SECURITIES AND EXCHANGE COMMISSION (Release No. 34-100085): File No. SR-IEX-2024-08

May 9, 2024

Self-Regulatory Organizations; Investors Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Pursuant to IEX Rule 15.110 to Amend IEX's Fee Schedule to Adopt a Physical Connectivity Fee and Increase Certain Port Fees

Pursuant to Section 19(b)(1)<sup>1</sup> of the Securities Exchange Act of 1934 ("Act" or "Exchange Act")<sup>2</sup> and Rule 19b-4 thereunder,<sup>3</sup> notice is hereby given that, on May 2, 2024, the Investors Exchange LLC ("IEX" or "Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II and III below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

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

Pursuant to the provisions of Section 19(b)(1) under the Act<sup>4</sup>, and Rule 19b-4 thereunder<sup>5</sup>, 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 amend certain connectivity fees. IEX will implement the proposed fees beginning on June 1, 2024.

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.

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

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

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

<sup>&</sup>lt;sup>4</sup> 15 U.S.C. 78s(b)(1).

<sup>&</sup>lt;sup>5</sup> 17 CFR 240.19b-4.

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

# 1. <u>Purpose</u>

IEX is proposing to modify its Fee Schedule, pursuant to IEX Rules 15.110(a) and (c), to add a new fee for physical connections to its Primary Data Center<sup>6</sup>, Disaster Recovery Data Center<sup>7</sup> and the IEX Testing Facility ("ITF") ("physical connectivity fees"), <sup>8</sup> and increase fees for logical order entry ports (also referred to as "Order Entry Ports") in excess of five per subscriber ("port fees"). IEX has not previously imposed any physical connectivity fees but has charged port fees since October 1, 2019. The Exchange has not changed the port fees since they were implemented, but since that time, the Exchange has experienced increases in related operational expenses including significant upgrades to its trading platform infrastructure. As

All connections to the IEX Primary Data Center (including for order entry and market data receipt) are made through IEX's point-of-presence ("IEX POP") in Secaucus, NJ. From the IEX POP, messages travel to IEX's Primary Data Center.

The Disaster Recovery Data Center, also known as the "Secondary Data Center", is the physical location of IEX's backup trading platform. It is located in Chicago, Illinois.

The only connections offered to the Primary Data Center are 10 gigabit ("10G") physical port connections. The Exchange offers both 10G and 1 gigabit ("1G") physical port connections to the ITF, for which it incurs physical connectivity-related costs; however, as discussed below, the Exchange is not proposing to charge for the connections to the ITF itself.

Order Entry Ports are used for sending and receiving order messages. Other uses for logical ports, which are not subject to the fees proposed herein, include drop copy ports and market data ports.

See Securities Exchange Act Release No. 86626 (August 9, 2019), 84 FR 41793 (August 15, 2019) (SR-IEX-2019-07) ("Port Fee Filing").

discussed more fully below, the Exchange recently calculated its aggregate annual costs of \$12,904,100 for providing physical connectivity and \$5,924,000 for providing Order Entry Ports.

Increased operational costs include costs related to monitoring and analysis of data and performance of the network connections with nanosecond granularity and continuous improvements in network performance. The costs associated with maintaining and enhancing a state-of-the-art network impacts the overall operational costs of the Exchange. The Exchange believes that it is appropriate to offset a portion of those increased costs by adding fees for physical connectivity and increasing fees for Order Entry Ports. Maintaining and enhancing the performance of the Exchange's systems is necessary to compete with other market venues and meet Users' 11 expectations when trading on the Exchange, as well as to assist the Exchange in complying with its Regulation SCI compliance obligations to have levels of capacity, integrity, resiliency, availability and security adequate to maintain IEX's operational capability and promote the maintenance of fair and orderly markets <sup>12</sup>, and to support a robust trading environment for Users. 13 In addition, the Exchange is in the process of implementing significant upgrades to its trading system to enhance scalability, network performance and connectivity, thereby enhancing the User experience. The associated costs are substantial, including costs to purchase new connectivity infrastructure equipment as well as other ongoing expenses. The Exchange believes it is necessary and appropriate to offset a portion of these costs with fees for physical connectivity and increased fees for Order Entry Ports.

<sup>11</sup> See IEX Rule 1.160(qq).

<sup>12</sup> 17 CFR 242.1001(a)(1)).

<sup>13</sup> Reg SCI Rule 1001(a) requires that IEX establish, maintain, and enforce written policies and procedures reasonably designed to ensure (among other things) that its Reg SCI systems have levels of capacity adequate to maintain IEX's operational capability and promote the maintenance of fair and orderly markets.

Accordingly, the Exchange now proposes to amend the Fee Schedule to begin charging fees for physical connectivity and increase existing fees for Order Entry Ports in excess of five per subscriber, in order to offset a portion of these increased related costs and expenses, with a limited potential return in excess of such costs if actuals differ from projections, as set forth below in the Exchange's cost analysis. As described below, IEX proposes to charge \$4,000 for each physical port connection to its Primary Data Center, which fee would also include one (1) 10G connection to its Disaster Recovery Center and one (1) 10G or 1G connection to its ITF; and to increase the fees it charges for Order Entry Ports in excess of five per subscriber from \$100 to \$250 per month. IEX is proposing to continue to provide Order Entry Ports at the Disaster Recovery Data Center and ITF, as well as drop copy ports and market data ports, free of charge. In each case, as detailed below, the proposed fees are less than comparable connectivity services offered by other equities exchanges, and significantly less than comparable fees charged by legacy exchanges. <sup>14</sup> The Exchange proposes to implement the changes to the Fee Schedule pursuant to this proposal on June 1, 2024.

