8011-01p



This document is scheduled to be published in the Federal Register on 04/13/2022 and available online at **federalregister.gov/d/2022-07853**, and on **govinfo.gov**

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-94630; File No. SR-IEX-2022-02]

Self-Regulatory Organizations; Investors Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend its Fee Schedule to Adopt Market Data Fees

April 7, 2022.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act")¹ and Rule 19b-4 thereunder,² notice is hereby given that, on April 1, 2022, the Investors Exchange LLC ("IEX" or the "Exchange") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. <u>Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule</u> <u>Change</u>

Pursuant to the provisions of Section 19(b)(1) under the Act,³ and Rule 19b-4 thereunder,⁴ the Exchange is filing with the Commission a proposed rule change to modify its Fee Schedule, pursuant to IEX Rules 15.110(a) and (c), to assess fees for receipt of its proprietary market data feeds. IEX intends to implement the proposed fees beginning on July 1, 2022, to provide an opportunity for subscribers to update their data subscriptions to suit their particular market data needs.

- ³ 15 U.S.C. 78s(b)(1).
- ⁴ 17 CFR 240.19b-4.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

The text of the proposed rule change is available at the Exchange's website at www.iextrading.com, at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the</u> <u>Proposed Rule Change</u>

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 these statements may be examined at the places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis</u> for, the Proposed Rule Change

1. <u>Purpose</u>

IEX is proposing to modify its Fee Schedule, pursuant to IEX Rules 15.110(a) and (c), to assess fees for receipt of its proprietary market data feeds.

Background

IEX previously filed a proposal to charge market data fees on November 1, 2021, with the proposed fee changes effective on filing but not operative until January 3, 2022 ("First Fee Filing").⁵ The First Fee Filing was published for comment in the Federal Register on November 17, 2021.⁶ The Commission received no comments on the First Fee Filing before December 30, 2021. On that date, the Commission suspended the First Fee Filing and requested public comment and additional information on various aspects of the First Fee Filing.⁷ To date, the Commission has received four comment letters in response to its Suspension Order, none of

⁵ <u>See</u> Securities Exchange Act Release No. 93557 (November 10, 2021), 86 FR 64268 (November 17, 2021) (SR-IEX-2021-14).

 $[\]frac{6}{\text{See supra note 3.}}$

See Securities Exchange Act Release No. 93883 (December 30, 2021), 87 FR 523 (January 5, 2022) (SR-IEX-2021-14) ("Suspension Order").

which stated that the First Fee Filing should not be approved by the Commission.⁸ Generally, the letters either commended IEX for the level of transparency raised in its rule filing and offered support for approval, or raised issues which are irrelevant to the consideration of IEX fees. As described more fully below, this filing provides additional transparency in support of IEX's proposed approach to charging for proprietary market data, as well as providing additional data and information included in the Commission's requests for comments in the Suspension Order.

The Exchange withdrew the First Fee Filing on April 1, 2022 and now submits this proposal for immediate effectiveness ("Second Fee Filing"), with a scheduled implementation date of July 1, 2022. This Second Fee Filing revises the fees proposed in the First Fee Filing to remove the proposed redistribution fees⁹ and provide additional clarity regarding how the fees apply to affiliated market data subscribers. Further, as discussed below, in connection with the First Fee Filing, IEX obtained feedback from some current market data subscribers with respect to their anticipated plans with respect to IEX's fee liable market data products (<u>i.e.</u>, products for which IEX would charge a fee) which was not available at the time of filing of the First Fee Filing. This feedback enables IEX to supplement this Second Fee Filing with additional details relevant to its revenue projections. Additionally, this filing responds to various questions and requests for information contained in the Suspension Order.

As explained in the First Fee Filing, IEX's proposed market data fees were derived based on IEX's costs to produce the market data products to which the fees apply and applying a reasonable markup over those costs (i.e., a "cost-plus model"). Further, as discussed more fully

 <u>See</u> January 27, 2022 letter from Erika Moore (Nasdaq Vice President and Corporate Secretary), January 26, 2022 letter from Tyler Gellasch (Executive Director, Healthy Markets Association), January 26, 2022 letter from Douglas Cifu (CEO, Virtu Financial, Inc.), and February 28, 2022 letter from Hope M. Jarkowski (General Counsel, New York Stock Exchange Group, Inc.). The comment letters are accessible at: https://www.sec.gov/comments/sr-iex-2021-14/sriex202114.htm.

⁹ IEX determined not to propose a redistribution fee in this Second Fee Filing (referred to as distribution fees in the fee schedule proposed in the First Fee Filing) because of challenges allocating costs directly to redistribution by a Data Subscriber.

below, the proposed allocation of these fees to the two market data products is informed by the extent to which demand for each product drives IEX's overall market data costs and the different uses of the products by different types of participants.

IEX has not previously imposed any fees to access its real-time top of book ("TOPS"¹⁰) and depth of book ("DEEP"¹¹) proprietary market data feeds ("IEX Data"),¹² either by direct recipients or through redistribution. In general, IEX believes that exchanges, in setting fees of all types, should meet very high standards of transparency to demonstrate why each new fee or fee increase meets the Exchange Act requirements. IEX believes this high standard is especially important when an exchange imposes fees for its own depth of book market data because each exchange is the exclusive source of its own depth of book market data. IEX further believes that, as a general matter, market data fees cannot be sufficiently justified based on unproven assumptions about competition for market data. Rather, IEX believes that market data fees can be best justified by an exchange demonstrating that its fees bear a reasonable relationship to its related costs and business needs (i.e., to obtain a reasonable return on its costs) and that it is not taking unfair advantage of its unique position as the source of its own proprietary market data. IEX believes that it does not need to address questions about market competition in the context of this filing because the proposed fees are so clearly consistent with the Act based on a cost analysis.

In proposing to charge fees for access to IEX Data, IEX has sought to determine such fees in a transparent way in relation to its own aggregate costs of providing the related service, that also carefully and transparently assesses the impact on Data Subscribers¹³ – both generally

¹² As discussed below, both TOPS and DEEP also include last sale information.

¹⁰ <u>See IEX Rule 11.330(a)(1).</u>

¹¹ <u>See IEX Rule 11.330(a)(2).</u>

¹³ "Data Subscriber" refers to any natural person or entity that receives real-time market data either directly from IEX or from another non-affiliated Data Subscriber. IEX notes that the current recipients of IEX Data include many Members of the Exchange, <u>see</u> IEX Rule 1.160(s), but also include several non-Members, including vendors who redistribute

and in relation to other Data Subscribers, <u>i.e.</u>, to assure the fee will not create an unfair financial burden on any participant and will not have an undue impact in particular on smaller Data Subscribers and competition among Data Subscribers in general.

IEX believes that this level of diligence and transparency is called for by the requirements of Section 19(b)(1) under the Act,¹⁴ and Rule 19b-4 thereunder,¹⁵ with respect to the types of information self-regulatory organizations ("SROs") should provide in seeking approval of any fee changes, and Section 6(b) of the Act,¹⁶ which requires, among other things, that exchange fees be reasonable and equitably allocated,¹⁷ not designed to permit unfair discrimination,¹⁸ and that they not impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Act.¹⁹ This rule change proposal addresses those requirements, and the analysis and data in each of the sections that follow are designed to clearly and comprehensively show how they are met.²⁰

As noted above, IEX offers two real-time proprietary market data feeds: TOPS and DEEP. TOPS is an uncompressed data feed that offers aggregated top of book quotations for all displayed orders resting on the Order Book²¹ and last sale information for executions on the

IEX Data to third-party recipients.

- ¹⁴ 15 U.S.C. 78s(b)(1).
- ¹⁵ 17 CFR 240.19b-4.
- ¹⁶ 15 U.S.C. 78f(b).
- ¹⁷ 15 U.S.C. 78f(b)(4).
- ¹⁸ 15 U.S.C. 78f(b)(5).
- ¹⁹ 15 U.S.C. 78f(b)(8).

²¹ <u>See</u> IEX Rule 1.160(p).

In May 2019, the Commission staff published guidance suggesting the types of information that SROs may use to demonstrate that their fee filings comply with the standards of the Exchange Act ("Guidance"). While IEX understands that the Guidance does not create new legal obligations on SROs, the Guidance is consistent with IEX's view about the type and level of transparency that exchanges should meet to demonstrate compliance with their existing obligations when they seek to charge new fees. See Staff Guidance on SRO Rule Filings Relating to Fees (May 21, 2019) available at https://www.sec.gov/tm/staff-guidance-sro-rule-filings-fees.

Exchange.²² The data available in TOPS is also available through the securities information processor ("SIP") feeds. DEEP is an uncompressed data feed that provides aggregated depth of book quotations for all displayed orders resting on the Order Book at each price level and last sale information for executions on the Exchange.²³ DEEP includes all resting displayed liquidity on the Exchange, aggregated by price level, meaning it includes the top of book quotes contained in TOPS, and also contains any less aggressively priced displayed quotes. The content of both TOPS and DEEP is derived exclusively from orders that are sent by the Exchange's Members²⁴, which the Exchange formats and rebroadcasts to market participants and to data vendors.

