

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-87795; File No. SR-NYSEArca-2019-88)

December 18, 2019

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change, as Modified by Partial Amendment No. 1, to Amend the Fees for NYSE Arca BBO and NYSE Arca Trades

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)¹ and Rule 19b-4 thereunder,² notice is hereby given that, on December 4, 2019, NYSE Arca, Inc. (“NYSE Arca” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”) a proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. On December 17, 2019, the Exchange filed Partial Amendment No. 1 to the proposed rule change.³ The Commission is publishing this notice to solicit comments on the proposed rule change, as modified by Partial Amendment No. 1, from interested persons.

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

The Exchange proposes to (1) amend the fees for NYSE Arca BBO and NYSE Arca Trades by modifying the application of the Access Fee; (2) amend the fees for NYSE Arca Trades by adopting a credit applicable to the Redistribution Fee; and (3) adopt a one-month free trial for all NYSE Arca market data products. The Exchange also proposes to remove certain obsolete text. The Exchange proposes to implement the proposed fee changes on February 3, 2020. The proposed rule change is available on the Exchange’s website at www.nyse.com, at the principal office of the Exchange, and at the Commission’s Public Reference Room.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ In Partial Amendment No. 1, the Exchange provided an additional example in support of the proposed rule change.

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 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 Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to decrease the fees for certain NYSE Arca market data products, as set forth on the NYSE Arca Equities Proprietary Market Data Fee Schedule ("Fee Schedule"). The purpose of these fee decreases, taken together with fee decreases filed by the Exchange's affiliated exchanges, New York Stock Exchange LLC ("NYSE") and NYSE American, Inc. ("NYSE American"),⁴ will reduce the fees associated with the NYSE BQT proprietary data product, which competes directly with similar products offered by both the Nasdaq and Cboe families of U.S. equity exchanges. Collectively, the proposed fee decreases are intended to respond to the competition posed by similar products offered by the other exchange groups.

Specifically, the Exchange proposes to (1) reduce the Access Fees by more than 86% for subscribers of NYSE Arca BBO and NYSE Arca Trades that receive a data feed and use those market data products in a display-only format; (2) provide for a credit applicable to the Redistribution Fee for subscribers of NYSE Arca Trades that use that market data product for display purposes; and (3) adopt a one-month free trial for all NYSE Arca market data products.

⁴ See SR-NYSE-2019-70 and SR-NYSEAmer-2019-55.

The Exchange also proposes non-substantive changes to remove certain obsolete text from the Fee Schedule. All of the proposed changes would decrease fees for market data on the Exchange.

The Exchange proposes to implement these proposed fee changes on February 3, 2020.

Background

The Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. 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.”⁵

As the Commission itself recognized, the market for trading services in NMS stocks has become “more fragmented and competitive.”⁶ Indeed, equity trading is currently dispersed across 13 exchanges,⁷ 31 alternative trading systems,⁸ and numerous broker-dealer internalizers and wholesalers, all competing for order flow. Based on publicly-available information, no

⁵ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37495, 37499 (June 29, 2005) (S7-10-04) (Final Rule) (“Regulation NMS Adopting Release”).

⁶ See Securities Exchange Act Release No. 51808, 84 FR 5202, 5253 (February 20, 2019) (File No. S7-05-18) (Transaction Fee Pilot for NMS Stocks Final Rule) (“Transaction Fee Pilot”).

⁷ See Cboe Global Markets, U.S. Equities Market Volume Summary, available at https://markets.cboe.com/us/equities/market_share/. See generally <https://www.sec.gov/fast-answers/divisionsmarketregmrexchangesshtml.html>.

⁸ See FINRA ATS Transparency Data, available at <https://otctransparency.finra.org/otctransparency/AtsIssueData>. A list of alternative trading systems registered with the Commission is available at <https://www.sec.gov/foia/docs/atslist.htm>.

single exchange currently has more than 18% market share (whether including or excluding auction volume).⁹

With the NYSE BQT market data product, NYSE Arca and its affiliates compete head to head with the Nasdaq Basic¹⁰ and Cboe One Feed¹¹ market data products. Similar to those market data products, NYSE BQT, which was established in 2014,¹² consists of certain elements from NYSE Arca BBO and NYSE Arca Trades as well as from market data products from the Exchange's affiliates, NYSE, NYSE American, NYSE National, Inc. ("NYSE National")¹³ and NYSE Chicago ("NYSE Chicago").¹⁴ Similar to both Nasdaq Basic and the Cboe One Feed, NYSE BQT provides investors with a unified view of comprehensive last sale and BBO data in all Tape A, B, and C securities that trade on the Exchange, NYSE, NYSE American, NYSE

⁹ See Cboe Global Markets U.S. Equities Market Volume Summary, available at http://markets.cboe.com/us/equities/market_share/.

¹⁰ As described on the Nasdaq website, available here: <http://www.nasdaqtrader.com/Trader.aspx?id=nasdaqbasic>, Nasdaq Basic is a "low cost alternative" that provides "Best Bid and Offer and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA Trade Reporting Facility ("TRF")."

¹¹ As described on the Cboe website, available here: https://markets.cboe.com/us/equities/market_data_services/cboe_one/, the Cboe One Feed is a "market data product that provides cost-effective, high-quality reference quotes and trade data for market participants looking for comprehensive, real-time market data" and provides a "unified view of the market from all four Cboe equity exchanges: BZX Exchange, BYX Exchange, EDGX Exchange, and EDGY [sic] Exchange."

¹² See Securities Exchange Act Release Nos. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (notice - NYSE BQT); and 73553 (November 6, 2014), 79 FR 67491 (November 13, 2014) (approval order - NYSE BQT) (SR-NYSE-2014-40) ("NYSE BQT Filing").

¹³ In 2018, NYSE BQT was amended to include NYSE National BBO and NYSE National Trades. See Securities Exchange Act Release No. 83359 (June 1, 2018), 83 FR 26507 (June 7, 2018) (SR-NYSE-2018-22).

¹⁴ In 2019, NYSE BQT was amended to include NYSE Chicago BBO and NYSE Chicago Trades. See Securities Exchange Act Release No. 87511 (November 12, 2019), 84 FR 63689 (November 18, 2019) (SR-NYSE-2019-60).

National and NYSE Chicago. Also, similar to Nasdaq Basic and the Cboe One Feed, NYSE BQT is not intended to be used for purposes of making order-routing or trading decisions, but rather, provides indicative prices for Tape A, B, and C securities.¹⁵

Currently, to subscribe to NYSE BQT, subscribers are charged an access fee of \$250 per month.¹⁶ Additionally, subscribers must also subscribe to, and pay applicable fees for NYSE Arca BBO, NYSE Arca Trades, NYSE BBO, NYSE Trades, NYSE American BBO, NYSE American Trades, NYSE National BBO, NYSE National Trades, NYSE Chicago BBO and NYSE Chicago Trades. Thus, the charges for NYSE BQT are the \$250 Access Fee for NYSE BQT, plus a \$1,500 access fee for each of NYSE BBO and NYSE Trades,¹⁷ plus a \$750 access fee for each of NYSE Arca BBO and NYSE Arca Trades,¹⁸ plus a \$750 access fee for each of NYSE American BBO and NYSE American Trades,¹⁷ for a total of \$6,250 (\$250 + \$3,000 + \$1,500 + \$1,500).¹⁸ In addition, an NYSE BQT subscriber would need to pay for the applicable Professional or Non-Professional User Fees for the underlying market data products, as applicable.¹⁹

¹⁵ See NYSE BQT Filing, supra note 12.

¹⁶ See NYSE Proprietary Market Data Fees, available here:
https://www.nyse.com/publicdocs/nyse/data/NYSE_Market_Data_Fee_Schedule.pdf

¹⁷ See id.