As described in previous filings<sup>15</sup>, in setting its prices for market data and connectivity products, IEX has established a general framework ("Framework") that is based on a high level of transparency with regard to its costs of providing these services and which is designed to set prices at levels that are reasonably related to those costs.<sup>16</sup> As relevant to this filing, the

See infra note 53 for a discussion of legacy and non-legacy exchanges.

See Securities Exchange Act Release No. 94630 (April 7, 2022), 87 FR 21945 (April 13, 2022) (SR-IEX-2022-22) ("IEX Market Data Fee Filing"); see also Port Fee Filing, supra note 10.

Since the IEX Market Data Fee Filing, which applied this Framework to provide a high level of transparency of relevant costs, other exchanges have adopted similar fees based on their own detailed cost analyses. IEX believes that the information provided in this filing meets or exceeds the level of detail and analysis contained in those filings. See Securities Exchange Act Release No. 98584 (September 28, 2023), 88 FR 68736 (October 4, 2023) (SR-PEARL-2023-51) ("MIAX Connectivity Fee Filing") (increasing physical and logical connectivity fees for MIAX Pearl equities members and non-members from \$1,000/month to \$2,500/month for 1G connections; from \$3,500/month to \$8,000/month for 10G

Framework includes the following elements:

- Prices are determined based on a comprehensive and transparently applied methodology for allocating costs to different exchange products.
- Based on this methodology, specific exchange costs are reasonably allocated to the
  products and services for which the exchange seeks to charge, including technology and
  staff directly related to the products and services being charged for. In this way, IEX
  prevents "double-counting" of costs across more than one set of product classes (e.g.,
  market data, physical connectivity, and logical connectivity).
- Cost allocation takes account of recent or planned enhancements to exchange operations.
- IEX strives to maintain a relatively flat, simple fee structure that avoids disproportionate or discriminatory impacts on any group of members or market participants.

The physical connectivity and port fees proposed in this filing have been developed consistent with this Framework. In particular, as described more fully below, in this rule filing IEX provides a cost analysis that includes, among other things, descriptions of how the Exchange allocated costs between the Exchange's various cost drivers to ensure no cost was double counted, as well as additional detail supporting its cost allocation processes.

IEX is in the process of implementing significant upgrades to its technological infrastructure. These upgrades, which include substantial enhancements to the speed and efficiency with which the Exchange can handle message traffic, as well as enhancements to the various matching engines, are thereby projected to provide noticeable performance improvements to Users. Additionally, these enhancements are designed to allow for greater

connections; and from \$0 for ports in excess of five but less than 25 per User, and from \$300-\$450/month for ports in excess of 25 per User to \$450/month); see also Securities Exchange Act Release No. No. 95936 (September 27, 2022), 87 FR 59845 (October 3, 2022) (SR-MEMX-2022-26) ("MEMX Connectivity Fees Filing").

scalability of the Exchange's System<sup>17</sup> as overall message traffic in the securities markets increases, and IEX seeks to capture a greater percentage of equity trading volume.

Consistent with the Framework, in proposing to charge physical connectivity and port fees, IEX assessed those fees in relation to its own aggregate costs of providing the services, as well as the impact on Members<sup>18</sup> (as well as other Users and subscribers) – both generally and in relation to other Members, i.e., so that the fees will not create a financial burden on any participant or an undue impact in particular on smaller Members and competition among Members in general. IEX believes that its approach is consistent with the requirements of Section 19(b)(1) under the Act, <sup>19</sup> and Rule 19b-4 thereunder, <sup>20</sup> and Section 6(b) of the Act, <sup>21</sup> which requires, among other things, that exchange fees be reasonable and equitably allocated, <sup>22</sup> not designed to permit unfair discrimination, <sup>23</sup> and that they not impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Act. <sup>24</sup> 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. <sup>25</sup>

<sup>&</sup>lt;sup>17</sup> See IEX Rule 1.160(nn).

<sup>18 &</sup>lt;u>See IEX Rule 1.160(s).</u>

<sup>&</sup>lt;sup>19</sup> 15 U.S.C. 78s(b)(1).

<sup>&</sup>lt;sup>20</sup> 17 CFR 240.19b-4.

<sup>&</sup>lt;sup>21</sup> 15 U.S.C. 78f(b).

<sup>&</sup>lt;sup>22</sup> 15 U.S.C. 78f(b)(4).

<sup>&</sup>lt;sup>23</sup> 15 U.S.C. 78f(b)(5).

<sup>&</sup>lt;sup>24</sup> 15 U.S.C. 78f(b)(8).

In 2019, the Commission staff published guidance suggesting the types of information that self-regulatory organizations ("SROs") may use to demonstrate that their fee filings comply with the standards of the Exchange Act ("Staff Guidance"). While IEX understands that the Staff Guidance does not create new legal obligations on SROs, IEX has consistently applied the Staff Guidance to provide the type and level of transparency in demonstrating compliance when seeking to modify fees. See Staff Guidance on SRO Rule Filings Relating to Fees (May 21, 2019) available at <a href="https://www.sec.gov/tm/staff-guidance-sro-rule-filings-fees">https://www.sec.gov/tm/staff-guidance-sro-rule-filings-fees</a>.

In determining the appropriate fees to charge, IEX considered its costs of providing physical and logical connectivity, using a methodology that is designed to allocate those costs that are related to the establishment, maintenance, support, and enhancements to its connectivity products. Based on this allocation, IEX has set the proposed fees at levels that are designed to offset a portion of its costs, with a limited potential return in excess of such costs if actuals differ from projections. Because of the uncertainty of forecasting subscribers' decision-making with respect to their IEX physical connections and Order Entry Ports it is not possible to make a definitive projection of the revenues that will be received.