IEX currently does not charge fees for access to IEX Data, irrespective of whether the Data Subscriber is a Member or not, the manner in which the data is received or used, the number of users, how quickly the recipient is able to receive the data after it is made available by the System²⁵, or whether the data is subject to any delay through the redistribution process. The objective of this approach was to eliminate any fee-based barriers to access IEX Data when IEX launched as a national securities exchange in 2016, and it was successful in achieving this objective in that a large number of both Members and non-Members currently receive either TOPS, DEEP, or both. As discussed more fully below, IEX recently calculated its annual aggregate costs for providing IEX Data to its Data Subscribers at approximately \$2.5 million. Because IEX has to date offered IEX Data free of charge, IEX has borne 100% of all costs for the compilation and dissemination of IEX Data to IEX's Data Subscribers.

Proposal

In order to establish fees that are designed to recover the aggregate costs of providing IEX Data to its Data Subscribers and limit the amount of potential return in excess of those costs

²² <u>See IEX Rule 11.330(a)(1).</u>

²³ <u>See IEX Rule 11.330(a)(2).</u>

 $[\]underline{See}$ IEX Rule 1.160(s).

²⁵ See IEX Rule 1.160(nn).

to no more than a reasonable markup, the Exchange is proposing to modify its Fee Schedule, pursuant to IEX Rules 15.110(a) and (c), to charge all Data Subscribers fees to access IEX Data in real time.

As proposed, the following definitions and concepts will be applicable to market data

fees:

- "Real-Time" means IEX market data that is accessed, used, or distributed less than fifteen (15) milliseconds after it was made available by the Exchange. IEX provides only Real-Time IEX market data to Data Subscribers.
- "Data Subscriber" means any natural person or entity that receives Real-Time IEX market data either directly from the Exchange or from another non-affiliate Data Subscriber. A Data Subscriber must enter into a Data Subscriber Agreement with IEX in order to receive Real-Time IEX market data. A natural person or entity that receives Real-Time IEX market data from an affiliated Data Subscriber is subject to the Data Subscriber Agreement of such affiliated Data Subscriber.
- A Data Subscriber may redistribute Real-Time IEX market data that it receives from the Exchange on a Real-Time basis to a natural person or entity. Receipt of IEX market data on a Real-Time basis by an affiliate of a Data Subscriber is not subject to additional Fees beyond those paid by such affiliated Data Subscriber.
- "Delayed" means IEX market data that is accessed, used, or distributed at least fifteen (15) milliseconds after it was made available by the Exchange. A Data Subscriber may redistribute Real-Time IEX market data that it receives from the Exchange on a Delayed basis to a natural person or entity. In addition, a recipient of Delayed IEX market data may further redistribute such Delayed IEX market data to a natural person or entity.

IEX proposes to charge the following flat fees to each Data Subscriber: \$500 per month

for Real-Time access to the TOPS feed and \$2,500 per month for Real-Time access to the DEEP

feed, whether received directly from IEX or from another Data Subscriber, except for an

affiliated Data Subscriber²⁶ as described more fully below. As proposed, IEX will only provide

²⁶ As specified in the IEX Fee Schedule, as proposed, the terms "affiliate" and "affiliated" have the meaning specified in Rule 12b-2 of the Exchange Act which provides that such terms as "a person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the person specified". The Data Subscriber Agreement provides additional context and defines affiliate as "any individual, corporation, company, partnership, limited partnership, limited liability company, trust, association or other entity that, directly or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such party." A non-affiliated third-party is any individual, corporation, company, partnership, limited partne

Real-Time IEX Data, and every recipient of such data (whether directly or indirectly) is required to become a Data Subscriber and enter into a Data Subscriber Agreement with IEX.²⁷ A Data Subscriber may redistribute IEX Data on either a Real-Time basis or subject to a delay. IEX is not proposing to charge a fee for redistribution of IEX Data. However, a recipient of Real-Time IEX Data would be required to become a Data Subscriber, and would be subject to the applicable fees, except for an affiliated recipient of the Data Subscriber. Further, a recipient of IEX Data that is subject to at least a 15-millisecond delay (whether from an IEX Data Subscriber or other recipient) is not required to become a Data Subscriber or pay any fees to IEX.²⁸ IEX is not proposing to charge any additional fees to a Data Subscriber based on the way it uses the data, e.g., display v. non-display use, and is not proposing to impose any individual per user fees.

The Suspension Order sought clarification on how affiliated entities are treated for purposes of the Data Subscriber definition, noting an apparent inconsistency between that language and IEX's calculation of the amount that exchange companies would be required to pay for IEX Data. To address that question, this Second Fee Filing clarifies that the definition of Data Subscriber includes any affiliates of the Data Subscriber. Thus, for example, a brokerdealer subscriber and an investment adviser under common control could both use the data from a particular feed for a single fee. Real-Time distribution of IEX Data to an affiliate of the Data Subscriber would not subject the affiliated recipient to any additional fees beyond those paid by the IEX Data Subscriber. Further, an affiliate that receives Real-Time IEX Data from an affiliated Data Subscriber is subject to the Data Subscriber Agreement of such Data Subscriber.

affiliate of the Data Subscriber pursuant to such definition.

²⁷ See IEX Market Data Policies, available at https://storage.googleapis.com/assetsbucket/exchange/assets/Market_Data_Agreements/IEX_Market_Data_Policies_Jan_2022 .pdf.

²⁸ The Delayed IEX Data recipient may be subject to any fees charged by the redistributor of the Delayed IEX Data, based upon the contractual arrangement between the Delayed IEX Data recipient and the provider of Delayed IEX Data. Such fees would not be paid to the Exchange.

IEX Framework

The Suspension Order seeks additional information and comments on various aspects of the First Fee Filing. In many respects, the Commission's questions about the First Fee Filing raise broader questions around the factors the SEC should consider and the type of data and analysis an exchange should provide in considering whether market data or connectivity fees are fair and reasonable under a cost-based methodology.

In this Second Fee Filing, IEX offers a conceptual framework for further considering the Commission's questions that draws on IEX's experience over several years in analyzing its own costs. The elements of that framework are as follows:

First, we allocate costs to market data products as part of a comprehensive and coherent methodology for allocating costs to different types of exchange products. That methodology does not allow "double-counting" of the same costs for different classes of exchange products – for example market data, physical connectivity, or "logical" port connections. Our general methodology was detailed in our 2019 Study of exchange costs, described below. This methodology reflects our belief that in conducting a cost analysis, it is both realistic and appropriate to segregate the costs of producing market data, for example, from the costs of other general aspects of an exchange's operation, including the receiving and matching of orders for execution.

Second, we have sought to carefully and narrowly allocate specific costs to the market data products to which the fees apply. In this filing, we provide more detail about how that allocation was determined, including by providing information about tangential cost items that were <u>not</u> included. In general, we believe that the more an exchange can demonstrate its cost accounting is carefully circumscribed, the stronger it can make the case that its fees are fair and reasonable.

Third, in accounting for costs, we have included certain costs we have incurred in the last year to enhance our technology related to market data. We believe such expenses are appropriately included if they are identified and can be shown to bear a reasonable relationship to projected future expenses of this type.

Fourth, our framework recognizes that the cost elements related to market data are largely common across different types of market data products. Accordingly, we have set fees for each of our two market data products based on factors other than differences between the two in cost to produce. These other factors include differences in the use and need for depth of book compared to top of book data among different types of participants, and the impact of the need for more detailed real-time data in driving many operational costs of the Exchange.

Fifth, we have sought to maximize the availability of data that is not needed on a very time-sensitive basis to investors and other market participants. For that reason, we are not proposing to charge for any data that a user receives with a delay of 15 milliseconds or more. IEX believes that promoting the wide availability of market data to market participants other than latency-sensitive traders is consistent with the goal of fair and efficient markets.

Sixth, IEX has created a flat, simple fee structure that imposes a single monthly fee for each Data Subscriber and its affiliates, without added fees based on the way the data is used or individual per user fees. IEX believes this relatively simple, flat structure is transparent and easy for users to apply, and this difference also helps to show that it meets the objectives of the Act.

Finally, because it is difficult to predict how much revenue IEX will receive from market data fees with precision, IEX is committing to conduct a one-year review after implementation of these fees, and to publish the results of that review. IEX expects that it may propose to adjust fees at that time, to increase fees in the event that revenues fail to cover costs and a reasonable mark-up of such costs. Similarly, IEX would propose to decrease fees in the event that revenue materially exceeds our current projections. In addition, IEX will periodically conduct a review to inform its decision making on whether a fee change is appropriate (e.g., to monitor for costs increasing/decreasing or subscribers increasing/decreasing, etc. in ways that suggest the then-

increase fees in the event that revenues fail to cover market data costs and a reasonable mark-up, or decrease fees in the event that revenue or the mark-up materially exceeds our current projections. In the event that IEX determines to propose a fee change, the results of a timely review, including an updated cost estimate, will be included in a rule filing proposing the fee change. More generally, we believe that, in applying a cost-plus model, it is appropriate for an exchange to refresh and update information about its relevant costs and revenues in seeking any future changes to fees, and IEX commits to do so.