¹⁸ See Fee Schedule, available here:
https://www.nyse.com/publicdocs/nyse/data/NYSE_Arca_Equities_Fee_Schedule.pdf

¹⁷ See NYSE American Equities Proprietary Market Data Fees, available here:
https://www.nyse.com/publicdocs/nyse/data/NYSE_American_Equities_Market_Data_Fee_Schedule.pdf.

¹⁸ There are currently no fees charged for the NYSE National BBO, NYSE National Trades, NYSE Chicago BBO, or NYSE Chicago Trades market data products.

¹⁹ The Exchange is not proposing any changes to the User Fees. Currently, the Professional User Fees for each of NYSE BBO and NYSE Trades is \$4 per month, and the Non-Professional User Fees for each of NYSE BBO and NYSE Trades is \$0.20 per month. See NYSE Proprietary Market Data Fees, available here:

Because NYSE BQT is priced based on the fees associated with the underlying ten market data feeds, the Exchange and its affiliates propose to compete with the Cboe One Feed and Nasdaq Basic by reducing fees for the underlying market data products that comprise NYSE BQT. Together with NYSE and NYSE American, the Exchange similarly proposes to compete for subscribers to NYSE BQT by designing its fee decreases to be attractive to subscribers of NYSE Arca BBO and NYSE Arca Trades that use such products for display-only purposes, which are more likely to be subscribers that service retail investors.

Access Fee - NYSE Arca BBO and NYSE Arca Trades

NYSE Arca BBO is a NYSE Arca-only market data product that allows a vendor to redistribute on a real-time basis the same best-bid-and-offer information that NYSE Arca reports under the Consolidated Quotation Plan (“CQ Plan”) for inclusion in the CQ Plan’s consolidated quotation information data stream (“NYSE Arca BBO Information”).¹⁹ NYSE Arca BBO Information includes the best bids and offers for all securities that are traded on the Exchange and for which NYSE Arca reports quotes under the CQ Plan. NYSE Arca BBO is available over a single data feed, regardless of the markets on which the securities are listed. NYSE Arca BBO

https://www.nyse.com/publicdocs/nyse/data/NYSE_Market_Data_Fee_Schedule.pdf.

The Professional User Fees for each of NYSE Arca BBO and NYSE Arca Trades is \$4 per month, and the Non-Professional User Fees for each of NYSE Arca BBO and NYSE Arca Trades is \$0.25 per month. See Fee Schedule, available here:

https://www.nyse.com/publicdocs/nyse/data/NYSE_Arca_Equities_Fee_Schedule.pdf.

The Professional User Fees for each of NYSE American BBO and NYSE American Trades is \$4 per month, and the Non-Professional User Fees for each of NYSE American BBO and NYSE American Trades is \$0.25 per month. See NYSE American Equities Proprietary Market Data Fees, available here:

https://www.nyse.com/publicdocs/nyse/data/NYSE_American_Equities_Market_Data_Fee_Schedule.pdf.

¹⁹ See Securities Exchange Act Release Nos. 61937 (April 16, 2010), 75 FR 21378 (April 23, 2010) (SR-NYSEArca-2010-23) (notice – NYSE Arca BBO); and 62188 (May 27, 2010), 75 FR 31484 (June 3, 2010) (SR-NYSEArca-2010-23) (approval order – NYSE Arca BBO).

is made available to its subscribers no earlier than the information it contains is made available to the processor under the CQ Plan.

NYSE Arca Trades is a NYSE Arca-only market data product that allows a vendor to redistribute on a real-time basis the same last sale information that NYSE Arca reports to the Consolidated Tape Association (“CTA”) for inclusion in the CTA’s consolidated data stream and certain other related data elements (“NYSE Arca Last Sale Information”).²⁰ NYSE Arca Last Sale Information includes last sale information for all securities that are traded on the Exchange. NYSE Arca Trades is made available to its subscribers at the same time as the information it contains is made available to the processor under the CTA Plan.

Currently, subscribers of each of the NYSE Arca BBO and NYSE Arca Trades products that receive a data feed pay an Access Fee of \$750 per month. The Exchange proposes to reduce the Access Fees for subscribers of NYSE Arca BBO and NYSE Arca Trades that receive a data feed and use those products in a display-only format, including for internal use for Professional Users and external distribution to both Professional and Non-Professional Users in a display-only format, from \$750 per month (per product) to \$100 per month (per product). The Exchange proposes to designate this access fee as a “Per User Access Fee.” A subscriber that receives a data feed and uses the market data product for any other purpose (such as non-display use), including if combined with Per User use, would continue to pay the \$750 per month Access Fee.²¹ A subscriber will be charged only one access fee for each of the NYSE Arca BBO and

²⁰ See Securities Exchange Act Release Nos. 59308 (January 28, 2009), 74 FR 5955 (February 3, 2009) (SR-NYSEArca-2009-05) (notice - NYSE Arca Trades); 59598 (March 18, 2009), 74 FR 12919 (March 25, 2009) (SR-NYSEArca-2009-05) (approval order - NYSE Arca Trades).

²¹ With the proposed adoption of the Per User Access Fee, the Exchange proposes to rename the Access Fee as the General Access Fee.

NYSE Arca Trades products, depending on the use of that product.

The proposed rule change would result in lower fees for subscribers of each of NYSE Arca BBO and NYSE Arca Trades products that receive a data feed and use such products for display-only purposes. The proposed Per User Access Fee of \$100 per month, lowered from \$750 per month, would result in a reduction of more than 86% for subscribers that receive a data feed and use the product in a display-only format. Additionally, the proposed rule change, together with the proposed rule changes by NYSE and NYSE American to similarly reduce the access fees to their BBO and Trades products, would also significantly lower access fees for display-only subscribers of NYSE BQT, from \$6,250 per month to \$850 per month (\$250 + \$200 + \$200 + \$200), a reduction of more than 86%.

The proposed rule change is intended to encourage greater use of NYSE BQT by making it more affordable for data recipients that receive a data feed of NYSE Arca Trades and NYSE Arca BBO and use the products in a display-only format and thereby, allow the Exchange to compete more effectively with Cboe One Feed and Nasdaq Basic. The Exchange believes the proposed rule change would allow the Exchange to offer retail investors a competitively priced alternative to other top-of-book data products available in the marketplace.

Redistribution Fee - NYSE Arca Trades

The Exchange currently charges a Redistribution Fee of \$750 per month for NYSE Arca Trades. A Redistributor is a vendor or any other person that provides a NYSE Arca data product to a data recipient or to any system that a data recipient uses, irrespective of the means of transmission or access. A Redistributor is required to report to the Exchange each month the number of Professional and Non-Professional Users and data feed recipients that receive NYSE Arca Trades. As noted above, for display use of NYSE Arca Trades, the Exchange currently

charges a Per User Fee of \$4 per month for each Professional User and a Per User Fee of \$0.25 per month for each Non-Professional User. These user fees apply to each display device that has access to NYSE Arca Trades.

The Exchange proposes to adopt a credit that would be applicable to Redistributors that provide external distribution of NYSE Arca Trades to Professional and Non-Professional Users in a display-only format. As proposed, such Redistributors would receive a credit equal to the amount of the monthly Professional User and Non-Professional User Fees for such external distribution, up to a maximum of the Redistribution Fee for NYSE Arca Trades. For example, a Redistributor that reports external Professional Users and Non-Professional Users in a month totaling \$750 or more would receive a maximum credit of \$750 for that month, which could effectively reduce its Redistribution Fee to zero. If that same Redistributor were to report external User quantities in a month totaling \$500 of monthly usage, that Redistributor would receive a credit of \$500. Redistributors would have an incentive to increase their redistribution of NYSE Arca Trades because the credit they would be eligible to receive would increase if they report additional external User quantities.