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#### Connectivity Fee Changes

IEX offers the ability to physically connect to the Exchange via the IEX POP<sup>26</sup> to its Members, Data Recipients<sup>27</sup>, Service Bureaus<sup>28</sup>, and Extranet Providers<sup>29</sup> (collectively, "Connectivity Subscribers").<sup>30</sup> In order to cover a portion of the aggregate costs of providing physical connectivity to its Connectivity Subscribers, the Exchange proposes to modify its Fee Schedule as described above and detailed below. IEX notes that it currently does not charge any fees for physical connectivity, and therefore the full cost of providing such connectivity is borne by IEX.

The number of physical connections to IEX's Primary Data Center (via the IEX POP) assigned to each Connectivity Subscriber as of February 29, 2024, ranged from one (1) to 14, as

Physical connectivity is provided via network switch and cabling infrastructure that allows a subscriber to access a logical port for send and receive order messages, as well receive market data messages.

<sup>&</sup>lt;sup>27</sup> See IEX Rule 11.130(c).

<sup>&</sup>lt;sup>28</sup> See IEX Rule 11.130(d).

<sup>29 &</sup>lt;u>See IEX Rule 11.130(e).</u>

Service Bureaus offer technology-based services to Members for a fee, including physical connectivity and Order Entry Ports. Extranet Providers offer physical connectivity services to Members and Data Recipients.

determined by the Connectivity Subscriber based on the scope and scale of its trading activity on the Exchange (or other IEX activity, in the case Data Recipients, Service Bureaus, and Extranet Providers), including its determination of the need for redundant connectivity.<sup>31</sup> Approximately 67% of IEX's Members do not maintain a direct physical connection to the Exchange's Primary Data Center (though many such Members have physical connectivity through a Service Bureau or Extranet Provider) and another 22% have either one (1) or two (2) physical connections to the Exchange in the Primary Data Center. Presently, only 10% of Members, maintain three or more physical connections to the Exchange to the Primary Data Center.

The Exchange currently does not charge any fees to connect to its Primary Data Center, its Disaster Recovery Data Center, or the ITF. In order to offset a portion of the costs of providing this physical connectivity, plus a limited potential return in excess of such costs if actuals differ from projections, the Exchange proposes to charge \$4,000 per month for each physical connection to its Primary Data Center (all of which are 10G connections), which fee would also include an option for one (1) 10G connection to its Disaster Recovery Center and one (1) 10G or 1G connection to its ITF. This integrated approach is designed to simplify the fee structure and encourage physical connectivity to the Disaster Recovery Data Center and testing at the ITF. As proposed, and discussed more fully below, IEX fees are significantly lower than comparable physical connectivity fees of other equity exchanges.

# Order Entry Ports Fee Changes

Similar to other exchanges, IEX offers Order Entry Ports, also known as "sessions", for order entry and receipt of trade execution reports and order messages.<sup>32</sup> Members can also

21 Connectivity Subscribers maintain one (1) or two (2) physical connections at IEX's Disaster Recovery Center, and 20 Connectivity Subscribers maintain one (1) or two (2) physical connections to the ITF.

Logical connectivity for order entry is provided via network switch and cabling infrastructure that delivers order and execution messages, as well as server infrastructure that runs software processes responsible for

choose to connect to IEX indirectly through a session maintained by a third-party Service Bureau. Service Bureau sessions may provide access to one or multiple Members on a single session. <sup>33</sup> The number of sessions assigned to each Port Subscriber as of February 29, 2024 ranges from one to 279, depending on the scope and scale of the User's trading activity on IEX (either through a direct connection or through a Service Bureau) as determined by the User. For example, by using multiple sessions, Members can segregate order flow from different internal desks, business lines, or customers. IEX does not impose any minimum or maximum requirements for how many Order Entry Ports a Port Subscriber can maintain, and it is not proposing to impose any minimum or maximum requirements.

IEX currently charges Port Subscribers \$100 per port on a monthly basis for each Order Entry Port at the Primary Data Center in excess of five per Port Subscriber. In order to offset a portion of its costs with a limited potential return in excess of such costs if actuals differ from projections, the Exchange proposes to increase the fees it charges for each such port in excess of five per Port Subscriber from \$100 per month to \$250 per month. These proposed fees would continue not to apply to logical ports used for other purposes, such as receiving market data or drop copies, for would such ports count toward the five free Order Entry Ports calculation. Furthermore, IEX would continue not to charge any fee for logical ports used to connect to IEX's Disaster Recovery Data Center or ITF, nor would such ports count toward the five free

validating and formatting such messages for either internal or external consumption.

Members and Service Bureaus are collectively referred to herein as "Port Subscribers."

As described in the Statutory Basis section, <u>infra</u>, these fees are significantly lower than fees charged by IEX's competitors for their sessions.

Confirmations of orders and execution reports are transmitted by the Exchange over the Order Entry Port that was used to enter the order. A "drop copy" contains redundant information that a Member chooses to have "dropped" to another destination (e.g., to allow the Member's back office and/or compliance department, or another Member – typically the Member's clearing broker – to have immediate access to the information for risk management and other purposes). Drop copies can only be sent via a drop copy port. Drop copy ports cannot be used to enter orders.