IEX believes that applying this framework to the proposed fees shows that they are consistent with the requirements of the Act, leaving aside the stark contrast in the amount of the proposed fees in comparison to market data fees commonly charged by other exchanges.

IEX Market Data Costs

The proposed fees are based on a comprehensive and transparent "cost-plus" methodology, wherein the proposed fees bear a reasonable relationship to the cost of producing market data products using a rigorous and narrow allocation of costs.²⁹ Moreover, IEX believes that any potential profit over IEX's costs of offering market data is reasonably based on realistic revenue assumptions, as described below. Further, as described above, IEX will conduct a review of these fees one year after implementation (as well as subsequent periodic reviews), including public disclosure of its revenues based on actual experience, and may propose to adjust such fees if warranted based on that review. In addition, IEX intends to provide updated information about its market data costs and revenue in any future filing to change its fees.³⁰

²⁹ IEX first published a comprehensive study of its aggregate costs to produce market data and connectivity in January 2019. See "The Cost of Exchange Services – Disclosing the Cost of Offering Market Data and Connectivity as a National Securities Exchange" available at https://iextrading.com/docs/The%20Cost%20of%20Exchange%20Services.pdf. ("IEX Study").

³⁰ Notwithstanding that IEX does not currently charge for its market data products, it does not believe that a review is warranted sooner than one year after implementation because of the feedback it received from current market data subscribers regarding their plans with respect to IEX's fee liable market data products, as discussed <u>supra</u>. This feedback

In determining the appropriate fees to charge, IEX considered its costs of providing market data, using what it believes to be a conservative methodology (<u>i.e.</u>, that strictly considers only those costs that are most clearly directly and exclusively related to the production and distribution of IEX Data) to estimate such costs³¹, and set fees that are designed to cover its costs with a limited potential return in excess of such costs. However, as discussed more fully below, such fees may also result in IEX recouping less than all of its costs of providing market data because of the uncertainty of forecasting Data Subscriber decision-making with respect to their IEX market data subscriptions.

Prior to the Commission's suspension of its First Fee Filing, IEX advised its current Data Subscribers of the proposed market data fees and received feedback from a significant number of such Data Subscribers as to whether they planned to continue to receive real-time IEX Data following implementation of such fees. Based on that feedback, which is described below, IEX believes it is likely that the proposed fees will not fully cover its costs and that a "best case" scenario is a return of approximately six percent in excess of such costs. The following describes IEX's cost allocation methodology, and how such methodology supports that the proposed fees are clearly consistent with the Act.

IEX was the first exchange to conduct a comprehensive review of its costs to produce market data, physical connectivity (the physical connections required to access IEX in its data center), and logical connectivity products (the cost to offer and maintain order entry ports) and published the results of that review in the January 2019 IEX Study.³² The IEX Study explained

provides a reasonable basis for IEX to project anticipated revenue and support that the proposed fees are consistent with the Act.

³¹ For example, IEX only included the costs associated with physical assets that are directly responsible for producing and transmitting IEX Data and excluded from its market data cost calculations any physical connectivity assets that are used to provide both order entry and market data. <u>See</u> IEX Study at 16. Thus, IEX notes that this methodology underestimates the total costs of providing market data.

 $[\]frac{32}{2}$ See supra note 27.

how hardware, software, and personnel costs were allocated for market data and connectivity and identified an annual dollar cost for each line item in each category. The IEX Study also explained graphically and textually the relationship of the different parts of the operation of an electronic exchange, to allow readers to understand the interrelationship among the various components. The IEX Study estimated IEX's aggregate annual cost to offer IEX Data to its Data Subscribers to be approximately \$1.8 million per year, for the year 2019, as reflected in Table 1.³³

Table 1.

Annual IEX Market Data Infrastructure (2019)	(\$1,791,403)
Top of Book Servers (TOPS) (5)	(\$12,833)
Depth of Book Servers (DEEP) (5)	(\$12,833)
Market Data Feeds Switches (2 x 24 port)	(\$13,333)
ITF Market Data	(\$7,333)
Data Center Space, Power, Security	(\$10,605)
Administrative Access	(\$33,333)
Monitoring	(\$596,135)
Personnel	(\$1,104,998)
Total Annual Costs	(\$1,791,403)

In 2021, in preparation for the First Fee Filing, IEX updated and refreshed the cost estimates contained in the IEX Study. As further detailed below, this update reflects somewhat lower annual hardware costs related to market data than contained in the 2019 IEX Study, and somewhat higher personnel costs. Considering all factors together, the updated estimates reflect an increase in total annual costs to produce market data from \$1,791,403 to \$2,483,644.

Table 2, below, details the individual annual line-item costs considered by IEX to be directly related to offering IEX Data to Data Subscribers.³⁴ The chart shows three cost

³⁴ Table 2 also shows the breakdown of the 2019 estimated market data infrastructure costs.

³³ <u>See</u> IEX Study at 15-18 for details on how IEX estimated the costs of its market data infrastructure; see also supra note 29.

components: 1) direct costs, such as servers, infrastructure, and monitoring; 2) enhancement initiative costs (e.g., new functionality for IEX Data and increased capacity for the proprietary market data feeds, as described below)³⁵; and 3) personnel costs. The costs allocated to IEX Data do not include the de minimis costs for creation of "HIST"³⁶ files available for download from IEX's website, or separate costs associated with transmitting IEX market data to the SIPs.³⁷

The servers and related hardware included were limited to those specifically dedicated to IEX Data, subject to the depreciation schedule described below. Network Infrastructure and Administrative Access costs consist of 100% of the network equipment (switches and cabling) to enable data transmission and maintenance. Data Center costs consist of the fees charged by the third-party data centers used by IEX and represent less than 10% the Exchange's total data center costs based on space utilized. Monitoring costs include 100% of the hardware and vendor licenses needed to enable the IEX technology team to monitor these servers and the health of the market data products provided by such assets, which are primarily used for market data monitoring.³⁸ The monitoring consists of real-time monitoring of system performance, integrity, and latency of market data products.

All physical assets were valued at cost for financial accounting purposes and depreciated over three years. All software used for market data purposes was developed internally, and the

³⁵ As described more fully below, these enhancement initiative costs are a routine part of offering proprietary market data. Some of the enhancement costs in Table 2, such as the introduction of the snapshot functionality for TOPS and DEEP, are one-time costs, but each year IEX expects to incur new enhancement costs such as the costs associated with increasing the capacity of its market data feeds and costs associated with upgrading its market data infrastructure, as well as any new functionality. Thus, IEX believes that its annual enhancement costs on an ongoing basis will be similar and that the enhancement costs included in the 2021 update are not extraordinary.

³⁶ <u>See</u> IEX Rule 11.330(a)(4). HIST data is available for download at https://iextrading.com/trading/market-data/#hist-download.

³⁷ IEX also notes that the SIPs are operated separately from IEX's provision of proprietary market data, with correspondingly separate costs and revenue streams.

³⁸ These assets may be used infrequently for incidental purposes to assess the status of Exchange systems.

applicable costs are captured in the personnel category. For purposes of the allocation of these costs to market data, IEX allocates the annual depreciation expense (<u>i.e.</u>, one-third of the initial asset value) of in-scope physical assets in each year. For personnel costs, IEX calculated an allocation of employee time for employees whose functions include providing and maintaining IEX Data and/or the proprietary market data feeds used to transmit IEX Data³⁹, and used a blended rate of compensation reflecting salary, stock and bonus compensation, benefits, payroll taxes, and 401(k) matching contributions.⁴⁰ Enhancement costs are allocated similarly (<u>i.e.</u>, hardware is subject to a three year depreciation schedule) and consist primarily of personnel costs (over 80%), with the balance comprised of hardware utilized for development and operation of each enhancement.

Table 2.	2019	2021
Annual IEX Market Data Infrastructure	(\$1,791,403)	(\$2,483,644)
Direct Costs		
Servers	(\$32,999)	(\$26,696)
Network Infrastructure & Admin Access	(\$46,666)	(\$152,783)
Monitoring	(\$596,135)	(\$213,109)
Data Center (Space, Power, Security)	(\$10,605)	(\$79,142)
Enhancement Initiatives Costs		
DEEP Snapshot	N/A	(\$95,974)
TOPS Snapshot	N/A	(\$95,974)
Capacity Planning	N/A	(\$232,856)
Monitoring Tools	N/A	(\$49,609)
Ongoing Personnel Costs	(\$1,104,998)	(\$1,537,500)
Total Annual Costs	(\$1,791,403)	(\$2,483,644)

³⁹ Notably, IEX did not include any costs associated with operating the Exchange itself in calculating the costs of offering IEX Data.

⁴⁰ Applying the methodology of the IEX Study, IEX determined cost allocation for employees who perform work in support of compiling and disseminating IEX Data to arrive at a full time equivalent ("FTE") of 6.15 FTEs across all the identified personnel (the FTE at the time of the IEX Study was 4.05). IEX then multiplied the FTE times a blended compensation rate for all relevant IEX personnel to determine the personnel costs associated with compiling and disseminating IEX Data.