By targeting this proposed credit to Redistributors that provide external distribution of NYSE Arca Trades in a display-only product, the Exchange believes that this proposed fee decrease would provide an incentive for Redistributors to make the NYSE BQT market data product available to its customers. Specifically, if a data recipient is interested in subscribing to NYSE BQT and relies on a Redistributor to obtain market data products from the Exchange, that data recipient would need its Redistributor to redistribute NYSE BQT. Currently, Redistributors that redistribute NYSE Arca market data products do not necessarily also make NYSE BQT available. Because data recipients that use NYSE BQT do so for display-only use, and therefore

would use the NYSE Arca Trades market data product for display-only use, the Exchange believes that this proposed fee decrease for Redistributors of NYSE Arca Trades would provide an incentive for Redistributors to make NYSE BQT available to its customers, which will increase the availability of NYSE BQT to a larger potential population of data recipients.²²

One-Month Free Trial - All NYSE Arca Market Data Products

The Exchange proposes a one-month free trial for any firm that subscribes to a particular NYSE Arca market data product for the first time. As proposed, a first-time subscriber would be any firm that has not previously subscribed to a particular NYSE Arca market data product listed on the Fee Schedule. As proposed, a first-time subscriber of a particular NYSE Arca market data product would not be charged the Access Fee, Non-Display Fee, any applicable Professional and Non-Professional User Fee, and Redistribution Fee for that product for one calendar month. For example, a firm that currently subscribes to NYSE Arca BBO would be eligible to receive a free one-month trial of NYSE Arca Trades, whether in a display-only format or for non-display use. On the other hand, a firm that currently pays an Access Fee and receives NYSE Arca BBO for non-display use would not be eligible to receive a free one-month trial of NYSE Arca BBO in a display-only format. The proposed free trial would be for the first full calendar month following the date a subscriber is approved to receive trial access to the particular NYSE Arca market data product. The Exchange would provide the one-month free trial for each particular product to each subscriber once.

The Exchange believes that providing a one-month free trial to NYSE Arca market data products listed on the Fee Schedule would enable potential subscribers to determine whether a particular NYSE Arca market data product provides value to their business models before fully

²² NYSE Arca does not charge a Redistribution Fee for NYSE Arca BBO.

committing to expend development and implementation costs related to the receipt of that product, and is intended to encourage increased use of the Exchange's market data products by defraying some of the development and implementation costs subscribers would ordinarily have to expend before using a product.

Non-Substantive Changes

In December 2017, the Exchange amended the Fee Schedule to adopt footnote 6 regarding a Decommission Extension Fee for receipt of the NYSE Arca Integrated Feed market data product.²³ The Decommission Extension Fee was adopted to allow existing subscribers at the time to receive these market data products in their legacy format as the Exchange was transitioning to a newer distribution protocol. The Decommission Extension Fee for NYSE Arca Integrated Feed expired on January 30, 2018. The Exchange proposes to remove rule text regarding the Decommission Extension Fee for NYSE Integrated Feed from footnote 6 of the Fee Schedule, as that rule text is now obsolete because the period of time during which the Decommission Extension Fee for NYSE Integrated Feed was applicable has passed. The Exchange proposes to replace the text in footnote 6 with rule text regarding the proposed fee change related to the Redistribution Fee for NYSE Arca Trades described above.

The Exchange also proposes a non-substantive amendment to move the text describing the Enterprise Fee on the Fee Schedule to appear below the Non-Professional User Fee. The Exchange is not making any substantive changes to this fee. The Exchange believes that this proposed non-substantive change will make the Fee Schedule easier to navigate, as the Enterprise Fee is related to Per User fees.

²³ See Securities Exchange Act Release No. 82344 (December 18, 2017), 82 FR 60784 (December 22, 2017) (SR-NYSEArca-2017-142).

The Exchange also proposes two non-substantive, clarifying amendments to footnote 4. First, the Exchange proposes to delete the term “clients” and replace it with the term “Professional Users and Non-Professional Users.” This proposed change is consistent with the operation of the Enterprise Fee, which relates only to the Professional User and Non-Professional Per User fees. Second, the Exchange proposes to insert “Arca” in front of BBO and Trades to correctly note that the Enterprise Fee applies to the NYSE Arca BBO and NYSE Arca Trades market data products. The Exchange believes that these proposed changes would promote clarity and transparency of the Fee Schedule, without making any substantive changes.

Applicability of Proposed Rule Change

As noted above, the proposed rule change is designed to reduce the overall cost of NYSE BQT by reducing specified fees applicable to the underlying market data products that comprise NYSE BQT. There is currently only one subscriber to NYSE BQT (a vendor), and the Exchange believes that the proposed rule change would provide an incentive both for data subscribers to subscribe to NYSE BQT and for Redistributors to subscribe to the product for purposes of providing external distribution of NYSE BQT.

Because the proposed rule change is targeted to potential customers of NYSE BQT, which is designed to be a product for display-only data subscribers, the proposed changes to the NYSE Arca BBO and NYSE Arca Trades Access Fee are narrowly construed with that purpose in mind. Accordingly, these proposed fee changes are not designed for data subscribers that use NYSE Arca BBO or NYSE Arca Trades for non-display use, or for Redistributors that redistribute NYSE Arca Trades to data subscribers that use that market data product for non-display uses. This proposed rule change would not result in any changes to the market data fees for NYSE Arca BBO and NYSE Arca Trades for such data subscribers.

The Exchange believes that five current subscribers to the NYSE Arca BBO and NYSE Arca Trades would meet the qualifications to be eligible for these proposed fee changes. The Exchange further believes that this proposed rule change has the potential to attract new Redistributors for NYSE BQT, as well as new NYSE BQT subscribers that would be subscribing to NYSE Arca BBO and NYSE Arca Trades for the first time.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the provisions of Section 6 of the Act,²⁴ in general, and Sections 6(b)(4) and 6(b)(5) of the Act,²⁵ in particular, in that it provides an equitable allocation of reasonable fees among users and recipients of the data and is not designed to permit unfair discrimination among customers, issuers, and brokers.

The Proposed Rule Change Is Reasonable

In adopting Regulation NMS, the Commission granted SROs and broker-dealers increased authority and flexibility to offer new and unique market data to the public. 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 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.”²⁶

With respect to market data, the decision of the United States Court of Appeals for the

²⁴ 15 U.S.C. 78f(b).

²⁵ 15 U.S.C. 78f(b)(4), (5).

²⁶ See Regulation NMS Adopting Release, 70 FR 37495, at 37499.

District of Columbia Circuit in NetCoalition v. SEC upheld the Commission's reliance on the existence of competitive market mechanisms to evaluate the reasonableness and fairness of fees for proprietary market data:

In fact, the legislative history indicates that the Congress intended that the market system “evolve through the interplay of competitive forces as unnecessary regulatory restrictions are removed” and that the SEC wield its regulatory power “in those situations where competition may not be sufficient,” such as in the creation of a “consolidated transactional reporting system.”²⁷

The court agreed with the Commission's conclusion that “Congress intended that ‘competitive forces should dictate the services and practices that constitute the U.S. national market system for trading equity securities.’”²⁸

1. The Proposed Fees Are Constrained by Significant Competitive Forces

a. Exchange Market Data Is Sold in a Competitive Market

In 2018, Charles M. Jones, the Robert W. Lear of Professor of Finance and Economics of the Columbia University School of Business, conducted an analysis of the market for equity market data in the United States. He canvassed the demand for both consolidated and exchange proprietary market data products and the uses to which those products were put by market

²⁷ NetCoalition v. SEC, 615 F.3d 525, 535 (D.C. Cir. 2010) (“NetCoalition I”) (quoting H.R. Rep. No. 94–229 at 92 (1975), as reprinted in 1975 U.S.C.C.A.N. 323).