## Conforming Changes to Fee Schedule

- To reflect the fee changes described above, IEX proposes to update the Connectivity Fees section of the IEX Fee Schedule as follows: In the first row of the Connectivity Fees table, after the words "10G Physical Port", add the words "Connection to Primary Data Center" to reflect that the \$4,000 per port monthly 10G fee applies to those connections. Additionally, IEX proposes to remove from this row the current footnote 1, which currently reads: "10G physical ports are available to connect to IEX's production systems (i.e., the IEX POP and Disaster Recovery Data Centers) and the IEX Test Facility ("ITF")." IEX is proposing to remove this footnote as the information contained therein is being added to other sections of the Connectivity Fees table.
- Add a new footnote 1 to the first row of the table, after the words "\$4,000 per month", which states: "Physical connectivity fees are billed to and payable by the Member, Service Bureau, Data Recipient, or Extranet Provider maintaining the physical port connection at the Primary Data Center based on the number of physical connections to the Primary Data Center as of the first of each month."
- Add a new second row to the Connectivity Fees table specifying that a "10G Physical Port Connection to Disaster Recovery Data Center" is "Included with 10G Physical Port Connection at Primary Data Center."
- Update the (now) third row of the Connectivity Fees table so it reads "1G or 10G Physical Port Connection to IEX Test Facility ("ITF")" are "Included with 10G Physical Port Connection at Primary Data Center." Update footnote 2 to add the words "and Service Bureaus" after the word "Members", in order to reflect that both Members and Service Bureaus may have physical connections to the ITF.
- Update the (now) fourth row of the Connectivity Fees table so it reads "Logical Port
  (except for Primary Data Center Order Entry Port)" are free, to reflect that some Order
  Entry Ports, in particular at the ITF and the Disaster Recovery Data Center, will
  continue to be offered free of charge, and that all other logical ports (e.g., drop copy
  ports) will continue to be offered free of charge.
- Update the (now) fifth row of the Connectivity Fees table so it reads "Primary Data Center Order Entry Port" to specify that IEX will only be charging for Order Entry Ports (above 5 per Port Subscriber) at the Primary Data Center. No changes are proposed for footnote 3.
- Update footnote 4 to add the words "Primary Data Center" before the words "Logical Order Entry Ports," and delete the second sentence of the footnote, because the

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IEX expects to incur costs of \$5,924,000 in 2024 to offer Order Entry Ports. At the current fee level, IEX would expect to generate fee revenue of \$1,389,500 resulting in negative income of \$4,534,500.

effective date of these proposed fee changes will be the same date as the effective date of the fee schedule.

# <u>Implementation</u>

Although fee filings are immediately effective upon filing, IEX plans to implement these fee changes on June 1, 2024, in order to provide ample advance notice and allow impacted market participants time to prepare for the change. As proposed, monthly physical connectivity fees will be assessed based on the number of 10G physical port connections maintained by a Member, Service Bureau, Data Recipient, or Extranet Provider as of the first of each month. Similarly, monthly logical connectivity fees will be assessed based on the number of Primary Data Center Order Entry Ports assigned to each Member or Service Bureau as of the first of each month.

# 2. <u>Statutory Basis</u>

IEX believes that the proposed fees are consistent with the provisions of Section  $6(b)^{37}$  of the Act in general and further the objectives of Section  $6(b)(4)^{38}$  of the Act, in particular, in that they are 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 changes promote just and equitable principles of trade and will not be unfairly discriminatory, consistent with the objectives of Section  $6(b)(5)^{39}$  of the Act.

The Exchange believes that the information provided herein to justify the proposed fees meets or exceeds the amount of detail required in respect of proposed fee changes under the Act, as well as the amount of detail required by the Commission in its review of similar fee filings by

<sup>&</sup>lt;sup>37</sup> 15 U.S.C. 78f(b).

<sup>&</sup>lt;sup>38</sup> 15 U.S.C. 78f(b)(4).

<sup>&</sup>lt;sup>39</sup> 15 U.S.C. 78f(b)(5).

other exchanges<sup>40</sup> and is also consistent with Staff Guidance<sup>41</sup> on such filings. Accordingly, the Exchange believes that the proposed fees are consistent with the Act because they: (i) are reasonable, equitably allocated, not unfairly discriminatory, do not create an undue burden on competition; (ii) are consistent with prior Commission action on other exchanges' fee filings and the Staff Guidance; and (iii) are supported by evidence (including the revenue and cost data and analysis detailed below) that they are fair and reasonable and will not result in excessive pricing or supra-competitive profit.

As discussed in the Purpose section and in IEX's Port and Market Data Fee Filings, 42 IEX believes that exchanges, in setting fees of all types, should meet high standards of transparency to demonstrate why each new fee or fee amendment meets the requirements of the Act that fees be reasonable, equitably allocated, not unfairly discriminatory, and not create an undue burden on competition among market participants. The Exchange believes this high standard is especially important when an exchange imposes various fees for market participants to access an exchange's marketplace.

In the Staff Guidance, the Commission Staff stated that, "[a]s an initial step in assessing the reasonableness of a fee, staff considers whether the fee is constrained by significant competitive forces." IEX believes that as a general matter, physical and logical connectivity fees cannot be sufficiently justified based on unproven assumptions about competition, notwithstanding that a newer and/or smaller securities exchange, such as IEX, may be less able to set prices for its physical and logical connectivity free of constraint by significant competitive

Specifically, the Commission allowed fee filings by MIAX Pearl and MEMX to remain effective by not suspending them within 60 days of filing, see supra note 16.

See Staff Guidance, supra note 25.

See Port Fee Filing, supra 10; IEX Market Data Fee Filing, supra note 15.

See Staff Guidance, supra note 25.

forces than may be the case for more established securities exchanges.

The Staff Guidance further stated that, "... even where an SRO cannot demonstrate, or does not assert, that significant competitive forces constrain the fee at issue, a cost-based discussion may be an alternative basis upon which to show consistency with the Exchange Act." Thus, similar to fee proposals submitted by other exchanges, 1 EX has not determined its proposed physical and logical connectivity fees based on assumptions about market competition, instead relying upon a cost-based model to determine a reasonable fee structure that is informed by the extent to which demand for each product drives IEX's overall costs. In this context, IEX believes the proposed fees overall are fair and reasonable as a form of cost recovery because they are designed to offset a portion of IEX's costs with a limited possibility of a reasonable return in excess of IEX's aggregate costs of offering physical and logical connectivity, if actuals differ from projections. 16

### **Cost Analysis**

In general, the Exchange 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 that fees be reasonable, equitably allocated, not unfairly discriminatory, and not create an undue burden on competition among members and markets. In particular, the Exchange believes that the proposed fees meet the standards of the Exchange Act based on the relationship of the fees to related costs and

<sup>44 &</sup>lt;u>See Staff Guidance, supra</u> note 25.

