and DTCC

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 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.

Bandwidth of connection to Third Party System	Monthly recurring fee per connection to Third Party System
<u>1Mb</u>	<u>\$200</u>
<u>3Mb</u>	<u>\$400</u>
<u>5Mb</u>	<u>\$500</u>
<u>10Mb</u>	<u>\$800</u>
<u>25Mb</u>	\$1,200

<u>50Mb</u>	<u>\$1,800</u>
<u>100Mb</u>	<u>\$2,500</u>
<u>200 Mb</u>	\$3,000
<u>1 Gb</u>	\$3,500

Third Party Systems
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
<u>Unicast (EUA)</u>
Euronext Optiq Cash and Derivatives
<u>Unicast (Production)</u>
<u>Investors Exchange (IEX)</u>
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

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.

	Monthly
	Recurring
	Connectivity
	Fee per Third
	Party Data
Third Party Data Feed	Feed
BM&F Bovespa	\$3,000
Boston Options Exchange (BOX)	\$1,000
Canadian Securities Exchange (CSE)	\$1,000
Cboe BZX Exchange (CboeBZX) and Cboe BYX	\$2,000
Exchange (CboeBYX)	
Cboe EDGX Exchange (CboeEDGX) and Cboe EDGA	\$2,000
Exchange (CboeEDGA)	
Cboe Exchange (Cboe) and Cboe C2 Exchange (C2)	\$2,000
CME Group	\$3,000
Euronext Optiq Compressed Cash	\$900
Euronext Optiq Compressed Derivatives	<u>\$600</u>
Euronext Optiq Shaped Cash	\$1,200
Euronext Optiq Shaped Derivatives	<u>\$900</u>
Financial Industry Regulatory Authority (FINRA)	<u>\$500</u>
Global OTC	<u>\$100</u>
ICE Data Global Index	<u>\$100</u>
ICE Data Services Consolidated Feed ≤ 100 Mb	<u>\$200</u>
ICE Data Services Consolidated Feed > 100 Mb to ≤1	<u>\$500</u>
<u>Gb</u>	
ICE Data Services Consolidated Feed > 1 Gb	<u>\$1,000</u>
ICE Data Services Consolidated Feed Shared Farm ≤	<u>\$200</u>
<u>100Mb</u>	
ICE Data Services Consolidated Feed Shared Farm >	<u>\$500</u>
$100 \text{ Mb to} \le 1 \text{ Gb}$	
ICE Data Services Consolidated Feed Shared Farm >1	<u>\$1,000</u>
<u>Gb</u>	
ICE Data Services PRD	<u>\$200</u>
ICE Data Services PRD CEP	<u>\$400</u>
Intercontinental Exchange (ICE)	<u>\$1,500</u>
Investors Exchange (IEX)	<u>\$1,000</u>

Third Party Data Feed	Monthly Recurring Connectivity Fee per Third Party Data Feed
ITG TriAct Matchnow	<u>\$1,000</u>
Miami International Securities Exchange/MIAX	<u>\$2,000</u>
<u>PEARL</u>	
Montréal Exchange (MX)	<u>\$1,000</u>
MSCI 5 Mb	<u>\$500</u>
MSCI 25 Mb	<u>\$1,200</u>
NASDAQ Stock Market	\$2,000
NASDAQ OMX Global Index Data Service	<u>\$100</u>
NASDAQ OMDF	<u>\$100</u>
NASDAQ UQDF & UTDF	<u>\$500</u>
NASDAQ Canada (CXC, CXD, CX2)	\$1,500
NASDAQ ISE	\$1,000
Neo Aequitas	\$1,200
<u>Omega</u>	\$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

<u>Connectivity to Third Party Testing and Certification</u> 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.

	\$100 monthly
Connectivity to third party certification and testing feeds	recurring fee per
	<u>feed</u>

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