²⁸ Id. at 535.

participants, and reported his conclusions in a paper annexed hereto.²⁹ Among other things, Professor Jones concluded that:

- “The market [for exchange market data] is characterized by robust competition: exchanges compete with each other in selling proprietary market data products. They also compete with consolidated data feeds and with data provided by alternative trading systems (‘ATs’). Barriers to entry are very low, so existing exchanges must also take into account competition from new entrants, who generally try to build market share by offering their proprietary market data products for free for some period of time.”³⁰
- “Although there are regulatory requirements for some market participants to use consolidated data products, there is no requirement for market participants to purchase any proprietary market data product for regulatory purposes.”³¹
- “There are a variety of data products, and consumers of equity market data choose among them based on their needs. Like most producers, exchanges offer a variety of market data products at different price levels. Advanced proprietary market data products provide greater value to those who subscribe. As in any other market, each potential subscriber takes the features and prices of available products into account in choosing what market data products to buy based on its business model.”³²

²⁹ See Exhibit 3A, Charles M. Jones, Understanding the Market for U.S. Equity Market Data, August 31, 2018 (hereinafter “Jones Paper”).

³⁰ Jones Paper at 2.

³¹ Id.

³² Id.

- “Exchange equity market data fees are a small cost for the industry overall: the data demonstrates that total exchange market data revenues are orders of magnitude smaller than (i) broker-dealer commissions, (ii) investment bank earnings from equity trading, and (iii) revenues earned by third-party vendors.”³³
- “For proprietary exchange data feeds, the main question is whether there is a competitive market for proprietary market data. More than 40 active exchanges and alternative trading systems compete vigorously in both the market for order flow and in the market for market data. The two are closely linked: an exchange needs to consider the negative impact on its order flow if it raises the price of its market data. Furthermore, new entrants have been frequent over the past 10 years or so, and these venues often give market data away for free, serving as a check on pricing by more established exchanges. These are all the standard hallmarks of a competitive market.”³⁴

Professor Jones’ conclusions are consistent with the demonstration of the competitive constraints on the pricing of market data demonstrated by analysis of exchanges as platforms for market data and trading services, as shown below.

b. Exchanges that Offer Market Data and Trading Services Function as Two-Sided Platforms

An exchange may demonstrate that its fees are constrained by competitive forces by showing that the platform theory of competition applies.

As the United States Supreme Court recognized in Ohio v. American Express, platforms

³³ Id.

³⁴ Id. at 39-40.

are firms that act as intermediaries between two or more sets of agents, and typically the choices made on one side of the platform affect the results on the other side of the platform via externalities, or “indirect network effects.”³⁵ Externalities are linkages between the different “sides” of a platform such that one cannot understand pricing and competition for goods or services on one side of the platform in isolation; one must also account for the influence of the other side. As the Supreme Court explained:

To ensure sufficient participation, two-sided platforms must be sensitive to the prices that they charge each side. . . . Raising the price on side A risks losing participation on that side, which decreases the value of the platform to side B. If the participants on side B leave due to this loss in value, then the platform has even less value to side A—risking a feedback loop of declining demand. . . . Two-sided platforms therefore must take these indirect network effects into account before making a change in price on either side.³⁶

The Exchange and its affiliated exchanges have long maintained that they function as platforms between consumers of market data and consumers of trading services. Proving the existence of linkages between the two sides of this platform requires an in-depth economic analysis of both public data and confidential Exchange data about particular customers’ trading activities and market data purchases. Exchanges, however, are prohibited from sharing details about these specific customer activities and purchases. For example, pursuant to Exchange Rule 7.41, transactions executed on the Exchange are processed anonymously.

³⁵ Ohio v. American Express, 138 S. Ct. 2274, 2280-81 (2018).

³⁶ Id. at 2281.

The Exchange and its affiliated exchanges have retained a third party expert, Marc Rysman, Professor of Economics Boston University, to analyze how platform economics applies to stock exchanges' sale of market data products and trading services, and to explain how this affects the assessment of competitive forces affecting the exchanges' data fees.³⁷ Professor Rysman was able to analyze exchange data that is not otherwise publicly available in a manner that is consistent with the exchanges' confidentiality obligations to customers. As shown in his paper, Professor Rysman surveyed the existing economic literature analyzing stock exchanges as platforms between market data and trading activities, and explained the types of linkages between market data access and trading activities that must be present for an exchange to function as a platform. In addition, Professor Rysman undertook an empirical analysis of customers' trading activities within the NYSE group of exchanges in reaction to NYSE's introduction in 2015 of the NYSE Integrated Feed, a full order-by-order depth of book data product.³⁸

Professor Rysman's analysis of this confidential firm-level data shows that firms that purchased the NYSE Integrated Feed market data product after its introduction were more likely to route orders to NYSE as opposed to one of the other NYSE-affiliated exchanges, such as NYSE Arca or NYSE American.³⁹ Moreover, Professor Rysman shows that the same is true for

³⁷ See Exhibit 3B, Marc Rysman, Stock Exchanges as Platforms for Data and Trading, December 2, 2019 (hereinafter "Rysman Paper"), ¶ 7.

³⁸ See Securities Exchange Act Release Nos. 74128 (January 23, 2015), 80 FR 4951 (January 29, 2015) (SR-NYSE-2015-03) (Notice of filing and immediate effectiveness of proposed rule change to establish NYSE Integrated Feed) and 76485 (November 20, 2015), 80 FR 74158 (November 27, 2015) (SR-NYSE-2015-57) (Notice of filing and immediate effectiveness of proposed rule change to establish fees for the NYSE Integrated Feed).

³⁹ Rysman Paper ¶¶ 79-89.

firms that did not subscribe to the NYSE Integrated Feed: the introduction of the NYSE Integrated Feed led to more trading on NYSE (as opposed to other NYSE-affiliated exchanges) by firms that did not subscribe to the NYSE Integrated Feed.⁴⁰ This is the sort of externality that is a key characteristic of a platform market.⁴¹

From this empirical evidence, Professor Rysman concludes:

- “[D]ata is more valuable when it reflects more trading activity and more liquidity-providing orders. These linkages alone are enough to make platform economics necessary for understanding the pricing of market data.”⁴²
- “[L]inkages running in the opposite direction, from data to trading, are also very likely to exist. This is because market data from an exchange reduces uncertainty about the likelihood, price, or timing of execution for an order on that exchange. This reduction in uncertainty makes trading on that exchange more attractive for traders that subscribe to that exchange’s market data. Increased trading by data subscribers, in turn, makes trading on the exchange in question more attractive for traders that do not subscribe to the exchange’s market data.”⁴³
- The “mechanisms by which market data makes trading on an exchange more attractive for subscribers to market data . . . apply to a wide assortment of market data products, including BBO, order book, and full order-by-order depth of book data products at all exchanges.”⁴⁴

⁴⁰ Id. ¶¶ 90-91.

⁴¹ Id. ¶ 90.

⁴² Id. ¶ 95.

⁴³ Id. ¶ 96.

⁴⁴ Id.

- “[E]mpirical evidence confirms that stock exchanges are platforms for data and trading.”⁴⁵
- “The platform nature of stock exchanges means that data fees cannot be analyzed in isolation, without accounting for the competitive dynamics in trading services.”⁴⁶
- “Competition is properly understood as being between platforms (i.e., stock exchanges) that balance the needs of consumers of data and traders.”⁴⁷
- “Data fees, data use, trading fees, and order flow are all interrelated.”⁴⁸
- “Competition for order flow can discipline the pricing of market data, and vice-versa.”⁴⁹
- “As with platforms generally, overall competition between exchanges will limit their overall profitability, not margins on any particular side of the platform.”⁵⁰

c. Exchange Market Data Fees Are Constrained by the Availability of Substitute Platforms

Professor Rysman’s conclusions that exchanges function as platforms for market data and transaction services mean that exchanges do not set fees for market data products without considering, and being constrained by, the effect the fees will have on the order-flow side of the platform. And as the D.C. Circuit recognized in NetCoalition I, “[n]o one disputes that

⁴⁵ Id. ¶ 97.

⁴⁶ Id. ¶ 98.

⁴⁷ Id.

⁴⁸ Id.

⁴⁹ Id.