See supra note 16.

IEX has not sought to justify the proposed fees solely on the basis that fees of the same type are constrained by competition. To the extent that the Commission later determines that exchange fees for market data, technology, or other technology products in general may be justified on the basis that they are effectively constrained by market competition, IEX reserves the right in future filings to use competition analysis as an independent basis to show why particular fees meet the requirements of the Exchange Act.

to IEX's business objectives, without needing to rely on a market competition analysis.

In proposing to charge fees for physical connectivity and increase fees for Order Entry Ports, the Exchange assessed those fees in a transparent way against its own aggregate costs of providing each service, as well as the impact on Members and other Connectivity Subscribers – both generally and in relation to other Members and Connectivity Subscribers, i.e., to reasonably assure the fee will not create an undue financial burden or impact on particular participants, smaller Members or Connectivity Subscribers, or competition among Members and other Connectivity Subscribers in general. The Exchange believes that this level of transparency is appropriate as a way of demonstrating that the fees meet the requirements of Section 19(b)(1) under the Act<sup>47</sup>, and Rule 19b-4 thereunder<sup>48</sup>, with respect to the types of information exchanges should provide when filing fee changes, and Section 6(b) of the Act<sup>49</sup>, which requires, among other things, that exchange fees be reasonable and equitably allocated 50, not designed to permit unfair discrimination<sup>51</sup>, and that they not impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Act.<sup>52</sup> 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.<sup>53</sup>

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<sup>&</sup>lt;sup>47</sup> 15 U.S.C. 78s(b)(1).

<sup>&</sup>lt;sup>48</sup> 17 CFR 240.19b-4.

<sup>&</sup>lt;sup>49</sup> 15 U.S.C. 78f(b).

<sup>&</sup>lt;sup>50</sup> 15 U.S.C. 78f(b)(4).

<sup>&</sup>lt;sup>51</sup> 15 U.S.C. 78f(b)(5).

<sup>&</sup>lt;sup>52</sup> 15 U.S.C. 78f(b)(8).

See Staff Guidance, supra note 25. The Exchange notes that other newer entrants to the equities exchange marketplace ("non-legacy exchanges") have asserted that the Commission has historically applied different standards of transparency and accountability in evaluating whether their fee filings, as compared to fee filings by larger incumbent exchanges ("legacy exchanges"), satisfied the Act's requirements. See e.g., MIAX Connectivity Fee Filing, supra note 16.

As detailed below, the Exchange recently calculated its aggregate annual costs for providing physical connectivity at \$12,904,100 (or approximately \$1,075,342 per month for physical connectivity costs, rounded to the nearest dollar when dividing the combined annual cost by 12 months). The Exchange also recently calculated its aggregate annual costs for providing Order Entry Ports at \$5,924,000 (or approximately \$493,667 per month for Order Entry Port costs, rounded to the nearest dollar when dividing the combined annual cost by 12 months). In order to cover a portion of the aggregate costs of providing physical and logical connectivity to its Connectivity Subscribers and Port Subscribers, respectively, the Exchange proposes to modify its Fee Schedule as described above.

In connection with this fee filing, the Exchange recently conducted a cost analysis to determine the Exchange's costs associated with providing physical and logical connectivity to the Exchange ("2024 Cost Analysis"). This 2024 Cost Analysis, similar to analyses performed by MIAX Pearl and MEMX in their connectivity fee filings<sup>54</sup>, included a comprehensive, wholistic, detailed analysis of the Exchange's aggregate baseline costs, including a determination and allocation of costs for core services provided by the Exchange – trading and routing, market data, physical connectivity, and logical ports (which provide order entry, cancellation and modification functionality, risk functionality, the ability to receive drop copies, and other functionality). The Exchange separately divided its costs between those costs necessary to deliver each of these core services, including infrastructure, software, human resources, and certain general and administrative expenses ("cost drivers"). <sup>55</sup>

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See supra note 16.

IEX previously conducted cost analyses in 2019 in connection with charging for Order Entry Ports and in 2021 in connection with charging for market data. The 2024 Cost Analysis is a more comprehensive analysis that incorporates all expenses related to providing core Exchange services and is also consistent

The 2024 Cost Analysis specifies how hardware, software, vendor, and human resources costs were allocated for trading and routing, market data, physical connectivity, and logical ports, and identified an annual dollar cost for each line item in each category. The Exchange adopted an allocation methodology with transparent and consistently applied principles to guide how much of a particular cost amount should be allocated to each core service. As set forth below, the cost allocation process is then applied to each of the cost drivers. For instance, fixed infrastructure costs that are not driven by client activity (e.g., message rates), such as data center costs, were allocated more heavily to the provision of physical connectivity (54% of fixed infrastructure costs were allocated to physical connectivity, with smaller allocations to Order Entry Ports (6%), and the remainder to the provision of other connectivity, other ports, transaction execution, and market data services (40%). After adopting this allocation methodology, the Exchange then applied an allocation of each cost driver to each core service, resulting in the cost allocations described below.