As noted in Table 2, IEX continues to introduce enhancement initiatives to IEX Data. First, effective February 3, 2021, IEX launched "DEEP Snapshot", which allows Data Subscribers to download point-in-time snapshots of DEEP in order to enable Data Subscribers to accelerate late start recovery.⁴¹ Second, effective September 27, 2021, IEX launched "TOPS Snapshot", which allows Data Subscribers to download point-in-time snapshots of TOPS in order to enable them to accelerate late-start recovery. Third, IEX is in the process of expanding the capacity and monitoring tools that support the efficient transmission of IEX Data to the IEX's proprietary market data feeds.

IEX also notes that it has made recent changes to its system functionality and architecture which improve the content and speed of IEX's proprietary market data feeds, but that have no impact on IEX's estimated costs of providing IEX Data. For example, effective February 16, 2021, IEX removed its outbound 350 microsecond latency "speedbump" while retaining its inbound 350 microsecond latency "speedbump."⁴² Prior to that date, IEX disseminated its top of book data and last sale data to the SIPs free of any artificial delays, but all other outbound messages, including IEX Data transmitted through IEX's proprietary market data feeds, were subjected to a 350-microsecond latency.⁴³ Additionally, on April 1, 2021, IEX began to display odd lot sized orders, which are aggregated by price on DEEP, and can aggregate to form the top of book quote on TOPS.⁴⁴ And on October 13, 2021, IEX began disseminating a "Retail Liquidity Indicator" on both TOPS and DEEP, which tells market participants when IEX has at least one round of Retail Liquidity Provider order⁴⁵ interest available for a particular security,

⁴¹ <u>See</u> Trading Alert No. 2021-003, available at https://iextrading.com/alerts/#/135.

⁴² <u>See Trading Alert No. 2021-006, available at https://iextrading.com/alerts/#/138.</u>

 ⁴³ See Securities Exchange Act Release No. 91016, January 29, 2021, 86 FR 8238 (February 4, 2021) (SR-IEX-2020-18).

 ⁴⁴ See Trading Alert 2021-010, available at https://iextrading.com/alerts/#/142; see also, See Securities Exchange Act Release No. 90933, January 15, 2021, 86 FR 6687 (January 22, 2021) (SR-IEX-2021-01).

⁴⁵ <u>See</u> IEX Rule 11.190(b)(14).

which is resting at the Midpoint Price⁴⁶ and priced at least \$0.001 better than the NBB⁴⁷ or NBO⁴⁸. The Retail Liquidity Indicator reflects the symbol and side of the resting interest, but does not include the price or size.⁴⁹

As discussed above, IEX's cost methodology allocates costs for hardware, software, and personnel expenses, and identified an annual dollar cost for each line item in each category. IEX's cost methodology does not provide for "double-counting", that is, the same cost items are not counted for more than one set of products. This was the approach followed in the IEX Study, the 2021 update, the First Fee Filing, and this Second Fee Filing. This segmentation of costs is also consistent with IEX's earlier filing to charge fees for order entry logical "ports" members use to communicate order messages to the Exchange ("Port Fee Filing").⁵⁰ In the Port Fee Filing, we detailed the servers, other hardware, monitoring, administrative, and personnel expenses that were directly connected to the provision of logical order entry ports. Consequently, there is no overlap with the costs IEX allocated to the provision of logical order

entry ports and the provision of market data feeds.

In the First Fee Filing, IEX provided detail on how it allocated the costs of providing market data feeds. The Suspension Order raised questions about whether additional detail and explanation should be provided, as detailed below. As described in the IEX Study, IEX considers the following physical technology assets and services as relevant to the production of

⁴⁶ The term "Midpoint Price" means the midpoint of the NBBO. <u>See</u> IEX Rule 1.160(t). The term "NBBO" means the national best bid or offer, as set forth in Rule 600(b) of Regulation NMS under the Act, determined as set forth in IEX Rule 11.410(b).

⁴⁷ <u>See IEX Rule 1.160(u).</u>

⁴⁸ <u>Id.</u>

 ⁴⁹ See Trading Alert 2021-036, available at https://iextrading.com/alerts/#/169; see also, Securities Exchange Act Release No. 92398 (July 13, 2021), 86 FR 38166 (July 19, 2021) (SR-IEX-2021-06).

⁵⁰ <u>See</u> Securities Exchange Act Release No. 86626 (August 9, 2019), 84 FR 41793 (August 15, 2019) (SR-IEX-2019-07).

market data⁵¹:

- Market Data Servers
- Market Data Feed Switches
- Software Licenses
- IEX Testing Facility (ITF) Infrastructure Hardware
- Data Center Space, Power, and Security
- Administrative Access⁵²
- Monitoring Servers, Switches and Licenses⁵³

Hardware is depreciated on a straight-line three-year period, which in IEX's experience, is equal to the typical life expectancy of those assets. As noted above, one-third of the cost of each hardware asset is included in the annual costs allocated to market data. IEX only included hardware specifically dedicated to the market data feeds in calculating the costs of providing market data. This means that physical assets used for both order entry and market data were excluded from the calculation.⁵⁴

The Suspension Order asked if IEX should provide more detail about the methodology IEX used to determine how much of an employee's time is devoted to specific market data related activities. In considering the cost of personnel, IEX generally considered the time spent on various market data projects and initiatives through project management tracking tools, in the following areas:

Technology Teams:

- Technical Operations
- Software Engineering

⁵¹ In some cases, these assets and services also entail fees from outside service providers, such as software licenses and data center costs. Additional detail is available in the IEX Study.

⁵² Administrative Access consists of the dedicated networking infrastructure to enable the technology team to manage and troubleshoot the production and distribution of market data.

⁵³ <u>See</u> IEX Study at 15. <u>See also</u> discussion <u>supra</u> describing monitoring functions.

⁵⁴ <u>See</u> IEX Study at 16.

- Quality Assurance
- Infrastructure

Non-Technology Teams:

- Market Operations
- Project Management
- Product Management
- Business Development / Corporate Communications
- Regulatory
- Legal
- Accounting/Finance

Based on this analysis, IEX allocated 6.15 "full time equivalent" employees (or "FTEs") to direct market data costs. Generally, for the technology teams, we attributed approximately 8% of their aggregate time to market data. For the non-technology teams we attributed approximately 12% of their time to market data. Consistent with IEX's methodology, these allocations do not provide for any "double counting". Additionally, the Suspension Order asked if it is appropriate to include incentive compensation in the blended personnel compensation rate if the incentive compensation is not directly attributable to market data. IEX believes that inclusion is appropriate on the same basis as other personnel costs for in-scope employees because incentive compensation is a part of the total personnel costs associated with IEX's provision of market data. Moreover, IEX notes that it has taken a conservative approach in determining which employees to include in its cost analysis, in terms of function and percent allocation, so that the included personnel costs are directly and closely tied to the costs of providing market data. The FTE allocation represents just 7.1% of the Exchange's overall personnel costs. In addition, IEX allocated 1.58 FTEs to market data enhancements, which represents 1.8% of the Exchange's overall personal costs, totaling 7.73 FTEs and 8.9% when combined with personnel allocated to direct market data costs. Consistent with IEX's conservative methodology to limit costs allocated to market data, this approach includes only a de minimis personnel cost allocation for senior level executives and no allocation for members of IEX's board of directors. Accordingly, IEX believes that the allocated personnel expenses included are appropriately attributable to market data.

Another way to evaluate whether costs are narrowly allocated is to consider other expenses that may bear an indirect relationship to the production of market data, but which were <u>not included</u>. Various expense items may be viewed as necessary to exchange functioning and therefore having some relationship to market data, but IEX chose not to allocate any portion of the cost of those items, because we believe limiting allocated costs to those with a more proximate relationship to market data is more justifiable and avoids the difficulties and potential arbitrariness of determining how to allocate a portion of general operational expenses to specific data products. IEX's excluded costs relate to:

- General and Administrative Expenses
 - o Travel, Sales, and Marketing
 - o Office and Miscellaneous / Occupancy and Overhead
 - Professional Fees (including Audit Fees)
- Operating Expenses
 - Costs Paid to Exchanges
 - o Other Technology and Infrastructure
- Other (Income)/Expense
- Income Tax (Benefit)/Expense

The expenses associated with the above, excluded, items amount to many multiples of the approximately \$2.5 million in annual costs that IEX allocated to market data. Inclusion of just a small portion of these more tangential items would have more than doubled the estimated cost basis for IEX to provide market data feeds.

Exchanges typically incur episodic expenses to upgrade market data or connectivity products, for example, to expand capacity, increase security or reliability, reduce latency, or to achieve other objectives. These expenses would not otherwise be captured in a methodology that looks exclusively at more static annualized expenses, such as servers, switches, and routine testing and monitoring functions. In the First Fee Filing, IEX detailed episodic expenses directly related to offering market data totaling \$474,000, amounting to approximately 19% of the total of the approximately \$2.5 million estimate for total market data infrastructure costs in 2021. These costs were approximately \$282,000 for capacity planning and monitoring and approximately \$192,000 for the addition of "snapshot" functionality, which facilitates the ability of users to construct an integrated stream of market data when there is a temporary interruption. IEX believes that this level of episodic expenses will likely recur, and that it is therefore appropriate to include such expenses as part of the cost allocation. In any event, variations in episodic expenses will be reflected in IEX's annual review of its market data fees and any proposed adjustments.