⁵⁰ Id. ¶ 100.

competition for order flow is fierce.”⁵¹ The court further noted that “no exchange possesses a monopoly, regulatory or otherwise, in the execution of order flow from broker dealers,” and that an exchange “must compete vigorously for order flow to maintain its share of trading volume.”⁵²

Similarly, the Commission itself has recognized that the market for trading services in NMS stocks has become “more fragmented and competitive.”⁵³ The Commission’s Division of Trading and Markets has also recognized that with so many “operating equities exchanges and dozens of ATSs, there is vigorous price competition among the U.S. equity markets and, as a result, [transaction] fees are tailored and frequently modified to attract particular types of order flow, some of which is highly fluid and price sensitive.”⁵⁴ Indeed, today, equity trading is currently dispersed across 13 exchanges,⁵⁵ 31 alternative trading systems,⁵⁶ and numerous broker-dealer internalizers and wholesalers, all competing for order flow. Based on publicly-available information, no single exchange currently has more than 18% market share.⁵⁷

Further, low barriers to entry mean that new exchanges may rapidly and inexpensively

⁵¹ NetCoalition I, 615 F.3d at 544 (internal quotation omitted).

⁵² Id.

⁵³ See Securities Exchange Act Release No. 51808, 84 FR 5202, 5253 (February 20, 2019) (File No. S7-05-18).

⁵⁴ Commission Division of Trading and Markets, Memorandum to EMSAC, dated October 20, 2015, available here: <https://www.sec.gov/spotlight/emsac/memo-maker-taker-fees-on-equities-exchanges.pdf>.

⁵⁵ See Cboe Global Markets, U.S. Equities Market Volume Summary, available at http://markets.cboe.com/us/equities/market_share/. See generally <https://www.sec.gov/fast-answers/divisionsmarketregmrexc hangeshtml.html>.

⁵⁶ See FINRA ATS Transparency Data, *available at* <https://otctransparency.finra.org/otctransparency/AtsIssueData>. A list of alternative trading systems registered with the Commission is *available at* <https://www.sec.gov/foia/docs/atslist.htm>.

⁵⁷ See Cboe Global Markets U.S. Equities Market Volume Summary, available at http://markets.cboe.com/us/equities/market_share/.

enter the market and offer additional substitute platforms to compete with the Exchange.⁵⁸ In addition to the 13 presently-existing exchanges, three new ones are expected to enter the market in 2020: Long Term Stock Exchange (LTSE), which has been approved as an equities exchange but is not yet operational;⁵⁹ Members Exchange (MEMX), which has recently filed its application to be approved as a registered equities exchange;⁶⁰ and Miami International Holdings (MIAX), which has announced its plan to introduce equities trading on an existing registered options exchange.⁶¹

Given Professor Rysman’s conclusion that exchanges are platforms for market data and trading, this fierce competition for order flow on the trading side of the platform acts to constrain, or “discipline,” the pricing of market data on the other side of the platform.⁶² And due to the ready availability of substitutes and the low cost to move order flow to those substitute trading venues, an exchange setting market data fees that are not at competitive levels would expect to quickly lose business to alternative platforms with more attractive pricing.⁶³ Although the various exchanges may differ in their strategies for pricing their market data products and their transaction fees for trades—with some offering market data for free along with higher

⁵⁸ See Jones Paper at 10-11.

⁵⁹ See Securities Exchange Act Release No. 85828 (May 10, 2019) (File No. 10-234) (Findings, Opinion, and Order of the Commission in the Matter of the Application of Long Term Stock Exchange, Inc. for Registration as a National Securities Exchange).

⁶⁰ See Securities Exchange Act Release No. 87436 (October 31, 2019) (File No. 10-237) (Notice of filing of application of MEMX LLC for registration as a national securities exchange under Section 6 of the Act).

⁶¹ See Press Release of Miami International Holdings Inc., dated May 17, 2019, available here: https://www.miaxoptions.com/sites/default/files/press_release-files/MIAX_Press_Release_05172019.pdf.

⁶² Rysman Paper ¶ 98.

⁶³ See Jones Paper at 11.

trading costs, and others charging more for market data and comparatively less for trading—the fact that exchanges are platforms ensures that no exchange makes pricing decisions for one side of its platform without considering, and being constrained by, the effects that price will have on the other side of the platform.

In sum, the fierce competition for order flow thus constrains any exchange from pricing its market data at a supracompetitive price, and constrains the Exchange in setting its fees at issue here.

The proposed fees are therefore reasonable because in setting them, the Exchange is constrained by the availability of numerous substitute platforms offering market data products and trading. Such substitutes need not be identical, but only substantially similar to the product at hand.

More specifically, in reducing specified fees for the NYSE Arca BBO and NYSE Arca Trades market data products, the Exchange is constrained by the fact that, if its pricing across the platform is unattractive to customers, customers have their pick of an increasing number of alternative platforms to use instead of the Exchange. The Exchange believes that it has considered all relevant factors and has not considered irrelevant factors in order to establish reasonable fees. The existence of numerous alternative platforms to the Exchange's platform ensures that the Exchange cannot set unreasonable market data fees without suffering the negative effects of that decision in the fiercely competitive market for trading order flow.

d. The Availability of Substitute Market Data Products Constrains Fees for NYSE Arca BBO, NYSE Arca Trades, and NYSE BQT

Even putting aside the facts that exchanges are platforms and that pricing decisions on the two sides of the platform are intertwined, the Exchange is constrained in setting the proposed market data fees by the availability of numerous substitute market data products.

The NYSE BQT market data product is subject to significant competitive forces that constrain its pricing. Specifically, as described above, NYSE BQT competes head-to-head with the Nasdaq Basic product and the Cboe One Feed. These products each serve as reasonable substitutes for one another as they are each designed to provide investors with a unified view of real-time quotes and last-sale prices in all Tape A, B, and C securities. Each product provides subscribers with consolidated top-of-book quotes and trades from multiple U.S. equities markets. In the case of NYSE BQT, this product provides top-of-book quotes and trades data from five NYSE-affiliated U.S. equities exchanges, which together account for approximately 24% of consolidated U.S. equities trading volume as of October 2019.⁶⁴ Cboe One Feed similarly provides top-of-book quotes and trades data from Cboe's four U.S. equities exchanges. NYSE BQT, Nasdaq Basic, and Cboe One Feed are all intended to provide indicative pricing and are not intended to be used for order routing or trading decisions.

In addition to competing with proprietary data products from Nasdaq and Cboe, NYSE BQT also competes with the consolidated data feed. However, the Exchange does not claim that NYSE BQT is a substitute for consolidated data with respect to requirements under the Vendor Display Rule, which is Regulation NMS Rule 603(c).

The fact that this filing is proposing reductions in certain fees, fee credits, and free trial periods is itself confirmation of the inherently competitive nature of the market for the sale of proprietary market data. For example, Cboe recently filed proposed rule changes to reduce certain of its Cboe One Feed fees and noted that it attracted two additional customers because of

⁶⁴ See Cboe Global Markets, U.S. Equities Market Volume Summary, available at https://markets.cboe.com/us/equities/market_share/market/2019-10-31/.

the reduced fees.⁶⁵

The Exchange notes that NYSE Arca BBO, NYSE Arca Trades, and NYSE BQT are entirely optional. The Exchange and its affiliates are not required to make the proprietary data products that are the subject of this proposed rule change available or to offer any specific pricing alternatives to any customers, nor is any firm or investor required to purchase these data products. Unlike some other data products (*e.g.*, the consolidated quotation and last-sale information feeds) that firms are required to purchase in order to fulfil regulatory obligations,⁶⁶ a