By allocating segmented costs to each core service, the Exchange estimates by core service the potential positive or negative margins it might earn based on different fee models. As a non-listing venue, the Exchange has only several potential sources of revenue that it can use to fund its operations: transaction fees, fees for physical connectivity and port services, membership fees, regulatory fees, and market data fees. The Exchange does not charge membership or regulatory fees. Moreover, as a general matter, each of these sources of revenue is based on services that are interrelated. For instance, trading and routing obviously necessitates that Users have physical and logical connectivity to send

with the cost analyses described by MIAX Pearl and MEMX in their filings.

All allocation percentages discussed herein, were rounded up or down to the nearest whole number.

orders to IEX. Given this interrelationship, the allocation of costs to each service and the relative weighting of such costs depends on the exercise of reasonable judgment by the Exchange. While there is no standardized and generally accepted methodology for the allocation of an exchange's costs across different products and services, the Exchange's methodology is the result of an extensive review and analysis, transparently applied, and IEX believes this methodology provides a more than ample basis to justify the proposed fees, particularly in light of the adoption of similar or much larger fees by other exchanges<sup>57</sup> with minimal or no cost analysis. Through the Exchange's extensive 2024 Cost Analysis, the Exchange analyzed each expense category in the Exchange's general expense ledger to determine whether and how to allocate such expense to the provision of physical and/or logical connectivity as appropriate.

Costs Related to Offering Physical Connectivity to the Primary Data Center, the Disaster Recovery Data Center and the ITF.

The following charts detail the costs considered by the Exchange to be related to offering physical connectivity to the Primary Data Center, Disaster Recovery Data Center, and ITF, each via an unshared network as well as the percentage of the Exchange's overall costs that such costs represent for each cost driver (e.g., as set forth below, the Exchange allocated 14% of its overall Human Resources cost to offering physical connectivity to the Primary Data Center, Disaster Recovery Data Center, and ITF).

Primary Data Center, Disaster Recovery Data Center, and ITF				
COST DRIVERS	ALLOCATED	ALLOCATED	% OF	
	ANNUAL	MONTHLY	COST	
	COST <sup>a</sup>	COST <sup>b</sup>	DRIVER	
Human Resources	\$7,475,449	\$622,954	14%	

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See infra notes 71 and 72.

Primary Data Center, Disaster Recovery Data Center, and ITF				
COST DRIVERS	ALLOCATED	ALLOCATED	% OF	
	ANNUAL	MONTHLY	COST	
	COST <sup>a</sup>	COST <sup>b</sup>	DRIVER	
Connectivity (external	\$0	\$0	0%	
fees, cabling,				
switches, etc.)				
External Market Data	\$0	\$0	0%	
Data Center	\$2,721,667	\$226,806	71%	
Hardware and	\$1,244,888	\$103,741	37%	
Software				
Maintenance and				
Licenses and				
Internet Services				
Depreciation	\$88,132	\$7,344	7%	
Allocated Shared	\$1,373,962	\$114,497	8%	
Expenses				
TOTAL	\$12,904,100	\$1,075,342	15%	

<sup>&</sup>lt;sup>a</sup> The Annual Cost includes figures rounded to the nearest dollar.

The following are additional details regarding each of the cost drivers considered by the Exchange to be related to offering physical connectivity to the Primary Data Center, Disaster Recovery Data Center and the ITF.

#### Human Resources

The Exchange notes that IEX Group, Inc. ("IEXG") (the parent company of the Exchange) had 68 employees who were fully dedicated to Exchange functions and 59 employees who performed some functions on behalf of the Exchange as of February 29, 2024. Each department leader has direct knowledge of the time spent by each employee with respect to the various tasks necessary to operate the Exchange. The estimates of Human Resources cost were therefore determined by consulting with such department leaders, determining which employees are involved in tasks related to providing physical connectivity, and confirming that the proposed allocations were reasonable based on an understanding of the percentage of their time such

<sup>&</sup>lt;sup>b</sup> The Monthly Cost was determined by dividing the Annual Cost for each line item by twelve (12) months and rounding up or down to the nearest dollar.

employees devote to such tasks, as well as to other exchange services. This process ensures that every employee is 100% allocated, with no double counting of employee time across different categories of exchange services. For shared services employee costs, the Exchange first allocated a percentage of the shared services employees from IEXG to the Exchange. This allocation was based on an assessment during the company's annual budget process by IEXG's management and Finance teams on how the shared services functions support the IEXG's different businesses. This assessment resulted in 75% of the shared services employees' costs being allocated to the Exchange. For the 2024 Cost Analysis, the Exchange calculated an average of the direct and ancillary employees time devoted to physical connectivity (approximately 14%) and applied the 14% average to each shared services department's employee costs. This rate was deemed appropriate for shared services employees as these functions operate to support the direct and ancillary functions. Overall, employee costs, as allocated, were calculated using a blended rate of compensation reflecting salary, equity and bonus compensation, benefits, payroll taxes, and 401(k) matching contributions and totaled 14% of Exchange Human Resources expenses. 58

Specifically, the Exchange calculated an allocation of employee time for employees whose functions include providing and maintaining physical connectivity and performance thereof, specifically Data Engineering, Network Engineering, Software Development Engineer and Test/Quality Assurance, Software Engineering, System Reliability Engineering, and Technology Project Management. The Exchange also allocated Human Resources costs to the provision of physical connectivity to a limited subset of employees with ancillary functions

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The 14% average allocation applied to shared services employees represents an average of the time that the direct and ancillary employees spend on physical connectivity. The 14% overall Human Resource allocation represents the total of the direct, ancillary and shared services employees cost allocations to physical connectivity. While the number is coincidentally the same for this allocation, the overall total represents a different calculation in that the components attributable to direct and ancillary employees reflect variations in individual employee compensation and time spent on physical connectivity.

related to establishing and maintaining such physical connectivity, specifically Business

Analytics, Business Development, Business Operations, Market Operations, Market Policy,

Product, Quantitative Research and Regulation. In addition, the Exchange allocated Human

Resources costs to employees in groups providing shared services that thereby support physical
connectivity, specifically Marketing, Office Management, Human Resources, Finance &

Accounting, Information Security, Legal, Risk, Government Relations, senior level executives,
and Compliance employees.