Characteristics and Pricing of Different Products

IEX believes the process of allocating costs to individual exchange products necessarily involves some degree of subjectivity, but that an exchange's allocation of costs to identified products and services should be part of a coherent and transparent methodology for allocating costs across various products and services, so that the Commission and commenters can evaluate whether its decisions are reasonable and well-grounded. Exchanges incur many operational costs as preconditions to being able to offer various products and services, but individual cost elements differ in how closely they are related to the offering of specific products, as distinct from general operational costs.

If an exchange is proposing different fees for products of the same class, <u>e.g.</u>, different connectivity options or different market data feeds, it may seek to allocate fees separately by product even if there are not material differences in terms of the cost of each product. It is IEX's experience, as explained in the IEX Study, that most of the expenses to offer a class of products and services, <u>e.g.</u>, physical connectivity, logical connectivity, and market data feeds, are common to the category and not unique to individual products. Accordingly, IEX believes that an exchange may base price differences among products in a given category based on factors other than cost where there are other reasons to differentiate.

Consistent with the practice at all other exchanges, IEX is proposing to charge different fees for its top of book ("TOB") and depth of book ("DOB") market data feeds, <u>i.e.</u>, TOPS and DEEP respectively. The costs allocated to IEX's production of market data are in large part costs that are common to the offering of both market data feeds. Thus, IEX based its proposed pricing for Real-Time access to TOPS and DEEP, as well as minimally delayed access to TOPS and DEEP, on other factors as well. While there are some cost differences to compile and disseminate TOPS versus DEEP⁵⁵, IEX is basing its proposed pricing differential on other factors.

First, IEX believes that the fee differential is justified based on the need for real-time DEEP data by electronic trading firms, the relative volume of and benefit to those firms in terms of their trading on the Exchange, and the need to compile and distribute real-time DOB data as a factor driving Exchange costs. Based on data from the fourth quarter of 2021, the top ten members of IEX by volume on the Exchange collectively represented over 60% of total Exchange volume. More tellingly, the same firms represented approximately 70% of message traffic on the Exchange. Over 90% of displayed orders are submitted by market participants that subscribe to DEEP. IEX believes that it is clear and well-established that trading that occurs on a millisecond and sub-millisecond time scale drives the majority of trading on U.S. exchanges. Further, IEX systems costs are heavily impacted by the need to support this activity, including the need to provide real-time depth data that is required by electronic trading firms, IEX believes that in order to provide market data that supports these types of trading strategies, IEX's market data needs to be published quickly enough (i.e., microsecond timescales) following order and trade events to be useful. Further, such publication timescales must be consistent and deterministic regardless of market volume and volatility.

⁵⁵ DEEP is an aggregated feed that must perform additional logic on each order-related message received from the System to calculate the total number of displayed shares available at each price level. TOPS requires less processing than DEEP because it only aggregates displayed liquidity at a single price level, the top of book.

In contrast, IEX believes that the relative value of real-time TOPS is diminished by the availability of alternative sources of IEX's TOB market data. Specifically, IEX believes that several factors operate to restrain demand for real-time TOPS, including that real-time IEX TOB market data can be readily obtained from the SIPs⁵⁶ and that fifteen-millisecond delayed TOPS data (which would not be subject to any IEX fees pursuant to this proposal) is adequate for many firms that are not electronic trading firms. In discussions with current market data subscribers regarding the fees proposed in the First Fee Filing, a number of such firms advised IEX that they would drop Real-Time access to TOPS to avoid the \$500 monthly fee, and instead rely on the SIPs or delayed access for IEX's TOB market data. Thus, IEX believes that there are constraints that operate to limit its ability to base Real-Time TOPS pricing based on some type of pro rata cost allocation. In view of these factors, IEX believes that it is fair and reasonable to price Real-Time access to DEEP at five times the price of TOPS.

Further, IEX is charging only for data that is made available in Real-Time, because it is the very demand for Real-Time, low latency data that drives much of the costs associated with creating and distributing IEX Data. For example, IEX must invest more in the resiliency, capacity, and redundancy of its proprietary market data feeds to provide Real-Time, low latency access to IEX Data. Moreover, IEX's decision to not charge fees for Delayed IEX Data is also consistent with IEX's goal to make its data broadly available to a wide range of market participants including long-term investors.

Specifically, IEX believes that minimally delayed market data may be useful to a much broader range of market participants. For example, such data may be useful in a variety of display use cases, for example, in streams of market data prices that are available in a graphical

⁵⁶ Broadly speaking, the self-regulatory organizations ("SROs") administer the SIPs and set pricing. Each SIP charges its own fees, which are determined by the operating committees of each SIP subject to the SEC rule filing process. While IEX is a member of the operating committee of each SIP, it has only one vote and does not exercise control over SIP pricing. IEX also notes that the SIPs charge pursuant to a different pricing structure than the pricing structure proposed by IEX in this filing.

user interface, for episodic trading strategies that are less latency sensitive, for retail and individual investors that have no need for Real-Time data, for use by "middle office" or risk personnel at broker-dealers, and for academics, among others.

The Suspension Order asks if IEX should provide more detail about the types of market participants that choose to subscribe to TOPS, DEEP, or both, in that such information may be relevant to an assessment of its pricing of different market data products. IEX has 70 Data Subscribers who it believes are individuals,⁵⁷ and 170 other subscribers who are comprised of approximately one-third IEX Members, one-third professional market participants that are not IEX Members (e.g., hedge funds and broker-dealers), and one-third data vendors. Of the 170 non-individuals, 15 currently subscribe to only DEEP (4 IEX Members, 4 professional market participants, 7 vendors), 64 to only TOPS (14 IEX Members, 23 professional market participants, 27 vendors) and 91 to both (41 Members, 26 professional market participants, 24 vendors). All of the individuals currently subscribe only to TOPS, and no individual subscriber has indicated that it will continue to receive TOPS in Real-Time once IEX begins charging the fee set forth in this proposal.

As proposed, IEX is structuring its fees so that fee levels are aligned with access to Real-Time DOB market data of the type that is needed by the relatively small number of firms that drive much of the Exchange's market data costs. Because of this dynamic, the proposed fee structure means that the absolute amount of fees charged for DOB market data will be far less than those charged by other exchanges for the equivalent products⁵⁸ and result in fees that are fair and reasonable from the standpoint of all users, including electronic trading firms. This structure serves the goal of promoting the wide availability of minimally delayed data to a broad range of

⁵⁷ IEX's belief in this regard is based on an assessment that the Data Subscriber has a natural person name (<u>i.e.</u>, fist name – last name), rather than an entity name.

⁵⁸ For examples of other exchange's market data fees, <u>see</u> https://www.nyse.com/publicdocs/nyse/data/NYSE_Market_Data_Fee_Schedule.pdf; https://nasdaqtrader.com/Trader.aspx?id=DPUSdata; and https://www.cboe.com/us/equities/membership/fee_schedule/bzx/.

market participants, including investors. IEX believes that these distinctions are not only allowed by the Act but fully align with the principles of fair and efficient markets more than many other fee structures now in place. IEX's proposed cost structure serves to provide wide availability of market data on a cost-effective (and in some cases, free) basis, which is itself a fundamental purpose of the Securities Acts Amendments of 1975.⁵⁹

IEX proposes to provide Delayed IEX Data free of charge in order to minimize barriers to access IEX Data and thereby potentially increase trading on IEX. IEX's business model seeks to primarily generate revenue from trading rather than from data and connectivity fees, so an essential objective of the proposed fee structure is to enable broad access to IEX Data while it is still timely and useful to most IEX Data consumers without incurring any IEX fees.

IEX notes that other equities exchanges also offer delayed market data free of charge, but they define "delayed data" as data that is disseminated at least fifteen minutes after the same data is disseminated in Real Time.⁶⁰ These delayed data feeds are often used by brokerage firms⁶¹ or online distributors of market data⁶² to provide stock quote information free of charge, even if it is 15 minutes old.

In determining the appropriate delay interval, IEX sought to strike a balance between

⁵⁹ Public Law 94-29, 89 Stat. 97 (1975).

See, e.g., NYSE Comprehensive Market Data Policies, Section 7 (Delayed Data Policy), available at https://www.nyse.com/publicdocs/data/Policy-ComprehensivPackage_PDP.pdf; Cboe Global Markets North American Data Policies, Section 5 (Delayed Data), available at https://cdn.batstrading.com/resources/membership/Market_Data_Policies.pdf; Nasdaq Delayed Data Policy, available at http://www.nasdaqtrader.com/content/administrationsupport/policy/delayeddatapolicy.pd f.

⁶¹ <u>See, e.g.</u>, Interactive Brokers Delayed and Streaming Market Data, available at https://www.interactivebrokers.com/en/software/webtrader/webtrader/marketdata/delayed andstreamingmarketdata.htm ("Delayed market data is available for instruments for which you do not currently hold market data subscriptions.").