⁶⁵ See Securities Exchange Act Release Nos. 86667 (August 14, 2019) (SR-CboeBZX-2019-069); 86670 (August 14, 2019) (SR-CboeBYX-2019-012); 86676 (August 14, 2019) (SR-CboeEDGA-2019-013); and 86678 (August 14, 2019) (SR-CboeEDGX-2019-048) (Notices of filing and Immediate effectiveness of proposed rule change to reduce fees for the Cboe One Feed) (collectively “Cboe One Fee Filings”). The Cboe One Fee Filings were in effect from August 1, 2019 until September 30, 2019, when the Commission suspended them and instituted proceedings to determine whether to approve or disapprove those proposals. See, *e.g.*, Securities Exchange Act Release No. 87164 (September 30, 2019), 84 FR 53208 (October 4, 2019) (SR-CboeBZX-2019-069). On October 1, 2019, the Cboe equities exchanges refiled the Cboe One Fee Filings on the basis that they had new customers subscribe as a result of the Cboe One Fee Filings, and therefore its fee proposal had increased competition for top-of-book market data. See Securities Exchange Act Release Nos. 87312 (October 15, 2019), 84 FR 56235 (October 21, 2019) (SR-CboeBZX-2019-086); 87305 (October 14, 2019), 84 FR 56210 (October 21, 2019) (SR-CboeBYX-2019-015); 87295 (October 11, 2019), 84 FR 55624 (October 17, 2019) (SR-CboeEDGX-2019-059); and 87294 (October 11, 2019), 84 FR 55638 (October 17, 2019) (SR-CboeEDGZ-2019-015) (Notices of filing and immediate effectiveness of proposed rule changes to re-file the Small Retail Broker Distribution Program) (“Cboe One Fee Re-Filings”). On November 26, 2019, the Commission suspended the Cboe One Fee Re-Filings and instituted proceedings to determine whether to approve or disapprove those proposals. See, *e.g.*, Securities Exchange Act Release No. 87629 (November 26, 2019) (SR-CboeBZX-2019-086) (Federal Register publication pending).

⁶⁶ The Exchange notes that broker-dealers are not required to purchase proprietary market data to comply with their best execution obligations. See In the Matter of the Application of Securities Industry and Financial Markets Association for Review of Actions Taken by Self-Regulatory Organizations, Release Nos. 34-72182; AP-3-15350; AP-3-15351 (May 16, 2014). Similarly, there is no requirement in Regulation NMS or any other rule that proprietary data be utilized for order routing decisions, and some broker-dealers and ATSs have chosen not to do so.

customer's decision whether to purchase any of the Exchange's proprietary market data feeds is entirely discretionary. Most firms that choose to subscribe to proprietary market data products from the Exchange and its affiliates do so for the primary goals of using them to increase their revenues, reduce their expenses, and in some instances compete directly with the Exchange's trading services. Such firms are able to determine for themselves whether or not the products in question or any other similar products are attractively priced. If market data products from the Exchange and its affiliates do not provide sufficient value to firms based on the uses those firms may have for it, such firms may simply choose to conduct their business operations in ways that do not use the products.⁶⁷ A clear illustration of this point is the fact that today, NYSE BQT has just one subscriber.

In addition, in the case of products that are also redistributed through market data vendors, such as Bloomberg and Refinitiv, the vendors themselves provide additional price discipline for proprietary data products because they control the primary means of access to certain end users. These vendors impose price discipline based upon their business models. For example, vendors that assess a surcharge on data they sell are able to refuse to offer proprietary products that their end users do not or will not purchase in sufficient numbers. Currently, only one vendor subscribes to NYSE BQT, and that vendor has limited redistribution of NYSE BQT. No other vendors currently subscribe to NYSE BQT and likely will not unless their customers request it, and customers will not elect to pay the proposed fees unless such product can provide value by sufficiently increasing revenues or reducing costs in the customer's business in a manner that will offset the fees. All of these factors operate as constraints on pricing proprietary data products.

⁶⁷ See generally Jones Paper at 8, 10-11.

Because of the availability of substitutes, an exchange that overprices its market data products stands a high risk that users may substitute another source of market data information for its own. Those competitive pressures imposed by available alternatives are evident in the Exchange's proposed pricing.

In setting the proposed fees, the Exchange considered the competitiveness of the market for proprietary data and all of the implications of that competition. The Exchange believes that it has considered all relevant factors and has not considered irrelevant factors in order to establish reasonable fees. The existence of numerous alternatives to the Exchange's platform and, more specifically, alternatives to the market data products, including proprietary data from other sources, ensures that the Exchange cannot set unreasonable fees when vendors and subscribers can elect these alternatives or choose not to purchase a specific proprietary data product if the attendant fees are not justified by the returns that any particular vendor or data recipient would achieve through the purchase.

2. The Proposed Fees Are Reasonable

The specific fees that the Exchange proposes for NYSE Arca Trades and NYSE Arca BBO are reasonable, for the following additional reasons.

Overall. This proposed fee change is a result of the competitive environment, as the Exchange seeks to decrease certain of its fees to attract subscribers that do not currently use the NYSE BQT market data product. The Exchange is proposing the fee reductions at issue to make the Exchange's fees more competitive for a specific segment of market participants, thereby increasing the availability of the Exchange's data products, and expanding the options available to firms making data purchasing decisions based on their business needs. The Exchange believes that this is consistent with the principles contained in Regulation NMS to

“promote the wide availability of market data and to allocate revenues to SROs that produce the most useful data for investors.”⁶⁸

Access Fee. By adopting a reduced access fee to access U.S. equity market data that is used in display-only format and that serves as the foundation of NYSE BQT, the Exchange believes that more data recipients may choose to subscribe to these products, thereby expanding the distribution of this market data for the benefit of investors that participate in the national market system and increasing competition generally. In addition, the proposed reduced access fee is reasonable when compared to similar fees for comparable products offered by other markets. For example, NYSE Arca Trades provides investors with alternative market data and is similar to the Nasdaq Last Sale Data Feed; Nasdaq charges redistributors a monthly fee of \$1,500 per month, which is higher than the current access fee for NYSE Arca Trades, and higher than the proposed access fee for display-only users.⁶⁹ The Exchange also believes that offering a reduced access fee for display-only use expands the range of options for offering the Exchange’s market data products and would allow data recipients greater choice in selecting the most appropriate level of data and fees for the Professional and Non-Professional Users they service.

The Exchange determined to charge the \$100 access fee for its proposed Per User Access Fee because it constitutes a substantial reduction of the current fee, with the intended purpose of increasing use of NYSE BQT. NYSE BQT has been in place since 2014 but has only one subscriber, which itself has limited distribution of the product. The Exchange believes that in order to compete with other indicative pricing products such as Nasdaq Basic and Cboe One

⁶⁸ See Regulation NMS Adopting Release, 70 FR 37495, at 37503.

⁶⁹ See Section 139(d) of the Nasdaq Equity 7 Pricing Schedule.

Feed, it needs to provide a meaningful financial incentive for data recipients to subscribe to NYSE BQT. Accordingly, the proposed reduction to the Access Fees for NYSE Arca Trades and NYSE Arca BBO, together with the proposed reduction to the Access Fees for NYSE BBO, NYSE Trades, NYSE American BBO, and NYSE American Trades, is reasonable because the reductions will make NYSE BQT a more attractive offering for data recipients and make it more competitive with Nasdaq Basic and Cboe One Feed. For example, the External Distribution Fee for Cboe One Feed is currently \$5,000 (which is the sum of the External Distribution fees for the four exchange data products that are included in Cboe One Feed) plus a Data Consolidation Fee of \$1,000, for a total of \$6,000. Evidence of the competition among exchange groups for these products has previously been demonstrated via fee changes. For example, following the introduction of the Cboe One Feed, Nasdaq responded by reducing its fees for the Nasdaq Basic product.⁷⁰ With the proposed changes by the Exchange, NYSE American, and NYSE, the Exchange is similarly seeking to compete by decreasing the total access fees for NYSE BQT from \$6,250 to \$850. This proposed rule change therefore demonstrates the existence of an effective, competitive market because this proposal resulted from a need to generate innovative approaches in response to competition from other exchanges that offer market data for a specific segment of market participants.