For employees that have direct or ancillary functions related to physical connectivity, the estimates of Human Resources cost were determined by consulting with applicable department leaders, who determined which employees are involved in tasks related to providing physical connectivity, and provided reasonable allocations based on an estimate of the percentage of time such employees devote to those tasks. Employees from these departments perform numerous functions to support physical connectivity, such as the installation, re-location, configuration, and maintenance of connections and the hardware they access. This hardware includes servers, routers, switches, firewalls, and monitoring devices. These employees also perform software upgrades, vulnerability assessments, remediation and patch installs, equipment configuration and hardening, as well as performance and capacity management. Further, these employees engage in research and development analysis for equipment and software supporting physical connectivity and design, provide regulatory oversight, and support the development and on-going maintenance of internally developed applications as well as data capture and analysis, and Member and internal Exchange reports related to network and system performance. The above list of employee functions is not exhaustive of all the functions performed by Exchange employees to support physical connectivity, but it illustrates the breath of functions those

employees perform in support of the above cost and time allocations.

Last, the Exchange notes that its Human Resources costs associated with physical connectivity have increased in recent years as the Exchange engaged in a several-years-long initiative to upgrade its system infrastructure and trading system, as discussed in the Purpose section. Thus, employees are allocated to work on various business initiatives and enhancements to support the Exchange's business, add new functionality, and expand its product offerings. These technology changes directly impact the Exchange's interface specifications and matching engine which, in turn, impacts physical connectivity by requiring additional coding, testing, and other updates necessary to accommodate the above initiatives.

## Connectivity (external fees, cabling, switches,)

The Exchange did not allocate costs for physical connectivity to external markets to receive market data to the provision of physical connectivity. As discussed below, a portion of such costs (as well as market data fees paid to external markets) were allocated to logical access as such market data is necessary for IEX to offer certain services related to such connectivity, such as certain risk checks that are performed prior to execution, and checking for other conditions (e.g., limit order price protection, trading collars, aggregate and net notional risk checks, LULD bands).

#### External Market Data

The Exchange did not allocate external market data fees to the provision of physical connectivity. As discussed below, a portion of such fees were allocated to logical access, as such market data is necessary for IEX to offer certain services related to such connectivity, such as certain risk checks that are performed prior to execution, and checking for other conditions (e.g., limit order price protection, trading collars, aggregate and net notional risk checks, LULD

bands).

#### Data Center

Data Center costs include the costs the Exchange incurs to provide physical connectivity in the third-party data centers where it maintains its equipment (such as dedicated space, security services, cooling and power). The Exchange does not own the Primary Data Center or the Disaster Recovery Data Center, but instead, leases space in data centers operated by third parties. The Exchange has allocated a high percentage of the Data Center costs (71%) to physical connectivity because the third-party data centers and the Exchange's physical equipment contained therein is the most direct cost in providing physical access to the Exchange. In other words, for the Exchange to operate in a dedicated space with connectivity by market participants to a trading platform, costs to operate in the data centers are tangible costs that are directly related to its ability to offer physical connectivity to market participants.

## Hardware and Software Maintenance and Licenses and Internet Services

Hardware and Software Licenses and Internet Services includes hardware and software licenses used to operate and monitor physical assets necessary to offer physical connectivity to the Exchange, such as integrated development environments, data visualization applications for building monitoring and real time analytic dashboards, knowledge management services and release management software. IEX allocated 37% of Exchange Hardware and Software Maintenance and Licenses and Internet Services expenses to the provision of physical connectivity.

#### <u>Depreciation</u>

All physical assets, software, and hardware used to provide physical connectivity, which also includes assets used for testing and monitoring of Exchange infrastructure, were valued at

cost, and depreciated over three years. In general, the Depreciation costs overall relate to hardware necessary to operate the Exchange, some of which are owned by the Exchange and some of which are leased by the Exchange to allow efficient periodic technology refreshes. The Exchange also included in the Depreciation cost driver certain budgeted improvements that the Exchange intends to capitalize and depreciate with respect to physical connectivity in the near-term. As with the other allocated costs in the Exchange's 2024 Cost Analysis, the Depreciation cost was narrowly tailored to depreciation related to physical connectivity. As noted above, the Exchange allocated 7% of its allocated depreciation costs to providing physical connectivity.

## **Allocated Shared Expenses**

Finally, as with other exchange products and services, a portion of general shared expenses was allocated to overall physical connectivity costs (8% of Exchange Allocated Shared Expenses). These general shared costs are integral to exchange operations, including its ability to provide physical connectivity. Costs included in general shared expenses include office space and office expenses (e.g., occupancy and overhead expenses), utilities, recruiting and training, marketing and advertising costs, professional fees for legal, tax and accounting services (including external and internal audit expenses), and telecommunications. These general shared expenses are incurred by the Exchange's parent company, IEXG, as a direct result of operating the Exchange. The Exchange allocated shared services costs in line with the average allocation rate for employees in the direct and ancillary categories (14%), consistent with the methodology used to allocate the cost of shared services employees as described above. <sup>59</sup> The Exchange believes it is reasonable to assign an allocation of shared expenses to physical connectivity, consistent with allocations for shared services employees, while continuing to ensure that such

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The 14% average allocation applied to applicable allocated shared expenses is based on the average of the time that the direct and ancillary employees spend on physical connectivity.

allocated expenses are not double counted when allocated to other products and services for which the Exchange charges fees. Separately, for other shared expenses related to the Exchange's regulatory obligations, such as fees paid to FINRA pursuant to a regulatory services agreement between the Exchange and FINRA, fees paid to the Depository Trust and Clearing Corporation, audit fees, and fees paid to Securities Information Processors, were allocated differently, less than 1% was allocated to the provision of physical connectivity. Thus, the Allocated Shared Expenses applied to offering physical connectivity totaled 8%.