⁶² <u>See, e.g.</u>, MarketWatch Market Data Terms of Use, available at https://www.marketwatch.com/site/investing-terms-of-use ("comprehensive quotes and volume reflect trading in all markets and are delayed at least 15 minutes.").

offering IEX Data at a reasonable and transparent price to market participants who require realtime data, while also offering market participants a commercially viable option for the receipt of free IEX Data within a time period in which the data will remain useful to market participants who do not require near instantaneous real-time market data for trading purposes. Knowing there is no "exact science" to the determination of how long to delay data before allowing it to be retransmitted free of charge, IEX sought informal feedback from Members and other Data Subscribers. Based upon that informal feedback, IEX believes that most, if not all, nonelectronic trading desks would be able to continue to use IEX Data if it was received subject to at least a fifteen-millisecond delay. Also based on that informal feedback, IEX believes that there will be some current Data Subscribers – <u>e.g.</u>, algorithmic traders, data vendors, and any electronic trading platform that we believe typically use real-time data to calculate the NBBO – that will continue to pay for Real-Time IEX Data.

In addition, IEX is not proposing to charge fees for HIST and did not include the de minimis incremental costs to create daily HIST files in its market data costs. IEX believes that HIST is not used for trading decisions since it is available only on a T+1 basis, other than possibly for back testing and research. Accordingly, all the factors that apply to IEX's decision not to charge for Delayed Data are even more applicable to HIST (which is significantly more delayed than 15 milliseconds), including the objective to provide broad access to IEX Data.

The proposed fees will not apply differently based upon the size or type of the market participant, but rather based upon the speed with which the Data Subscriber wishes to obtain IEX Data, based upon factors deemed relevant by each Data Subscriber, such as the cost to access and process IEX Data as well as business models.

Finally, IEX notes that this simple, transparent market data fee proposal will simplify IEX audits for compliance with applicable market data policies. Any Data Subscriber receiving Real-Time IEX Data will enter into a Data Subscriber Agreement with IEX, even if the Data Subscriber obtains its data through a third-party vendor (as noted above, if the Real-Time data is received by an affiliate of the Data Subscriber, there will be no additional fees charged). Further, any Delayed IEX Data recipient does not need to enter into a Data Subscriber Agreement with IEX. Therefore, to assess compliance with applicable market data policies, IEX would simply audit whether any redistribution of IEX Data to any external, non-affiliate third party Data Subscribers is occurring, and if so, whether such redistribution is in Real Time or subject to at least a fifteen-millisecond delay.

IEX's proposed fee structure is designed to recoup its costs and limit any revenue in excess of costs to an amount that represents no more than what IEX believes is a reasonable rate of return over such costs.⁶³ IEX conducted an updated analysis of potential revenue, based on responses from current market data subscribers in connection with the First Fee Filing. Specifically, IEX obtained feedback from existing Data Subscribers in connection with the First Fee Filing on whether they intend to continue to subscribe to Real-Time TOPS and/or DEEP following the implementation of the fees proposed therein. As discussed above, this feedback, which was not available at the time of filing of the First Fee Filing, enables IEX to supplement this Second Fee Filing with additional details relevant to revenue projection. Based upon that feedback, and the expertise of IEX employees, IEX expects that most, if not all, of the individual Data Subscribers will terminate their subscriptions for Real-Time IEX Data and, if they choose to continue to receive IEX Data, can opt to receive Delayed IEX Data from a third-party vendor or through HIST. Of the non-individual Data Subscribers IEX projects the following: over onethird overall will drop Real-Time IEX Data and use Delayed IEX Data, SIP feeds or obtain Real-Time IEX Data through an affiliate; approximately two-thirds of Members that are Data Subscribers will retain Real-Time access; over 50% of vendors will drop Real-Time IEX Data; and those Data Subscribers that currently only subscribe to TOPS are more likely to drop compared to those that subscribe to DEEP.

⁶³ IEX notes that it is not only being transparent about its costs associated with producing IEX Data, but is also being transparent about its anticipated markup over costs.

Based on the feedback received, IEX believes that in the worst case, assuming no subscribers that have not yet indicated whether they will continue to subscribe elect to subscribe, we estimate annual revenues of \$1.75 million, amounting to a loss of 29.5% under our estimated costs. In the best case, if all such subscribers choose to continue to subscribe, we estimate annual revenue of \$2.63 million, representing a potential markup of just 6.1%. IEX believes that this revenue and cost recovery range is clearly reasonable and does not come even close to constituting taking an unfair advantage of its unique position as the sole source of its own proprietary market data.

IEX does not have visibility into other equities exchanges' costs to provide market data, and therefore cannot use those exchanges' market data fees as a benchmark to determine a reasonable markup over the costs of providing market data. Nevertheless, IEX believes the other exchanges' market data fees are a useful example of alternative approaches to providing and charging for market data. To that end, IEX notes that its proposed fees are materially lower than what competing equities exchanges charge IEX for similar market data products.⁶⁴ Specifically, during 2022, IEX pays an aggregate monthly cost of \$101,024 to the 11 other equities exchanges⁶⁵ that charge for their market data⁶⁶ to obtain TOB, <u>DOB</u> and last sale market data. By comparison, to obtain the equivalent market data from IEX (as proposed) the aggregate monthly cost for those 11 equity exchanges would be \$3,000 per exchange family, compared to the approximately \$34,000 (on average) that IEX pays each exchange family to obtain such

⁶⁴ <u>See supra note 56.</u>

⁶⁵ Currently, IEX pays for market data from four NYSE exchanges (New York Stock Exchange LLC, NYSE American LLC, and NYSE Arca, Inc.), three Nasdaq exchanges (Nasdaq Stock Market LLC, Nasdaq BX, Inc., and Nasdaq PHLX LLC) and four Cboe exchanges (Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe EDGA Exchange, Inc., and Cboe EDGX Exchange, Inc.).

⁶⁶ Long-Term Stock Exchange Inc.; MEMX LLC; MIAX PEARL, LLC; and NYSE Chicago, Inc. currently do not charge for their market data. However, MEMX LLC has announced a plan to begin charging for market data on April 1, 2022, which would increase IEX's fees.

equivalent market data. As proposed, the 11 competing exchanges will, in the aggregate, be subject to monthly fees of \$9,000 or approximately one-eleventh of the aggregate fees that IEX pays to those 11 exchanges. Additionally, as noted in the IEX Study, the actual costs IEX incurs to obtain market data from other exchanges often involve aggregating several different kinds of fees, making it difficult to ascertain the actual costs to a market participant of obtaining equivalent market data from other exchanges.⁶⁷ For example, several other exchanges charge separate fees depending on whether exchange data is redistributed internally⁶⁸ or externally⁶⁹, is used for non-display or other forms of use⁷⁰, or is calculated on a per user basis, with different fees for non-professional⁷¹ and professional⁷² users of the data feeds.⁷³ By contrast, IEX's fee proposal is much simpler – charging a flat fee for any entity to access one or both of the IEX Data feeds (\$500 month for TOPS/\$2,500 for DEEP), with no fee to redistribute TOPS, DEEP, or both TOPS and DEEP in Real-Time or on a Delayed basis (regardless of the number of recipients that the entity redistributes to). This simple fee structure means the cost burden for subscribing to receive IEX Data would be relatively flat regardless of the size of the Data Subscriber's firm. At the same time, IEX believes that the fees are set at a level that will not represent a significant cost to any Data Subscriber. For example, because IEX will not be charging any variable per user fees. Data Subscribers will not need to expend resources on monthly reporting of market data usage that can be required when subscribing to other exchange

⁷² Anyone who is not a non-professional user is considered a professional user.

⁶⁷ <u>See</u> IEX Study at 18.

⁶⁸ Internal distribution is receiving market data from an exchange and distributing it within the same entity that received the data.

⁶⁹ External distribution is receiving market data from an exchange and distributing it to a third party outside of the entity that received the data.

⁷⁰ Non-display usage means any method of accessing a market data product that involves access or use by a machine or automated device without access or use of a display by a natural person.

⁷¹ Non-professional users are natural persons who use data for personal, not commercial, purposes, and are not a registered financial services professional.

 $^{^{73}}$ <u>See supra note 56.</u>

data feeds with pricing that differs based on the various factors noted above. Furthermore, because IEX will not be charging different usage fees (such as for "display" vs. "non-display" usage) or charging based on "controlled" and "uncontrolled" products, the Data Subscribers will not need to expend resources on managing different methods of receiving and distributing IEX Data or different types of application usage. Furthermore, IEX understands that the above administrative concerns can result in contentious audits or even litigation between data subscribers and providers of proprietary market data, all of which can result in substantial costs to the subscribers of other exchanges' market data feeds.

IEX acknowledges that there are trade-offs between the benefits of a relatively simple fee structure and a fee structure that is more graduated based on the extent and variety of uses of IEX Data. IEX believes it has struck an appropriate balance of these interests by creating a fee model that is simple, easy to understand and administer, and set at a level that is affordable for all firms that need real-time data, while imposing no charge on recipients of Delayed IEX Data that do not need Real-Time IEX Data.