⁷⁰ See e.g. Securities Exchange Act Release No. 83751 (July 31, 2018), 83 FR 38428 (August 6, 2018) (SR-NASDAQ-2018-058) (Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Lower Fees and Administrative Costs for Distributors of Nasdaq Basic, Nasdaq Last Sale, NLS Plus and the Nasdaq Depth-of-Book Products Through a Consolidated Enterprise License). Nasdaq filed the proposed fee change to lower the Enterprise Fee for Nasdaq Basic and other market data products in response to the Enterprise Fee for the Cboe One Feed adopted by Cboe family of exchanges.

Redistribution Fees. Similarly, the proposed reduction to the NYSE Arca Trades Redistribution Fee is reasonable because it is designed to provide an incentive for Redistributors to make NYSE BQT available so that data recipients can subscribe to NYSE BQT. The Exchange further believes that the proposed reduction to the NYSE Arca Trades Redistribution Fee is reasonable because it is designed to compete with a similar credit offered by the Cboe family of equity exchanges.⁷¹

One-Month Free Trial. The Exchange believes that the proposed rule change to provide the NYSE Arca market data products to new customers free-of-charge for their first subscription month is reasonable because it would allow vendors and subscribers to become familiar with the feeds and determine whether they suit their needs without incurring fees. Making a new market data product available for free for a trial period is consistent with offerings of other exchanges. For example, Nasdaq offers new subscribers its market data products a 30-day waiver of user fees.⁷²

Deletion of Obsolete Text. The Exchange believes that it is reasonable to delete references to obsolete rule text and dates from the Fee Schedule and to make non-substantive clarifying amendments. The Exchange believes that the proposed changes are reasonable because they would result in greater specificity and precision within the Fee Schedule, which

⁷¹ See, e.g., BZX Price List - U.S. Equities available at <http://www.nasdaqtrader.com/Trader.aspx?id=DPUSdata#db> [sic]. BZX charges \$500 per month for internal distribution, and \$2,500 per month for external distribution, of BZX Last Sale. BZX also charges \$500 per month for internal distribution, and \$2,500 per month for external distribution, of BZX Top. Each external distributor is eligible to receive a credit against its monthly Distributor Fee for BZX Las [sic] Sale equal to the amount of its monthly User Fees up to a maximum of the Distributor Fee for BZX Las [sic] Sale. See Cboe BZX U.S. Equities Exchange Fee Schedule at http://markets.cboe.com/us/equities/membership/fee_schedule/bzx/.

⁷² See Section 112(b)(1) of Nasdaq's Equity 7 Pricing Schedule.

would contribute to reasonably ensuring that the fees described there are clear and accurate. Specifically, the proposed changes are reasonable because they would remove obsolete rule text and dates from the Fee Schedule related to a Decommission Extension Fee that is no longer charged by the Exchange and provide greater specificity regarding the application of the Enterprise Fee.

For all of the foregoing reasons, the Exchange believes that the proposed fees are reasonable.

The Proposed Fees Are Equitably Allocated

The Exchange believes the proposed fees for NYSE Arca Trades and NYSE Arca BBO are allocated fairly and equitably among the various categories of users of the feed, and any differences among categories of users are justified.

Overall. As noted above, this proposed fee change is a result of the competitive environment for market data products that provide indicative pricing information across a family of exchanges. To respond to this competitive environment, the Exchange seeks to amend its fees to access NYSE Arca Trades and NYSE Arca BBO in a display-only format, which the Exchange hopes will attract additional subscribers for its NYSE BQT market data product. The Exchange is proposing the fee reductions to make the Exchange's fees more competitive for a specific segment of market participants, thereby increasing the availability of the Exchange's data products, expanding the options available to firms making data purchasing decisions based on their business needs, and generally increasing competition.

Access Fee. The Exchange believes that the proposed Per User Access Fee is equitable as it would apply equally to all data recipients that choose to subscribe to NYSE Arca Trades or NYSE Arca BBO in a display-only format. Because NYSE Arca Trades and NYSE Arca BBO

are optional products, any data recipient could choose to subscribe to NYSE Arca Trades or NYSE Arca BBO for display-only use and be eligible for the proposed reduced fee. The Exchange does not believe that it is inequitable that this proposed fee reduction would be available only to data recipients that use NYSE Arca Trades or NYSE Arca BBO in a display-only format. Non-display data represents a different set of use cases than display-only usage; non-display data can be used by data recipients for a wide variety of profit-generating purposes, including proprietary and agency trading and smart order routing, as well as by data recipients that operate order matching and execution platforms that compete directly with the Exchange for order flow. The data also can be used for a variety of non-trading purposes that indirectly support trading, such as risk management and compliance. Although some of these non-trading uses do not directly generate revenues, they can nonetheless substantially reduce the recipient's costs by automating such functions so that they can be carried out in a more efficient and accurate manner and reduce errors and labor costs, thereby benefiting end users. The Exchange believes that charging a different access fee for non-display use is equitable because data recipients can derive substantial value from such uses, for example, by automating tasks so that can be performed more quickly and accurately and less expensively than if they were performed manually.

Redistribution Fees. The Exchange believes the proposed change to provide a credit to a Redistributor that externally redistributes NYSE Arca Trades to Professional and Non-Professional Users in a display-only format in an amount equal to the monthly Professional User and Non-Professional User fees for such external distribution, up to a maximum of the Redistribution Fee, is equitably allocated. The proposed change would apply equally to all Redistributors that choose to externally redistribute the NYSE Arca Trades product, and would

serve as an incentive for Redistributors to make NYSE Arca Trades more broadly available for use by both Professional and Non-Professional Users. This, in turn, could provide an incentive for Redistributors to make NYSE BQT available to their customers.

One-Month Free Trial. The Exchange believes the proposal to provide the NYSE Arca market data products to new customers free-of-charge for their first subscription month is equitable because it applies to any first-time subscriber, regardless of the use they plan to make of the feed. As proposed, any first-time subscriber would not be charged the Access Fee, Non-Display Fee, any applicable Professional and Non-Professional User Fee, or Redistribution Fee for any of the NYSE Arca market data products for one calendar month. The Exchange believes it is equitable to restrict the availability of this one-month free trial to customers that have not previously subscribed to any NYSE Arca market data product, since customers who are current or previous subscribers are already familiar with the products and whether they would suits their needs.

Deletion of Obsolete Text. The Exchange believes that deleting obsolete rule text and dates from the Fee Schedule and make non-substantive clarifying amendments is equitably allocated because these proposed changes do not change fees, but rather, result in greater specificity and precision within the Fee Schedule, which would contribute to reasonably ensuring that the fees described there are clear and accurate. The Exchange also believes that the proposed changes are equitable because all readers of the Fee Schedule would benefit from the increased specificity and clarity that this proposed rule change would provide.

For all of the foregoing reasons, the Exchange believes that the proposed fees for the NYSE Arca market data products are equitably allocated.

The Proposed Fees Are Not Unfairly Discriminatory

The Exchange believes the proposed fees are not unfairly discriminatory because any differences in the application of the fees are based on meaningful distinctions between customers, and those meaningful distinctions are not unfairly discriminatory between customers.

Overall. As noted above, this proposed fee change is a result of the competitive environment for market data products that provide indicative pricing information across a family of exchanges. To respond to this competitive environment, the Exchange seeks to amend its fees to access NYSE Arca Trades and NYSE Arca BBO in a display-only format, which the Exchange hopes will attract more subscribers for its NYSE BQT market data product. The Exchange is proposing the fee reductions to make the Exchange's fees more competitive for a specific segment of market participants, thereby increasing the availability of the Exchange's data products, expanding the options available to firms making data purchasing decisions based on their business needs, and generally increasing competition.

Access Fee. The Exchange believes that the proposed Per User Access Fee is not unfairly discriminatory as it would apply equally to all data recipients that choose to subscribe to NYSE Arca Trades or NYSE Arca BBO in a display-only format. Because NYSE Arca Trades and NYSE Arca BBO are optional products, any data recipient could choose to subscribe to NYSE Arca Trades or NYSE Arca BBO for display-only use and be eligible for the proposed reduced fee. The Exchange does not believe that it is unfairly discriminatory that this proposed fee reduction would be available only to data recipients that use NYSE Arca Trades or NYSE Arca BBO in a display-only format. Non-display data can be used by data recipients for a wide variety of profit-generating purposes, including proprietary and agency trading and smart order routing, as well as by data recipients that operate order matching and execution platforms that

compete directly with the Exchange for order flow. The data also can be used for a variety of non-trading purposes that indirectly support trading, such as risk management and compliance. While some of these non-trading uses do not directly generate revenues, they can nonetheless substantially reduce the recipient's costs by automating such functions so that they can be carried out in a more efficient and accurate manner and reduce errors and labor costs, thereby benefiting end users. The Exchange therefore believes that there is a meaningful distinction between display and non-display users of market data and that charging a different access fee for non-display use is not unfairly discriminatory because data recipients can derive substantial value from such non-display uses, for example, by automating tasks so that can be performed more quickly and accurately and less expensively than if they were performed manually.

Redistribution Fees. The Exchange believes the proposed change to provide a credit to a Redistributor that externally redistributes NYSE Arca Trades to Professional and Non-Professional Users in a display-only format in an amount equal to the monthly Professional User and Non-Professional User fees for such external distribution, up to a maximum of the Redistribution Fee, is not unfairly discriminatory. The proposed credit would apply equally to all Redistributors that choose to externally redistribute the NYSE Arca Trades product for display use, and would serve as an incentive for Redistributors to make NYSE Arca Trades more broadly available for use by both Professional and Non-Professional Users. This, in turn, could provide an incentive for Redistributors to make NYSE BQT available to their customers.

The Exchange believes that there is a meaningful distinction between vendors that distribute market data in a display-only format, as such vendors are more likely to service the non-professional community, and vendors that distribute market data for non-display use only, as users of non-display data are more likely to be professionals that derive substantial value

from such non-display uses. While this credit is not available to vendors that redistribute NYSE Arca Trades for non-display use only, such vendors would be eligible for this credit if they choose to expand their distribution of NYSE Arca Trades for display use. NYSE BQT is targeted for display use and the Exchange believes that the proposed credit would increase the number of Redistributors—whether current vendors that redistribute on a non-display only basis or new vendors—that would make NYSE BQT available to their customers.

One-Month Free Trial. The Exchange believes that the proposed rule change providing for a one-month free trial period to test is not unfairly discriminatory because the financial benefit of the fee waiver would be available to all firms subscribing to a NYSE Arca market data product for the first time on a free-trial basis. The Exchange believes there is a meaningful distinction between customers that are subscribing to a market data for the first time, who may benefit from a period within which to set up and test use of the product before it becomes fee liable, and users that are already receiving the Exchange's market data products and are deriving value from such use. The Exchange believes that the limited period of the free trial would not be unfairly discriminatory to other users of the Exchange's market data products because it is designed to provide a reasonable period of time to set up and test a new market data product. The Exchange further believes that providing a free trial for a calendar month would ease administrative burdens for data recipients to subscribe to a new data product and eliminate fees for a period before such users are able to derive any benefit from the data.

Deletion of Obsolete Text. The Exchange believes that deleting obsolete rule text and dates from the Fee Schedule and make non-substantive clarifying amendments is not unfairly discriminatory because these proposed changes do not change fees, but rather, result in greater specificity and precision within the Fee Schedule, which would contribute to reasonably

ensuring that the fees described there are clear and accurate. The Exchange also believes that the proposed changes are not unfairly discriminatory because all readers of the Fee Schedule would benefit from the increased specificity and clarity that this proposed rule change would provide.

For all of the foregoing reasons, the Exchange believes that the proposed fees are not unfairly discriminatory.

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

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

Intramarket Competition. The Exchange believes that the proposed fees do not put any market participants at a relative disadvantage compared to other market participants. As noted above, the proposed fee schedule would apply to all subscribers of NYSE Arca market data products, and customers may not only choose whether to subscribe to the products at all, but also may tailor their subscriptions to include only the products and uses that they deem suitable for their business needs.

The Exchange also believes that the proposed fees neither favor nor penalize one or more categories of market participants in a manner that would impose an undue market on competition. As shown above, to the extent that particular proposed fees apply to only a subset of subscribers, those distinctions are not unfairly discriminatory and do not unfairly burden one set of customers over another. To the contrary, by tailoring the proposed fees in this manner, the Exchange believes that it has eliminated the potential burden on competition that might result, for instance, from unfairly asking vendors that distribute market data in a display-only format to pay the same fees as vendors that distribute market data for non-display use to professionals that

derive substantial value from such non-display uses.

Intermarket Competition. The Exchange believes that the proposed fees do not impose a burden on competition or on other exchanges that is not necessary or appropriate; indeed, the Exchange believes the proposed fee changes would have the effect of increasing competition. As demonstrated above and in Professor Rysman's attached [sic] paper, exchanges are platforms for market data and trading. In setting the proposed fees, the Exchange is constrained by the availability of substitute platforms also offering market data products and trading, and low barriers to entry mean new exchange platforms are frequently introduced. The fact that exchanges are platforms ensures that no exchange can make pricing decisions for one side of its platform without considering, and being constrained by, the effects that price will have on the other side of the platform. In setting fees at issue here, the Exchange is constrained by the fact that, if its pricing across the platform is unattractive to customers, customers will have its pick of an increasing number of alternative platforms to use instead of the Exchange. Given this intense competition between platforms, no one exchange's market data fees can impose an unnecessary burden on competition, and the Exchange's proposed fees do not do so here.

In addition, the Exchange believes that the proposed fees do not impose a burden on competition or on other exchanges that is not necessary or appropriate because of the availability of numerous substitute market data products. Specifically, as described above, NYSE BQT competes head-to-head with the Nasdaq Basic product and the Cboe One Feed. These products each serve as reasonable substitutes for one another as they are each designed to provide investors with a unified view of real-time quotes and last-sale prices in all Tape A, B, and C securities. Each product provides subscribers with consolidated top-of-book quotes and trades from multiple U.S. equities markets. NYSE BQT provides top-of-book quotes and trades data

from five NYSE-affiliated U.S. equities exchanges, while Cboe One Feed similarly provides top-of-book quotes and trades data from Cboe's four U.S. equities exchanges. NYSE BQT, Nasdaq Basic, and Cboe One Feed are all intended to provide indicative pricing and therefore, are reasonable substitutes for one another. Additionally, market data vendors are also able to offer close substitutes to NYSE BQT. Because market data users can find suitable substitute feeds, an exchange that overprices its market data products stands a high risk that users may substitute another source of market data information for its own. These competitive pressures ensure that no one exchange's market data fees can impose an unnecessary burden on competition, and the Exchange's proposed fees do not do so here.

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 foregoing rule change is effective upon filing pursuant to Section 19(b)(3)(A)⁷³ of the Act and subparagraph (f)(2) of Rule 19b-4⁷⁴ thereunder, because it establishes a due, fee, or other charge imposed by the Exchange.

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 otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the

⁷³ 15 U.S.C. 78s(b)(3)(A).

⁷⁴ 17 CFR 240.19b-4(f)(2).

Commission shall institute proceedings under Section 19(b)(2)(B)⁷⁵ 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. Please include File Number SR-NYSEArca-2019-88 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-NYSEArca-2019-88. 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 available for website viewing and printing in the Commission's Public Reference Room, 100 F

⁷⁵ 15 U.S.C. 78s(b)(2)(B).

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-NYSEArca-2019-88, 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.⁷⁶

J. Matthew DeLesDernier
Assistant Secretary

⁷⁶ 17 CFR 200.30-3(a)(12).