As discussed above, IEX estimates that this fee proposal would result in it receiving <u>at</u> <u>most</u> an amount equal to approximately 6.1% over its estimated costs of providing market data, with a significant possibility that IEX will not even recoup all of its costs.⁷⁴ We believe the fact that some current users have indicated to IEX they no longer plan to subscribe to Real-Time IEX Data owes in part to the fact that they will have the option to receive Delayed IEX Data (at a minimal delay of only 15 milliseconds) in lieu of Real-Time IEX Data, without paying a fee to IEX. IEX believes that Data Subscribers that are not engaged in high speed, low latency trading may not choose to pay for Real-Time IEX Data. As proposed, Data Subscribers may provide

⁷⁴ IEX notes that the proposed fee filing introduces a new subscription model, and IEX will notify all current Data Subscribers that before July 1, 2022, they will need to enter into a new Data Subscriber Agreement with IEX if they wish to continue receiving IEX Data in real time (either directly from IEX or via a third party). Furthermore, anyone who elects to receive Delayed IEX Data from a third party would no longer need to enter into a Data Subscriber Agreement with IEX, as required under IEX's current market data policies.

Delayed IEX Data to market participants who do not require (or quite possibly even have the necessary technology tools to use) near instantaneous access to IEX Data.⁷⁵ These Delayed IEX Data recipients that elect to receive Delayed IEX Data from a Data Subscriber of IEX Data will not incur any IEX fees.⁷⁶ Conversely, a market participant that values near instantaneous market data (e.g., algorithmic traders or other equities venues that use proprietary market data feeds to calculate the NBBO for each security) will have the option of paying \$3,000 per month to receive Real-Time TOPS and DEEP. IEX also notes that any consumers can continue to obtain all the data in TOPS and DEEP free of charge on a T+1 basis from IEX's HIST data product. And a market participant can also choose to obtain IEX TOB market data from the SIPs instead of from IEX.

Annual Review of Fees

In its Suspension Order, the Commission asks whether exchanges should periodically reevaluate fees on an ongoing and periodic basis in order to assure that actual revenue aligns with a reasonable cost-plus model. IEX intends to conduct a review (as described above) one year after implementation of the proposed fees and will publish the results of that review, including the aggregate revenue received during the year from subscription to each market data product. IEX expects that it may propose to adjust fees at that time, to increase fees in the event that revenues fail to cover costs. Similarly, IEX would propose to decrease fees in the event that revenue materially exceeds our current projections and is above a reasonable mark-up of market data costs. Further, and as discussed above, IEX will periodically conduct a review to inform its decision making on whether a fee change is appropriate (e.g., to monitor for costs increasing/decreasing or subscribers increasing/decreasing, etc. in ways that suggest the then-

⁷⁵ As noted above, IEX will only provide real-time IEX Data and will not itself delay the dissemination of IEX Data to Data Subscribers.

⁷⁶ The Delayed IEX Data recipient may be subject to any fees charged by the redistributor of the Delayed IEX Data, based upon the contractual arrangement between the Delayed IEX Data recipient and the provider of Delayed IEX Data. Such fees would not be paid to the Exchange.

current fees are becoming dislocated from the prior cost-based analysis). In the event that IEX determines to propose a fee change, the results of a timely review, including an updated cost estimate, will be included in a rule filing proposing the fee change. IEX believes this approach will further increase transparency around market data costs and help to ensure that Exchange fees continue to be reasonably related to costs.

Specific Changes to the Fee Schedule

In order to effectuate the proposed fee changes, IEX is proposing to make the following

changes to the definitions in the "Market Data Fees" part of its Fee Schedule:

- Remove the definitions for "Internal Distribution Fee" and "External Distribution Fee" because IEX is not proposing to charge any distribution fees.
- Define the term "Real-Time" as "IEX market data that is accessed, used, or distributed less than fifteen (15) milliseconds after it was made available by the Exchange. IEX provides only Real-Time IEX market data to Data Subscribers. A Data Subscriber may redistribute Real-Time IEX market data that it receives from the Exchange on a Real-Time basis to a natural person or entity. Receipt of IEX market data on a Real-Time basis by an affiliate of a Data Subscriber is not subject to additional Fees beyond those paid by such Data Subscriber.¹"
- Define the term "Delayed" as "IEX market data that is accessed, used, or distributed at least fifteen (15) milliseconds after it was made available by the Exchange. A Data Subscriber may redistribute Real-Time IEX market data that it receives from the Exchange on a Delayed basis to a natural person or entity. In addition, a recipient of Delayed IEX market data may further redistribute such Delayed IEX market data to a natural person or entity."
- Define the term "Data Subscriber" as "any natural person or entity that receives Real-Time IEX market data either directly from the Exchange or from another non-affiliate Data Subscriber. A Data Subscriber must enter into a Data Subscriber Agreement with IEX in order to receive Real-Time IEX market data. A natural person or entity that receives Real-Time IEX market data from an affiliated Data Subscriber is subject to the Data Subscriber Agreement of such affiliated Data Subscriber."
- Remove the definition of "Usage Fee" because IEX is not proposing to charge any usage fees for its market data.
- Add the following words before the "Service/Fee" table: "The following fees² are assessed by IEX on market data recipients:"

IEX is also proposing to the make the following changes to the "Service/Fee" table in the

Market Data Fees section of the Fee Schedule:

- Delete the references to the Internal Distribution, External Distribution, and Usage Fees.
- Add the following entries to the table:

Service	Fee
DEEP Feed (Real-Time)	$$2,500 \text{ per month}^3$
TOPS Feed (Real-Time)	\$500 per month ³
DEEP Feed (Delayed)	FREE
TOPS Feed (Delayed)	FREE

- Define footnote 1 to say: "The terms "affiliate" and "affiliated" have the meaning specified in Rule 12b-2 of the Exchange Act."
- Define footnote 2 to say: "The fees set forth below include only fees charged by IEX. Receipt of Real-Time IEX market data from a Data Subscriber or Delayed IEX market data from a Data Subscriber or other person may also be subject to fees agreed to between the Data Subscriber and recipient of such IEX market data."
- Define footnote 3 to say: "These fees will be operative beginning July 1, 2022."

Implementation Schedule

As noted above, the proposed rule change is effective on filing and the fees proposed

herein will become operative on July 1, 2022. Delayed implementation will provide an

opportunity for current Data Subscribers to modify the manner in which they receive IEX Data,

if they choose to do so, allowing them to obtain IEX Data without incurring any charge from

IEX if they receive it subject to at least a fifteen-millisecond delay⁷⁷, before the first month in

which IEX will charge for access to IEX Data.78

2. <u>Statutory Basis</u>

IEX believes that the proposed rule change is consistent with the provisions of Section

⁷⁷ The Delayed IEX Data recipient may be subject to any fees charged by the redistributor of the Delayed IEX Data, based upon the contractual arrangement between the Delayed IEX Data recipient and the provider of Delayed IEX Data. Such fees would not be paid to the Exchange.

⁷⁸ IEX will bill all Data Subscribers directly, even if the Data Subscriber obtains IEX Data from a vendor, rather than indirectly billing the Data Subscriber through the vendor and requiring the Data Subscriber to reimburse the vendor from which it receives IEX Data.

 $6(b)^{79}$ of the Act in general and furthers the objectives of Section $6(b)(4)^{80}$ of the Act, in particular, in that it is designed to provide for the equitable allocation of reasonable dues, fees and other charges among its Members and other persons using its facilities. The Exchange also believes that the proposed fee change promotes just and equitable principles of trade and will not be unfairly discriminatory, consistent with the objectives of Section $6(b)(5)^{81}$ of the Act.

Reasonableness

With regard to reasonableness, the Exchange understands that the Commission has traditionally taken a market-based approach to examine whether the SRO making the fee proposal was subject to significant competitive forces in setting the terms of the proposal. IEX understands that in general the analysis considers whether the SRO has demonstrated in its filing that (i) there are reasonable substitutes for the product or service; (ii) "platform" competition constrains the ability to set the fee; and/or (iii) revenue and cost analysis shows the fee would not result in the SRO taking supracompetitive profits. If the SRO demonstrates that the fee is subject to significant competitive forces, IEX understands that in general the analysis will next consider whether there is any substantial countervailing basis to suggest the fee's terms fail to meet one or more standards under the Exchange Act. IEX further understands that if the filing fails to demonstrate that the fee is constrained by competitive forces, the SRO must provide a substantial basis, other than competition, to show that it is consistent with the Exchange Act, which may include production of relevant revenue and cost data pertaining to the product or service.

As discussed in the Purpose section, IEX believes that as a general matter, because each exchange is the exclusive source of its own market data (particularly its depth of book data), market data fees cannot be sufficiently justified based on unproven assumptions about competition for market data, notwithstanding that a newer and/or smaller securities exchange,

⁷⁹ 15 U.S.C. 78f(b).

⁸⁰ 15 U.S.C. 78f(b)(4).

⁸¹ 15 U.S.C. 78f(b)(5).

such as IEX, may be less able to set prices for its market data free of competition pressures than may be the case for more established securities exchanges. Nevertheless, IEX has not determined its proposed overall market data fees based on assumptions about market competition, instead relying upon a cost-plus model to determine a reasonable fee structure that is informed by the extent to which demand for each product drives IEX's overall market data costs and the different uses of the products by different types of participants. In this context, IEX believes the proposed fees overall are fair and reasonable as a form of cost recovery plus the possibility of a reasonable return for IEX's aggregate costs of offering IEX Data to its Data Subscribers.

As discussed in the Purpose section, IEX believes that charging \$500 per month for TOPS and \$2,500 per month for DEEP is reasonable because it is based both on the relative costs to IEX to generate TOPS and DEEP, the extent to which each product drives IEX's overall costs and the relative value of each, as well as IEX's objective to make TOPS broadly available to a range of market participants including long-term investors. Therefore, IEX believes that it is reasonable to charge a higher fee for DEEP than for TOPS.

IEX also believes the proposed fees are reasonable because they are designed to generate annual revenue to recoup some or all of IEX's annual costs of providing market data. As discussed in the Purpose section, subsequent to the First Fee Filing, IEX conducted an updated analysis of potential revenue, based on responses from current market data subscribers. Based on that analysis, assuming no subscribers that have not yet indicated whether they will continue to subscribe elect not to subscribe, we estimate annual revenues of \$1.75 million in market data fees, amounting to a loss of 29.5% under our estimated costs of providing that data. Even if all such subscribers choose to continue to subscribe, we estimate this fee filing will result in annual revenue of \$2.63 million, representing a potential markup of just 6.1% over the cost of providing market data. Accordingly, IEX believes that this fee methodology is reasonable because it both allows IEX to recoup some or all of its expenses for providing market data (with any additional revenue representing no more than what IEX believes to be a reasonable rate of return), while continuing to allow market participants to access IEX Data free of charge if they can wait at least fifteen milliseconds to receive it.

Additionally, IEX believes the proposed fees are reasonable because IEX is only charging Data Subscribers who use IEX Data in Real-Time, and as described in the Purpose section, these Data Subscribers are the very ones creating the demand for Real-Time IEX Data, thereby causing IEX to incur the costs described above to produce Real-Time market data feeds.

IEX also believes that the proposed fees are reasonable because they are significantly less than the fees charged by competing equities exchanges, notwithstanding that the competing exchanges may have different system architectures that may result in different cost structures for the provision of market data. As described above, the three large exchange families charge significantly more than IEX's proposed fees for real-time access to their proprietary market data. Significantly, they charge these fees without offering an option to receive delayed market data within a time frame that is usable for most trading purposes. The delayed data offered by other exchanges is also offered free of charge, but only fifteen minutes after it is first disseminated, which IEX believes generally makes the data stale for any subscribers using the data to make trading decisions.

Finally, as described in the Purpose section above, IEX believes that this fee proposal is reasonable because it will not impose onerous audit requirements on Data Subscribers, because there will be no need to substantiate the number of users of IEX Data or the manner in which it is being used, but rather only whether it is being redistributed in real time or subject to at least a fifteen-millisecond delay.

Equitable Allocation and Non-Discrimination

IEX believes that its proposed fees are reasonable, fair, and equitable, and not unfairly discriminatory because they are designed to align fees with services provided, will apply equally to all Data Subscribers that require real-time data, and will minimize barriers to entry by providing IEX Data for free after at least fifteen milliseconds, thereby allowing all but the most

latency sensitive market participants access to IEX Data within a time frame that is usable for most trading purposes.

The Exchange believes that providing Delayed IEX Data without charging any fees and charging as much as \$3,000 per month to Data Subscribers who require Real-Time IEX Data is fair and equitable, and not unfairly discriminatory because it will enable all market participants to access Delayed IEX Data without paying any fees to IEX⁸² and will charge only the users who require the fastest market data feeds available (which, as discussed in the Purpose section, drives much of the costs associated with creating and distributing IEX Data because it increases the resiliency, capacity and redundancy costs associated with IEX's proprietary market data feeds) for access to IEX Data. Additionally, as noted in the Purpose section, anyone can obtain TOPS and DEEP data free of charge on a T+1 basis through IEX's HIST data product. IEX believes this approach to market data fees will equitably distribute the costs of IEX Data among market participants based on any distinctions between or among Members, customers, broker-dealers, or any other entity, because they are solely determined by the individual market participant based on its business needs.

Furthermore, IEX believes that charging \$500 per month for TOPS and \$2,500 per month for DEEP is fair and equitable because, as discussed in the Purpose section, it is based on the relative value of DEEP and TOPS, the fact that demand for real-time DEEP drives a significant portion of IEX's market data costs, and the existence of alternatives to real-time TOB market data. These factors operate to limit IEX's ability to base real-time TOPS pricing strictly on a proportional cost allocation; additionally, charging significantly less for TOPS supports IEX's objective to make TOPS broadly available to a range of market participants including long-term

⁸² Although IEX will not charge any distribution fees to a redistributor of Delayed IEX Data, the redistributor may still charge its own fees to its customers that receive Delayed IEX Data from such redistributor.

investors. Therefore, IEX believes that it is fair and equitable to charge a higher fee for DEEP than for TOPS.

The Exchange also believes that it is fair and reasonable to not charge additional fees to affiliates of a Data Subscriber because that approach is agnostic on corporate structure without financially penalizing a firm organized into multiple affiliates. Moreover, IEX's costs do not materially differ based on how Data Subscribers have legally structured their operations.

The Exchange further believes that the proposed fees are reasonable, fair, and equitable, and non-discriminatory because they will apply to all Data Subscribers in the same manner based on the type of market data needed. All similarly situated market participants are subject to the same fees. The fees also do not depend on any distinctions between or among Members, customers, broker-dealers, or any other entity, because they are solely determined by the individual market participant based on its business needs.

Finally, the Exchange believes that the proposed fee is consistent with Section 11A of the Exchange Act in that it is designed to facilitate the economically efficient execution of securities transactions, fair competition among brokers and dealers, exchange markets and markets other than exchange markets, and the practicability of brokers executing investors' orders in the best market. Specifically, the proposed low, cost-based fee, with the option of receiving free data from a third party on at least a fifteen-millisecond delay⁸³ or for absolutely no cost on a T+1 basis using HIST, will enable a broad range of market participants to continue to receive IEX Data, thereby facilitating the economically efficient execution of securities transactions on IEX, fair competition between and among such Members, and the practicability of Members that are brokers executing investors' orders on IEX when it is the best market.

For the foregoing reasons, the Exchange believes that the proposed fee is reasonable, equitably allocated, and not unfairly discriminatory.

⁸³ Distributors of Delayed IEX Data may charge a fee for the data, but that fee is not payable to IEX.

B. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

IEX does not believe that the proposed rule change will result in any burden on intramarket or intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act.

The Exchange does not believe that the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act. The proposed fees are based on actual costs and are designed to enable the Exchange to recoup its applicable costs with the possibility of a reasonable profit on its investment as described in the Purpose and Statutory Basis sections. Competing equities exchanges are free to adopt comparable fee structures subject to the SEC rule filing process.

The Exchange also does not believe that the proposed fees will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because all market participants are entitled to receive IEX Data free of charge after at least a fifteen-millisecond delay. Providing a commercially viable free data feed to Data Subscribers is designed to avoid creating barriers to entry for smaller Members, thereby promoting intramarket competition. In addition, even Members subject to relatively higher fees, because they are paying up to \$3,000 per month for IEX Data, will still be subject to a relatively low aggregate fee (and significantly less than the fees charged by competing exchanges, as described above) and IEX thus believes that the proposed fee will not operate as a barrier to entry for such Members or impose a significant business cost burden on such Members relative to their levels of business activity. Finally, as noted in the Purpose and Statutory Basis sections, IEX believes that not requiring any onerous audits for Data Subscribers will be of equal benefit to all Data Subscribers.

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

Written comments were neither solicited nor received.

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

The foregoing rule change has become effective pursuant to Section $19(b)(3)(A)(ii)^{84}$ of the Act.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings under Section $19(b)(2)(B)^{85}$ 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 (<u>http://www.sec.gov/rules/sro.shtml</u>); or
- Send an e-mail to <u>rule-comments@sec.gov</u>. Please include File No. SR-IEX-2022-02 on the subject line.

Paper Comments:

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

All submissions should refer to File No. SR-IEX-2022-02. 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,

⁸⁴ 15 U.S.C. 78s(b)(3)(A)(ii).

⁸⁵ 15 U.S.C. 78s(b)(2)(B).

all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10:00 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 and on its Internet website at www.iextrading.com. 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 No. SR-IEX-2022-02, and should be submitted on or before **[INSERT DATE 21 DAYS AFTER**

DATE OF PUBLICATION IN THE FEDERAL REGISTER].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁸⁶

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2022-07853 Filed: 4/12/2022 8:45 am; Publication Date: 4/13/2022]

⁸⁶ 17 CFR 200.30-3(a)(12).