# **Approximate Monthly Cost**

After determining the approximate allocated monthly cost related to physical connectivity, the total monthly cost for physical connectivity to the Primary Data Center, Disaster Recovery Data Center, and ITF of \$1,075,342 was divided by the number of Primary Data Center physical connections the Exchange maintained (because Disaster Recovery Center and ITF connectivity is included with each connection to the Primary Data Center) as of February 29, 2024 (180 connections), to arrive at a cost of approximately \$5,974 per month, per physical 10G connection.

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## **Costs Related to Offering Order Entry Ports**

The following chart details the individual line-item costs considered by the Exchange to be related to offering Order Entry Ports as well as the percentage of the Exchange's overall costs such costs represent for such area (e.g., as set forth below, the Exchange allocated 8% of its overall Human Resources cost to offering Order Entry Ports).<sup>60</sup>

As described above, IEX is proposing to continue to not charge fees for the first five Order Entry Ports at the Primary Data Center assigned to any Port Subscriber, and to not charge fees for logical connectivity to the Disaster Recovery Data Center or ITF.

Order Entry Ports				
COST DRIVERS	ALLOCATED ANNUAL COST <sup>c</sup>	ALLOCATED MONTHLY COST <sup>d</sup>	% OF COST DRIVER	
Human Resources	\$4,227,561	\$352,297	8%	
Connectivity (external fees, cabling, switches, etc.)	\$161,051	\$13,421	5%	
External Market Data	\$141,035	\$11,753	8%	
Data Center	\$122,923	\$10,244	3%	
Hardware and Software Maintenance and Licenses and Internet Services	\$345,906	\$28,826	10%	
Depreciation	\$225,727	\$18,811	18%	
Allocated Shared Expenses	\$699,796	\$58,316	4%	
TOTAL	\$5,924,000	\$493,667	7%	

<sup>&</sup>lt;sup>c</sup> The Annual Cost includes figures rounded to the nearest dollar.

The following provides additional detail regarding each of the cost drivers considered by the Exchange to be related to offering Order Entry Ports.

## **Human Resources**

As noted above, IEXG (the parent company of the Exchange) had 68 employees who are fully dedicated to Exchange functions and 59 additional employees who perform some functions on behalf of the Exchange as of February 29, 2024. As discussed in the section on physical connectivity, each department leader has direct knowledge of the time spent by each employee with respect to the various tasks necessary to operate the Exchange. The estimates of Human Resources cost were therefore determined by consulting with applicable department leaders, who determined which employees are involved in tasks related to providing Order Entry Ports, and provided reasonable allocations based on an understanding of the percentage of their time such employees devote to such tasks. This process ensures that every employee is 100% allocated,

<sup>&</sup>lt;sup>d</sup> The Monthly Cost was determined by dividing the Annual Cost for each line item by twelve (12) months and rounding up or down to the nearest dollar.

with no double counting of employee time across different categories of exchange services. For shared services employee costs, the Exchange first allocated a percentage of the shared services employees from IEXG to the Exchange. This allocation was based on an assessment during the company's annual budget process by IEXG's management and Finance teams on how the shared services functions support IEXG's different businesses. This assessment resulted in 75% of the shared services employee's costs being allocated to the Exchange. The Exchange then allocated these costs to its core services, including logical ports in line with the average allocation rate for employees in the direct and ancillary categories. For the 2024 Cost Analysis, the Exchange calculated an average of the direct and ancillary employees time devoted to logical connectivity (7%) and applied the 7% average to each shared services department's employee costs. This rate was deemed appropriate for shared services employees as these functions operate to support the direct and ancillary functions. Overall, employee costs for employees in the direct, ancillary and shared services categories, as allocated, were calculated using a blended rate of compensation reflecting salary, equity and bonus compensation, benefits, payroll taxes, and 401(k) matching contributions and totaled 8% of Exchange Human Resources expenses. 61

Specifically, the Exchange calculated an allocation of employee time for employees whose functions include providing and maintaining Order Entry Ports and performance thereof, specifically Data Engineering, Network Engineering, Software Development Engineer and Test / Quality Assurance, Software Engineering, System Reliability Engineering, and Technology Project Management. The Exchange also allocated Human Resources costs to the provision of

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The 7% average allocation applied to shared services employees represents an average of the time that the direct and ancillary employees spend on logical Order Entry Ports. The 8% overall Human Resource allocation represents the total of the direct, ancillary and shared services employees cost allocations to logical connectivity. The overall total represents a different calculation than the average allocation in that the components attributable to direct and ancillary employees reflect variations in individual employee compensation and time spent on logical connectivity.

Order Entry Ports to a limited subset of employees with ancillary functions related to establishing and maintaining such connectivity, specifically Business Analytics, Business Development, Business Operations, Market Operations, Market Policy, Product, Quantitative Research and Regulation. In addition, the Exchange allocated Human Resources costs to employees in groups providing shared services that thereby support Order Entry Ports, specifically Marketing, Office Management, Human Resources, Finance & Accounting, Information Security, Legal, Risk, Government Relations, senior level executives, and Compliance employees.

For employees that have direct or ancillary functions related to Order Entry Ports, the estimates of Human Resources cost were determined by consulting with applicable department leaders, who determined which employees are involved in tasks related to providing logical connectivity, and provided reasonable allocations based on an estimate of the percentage of time such employees devote to those tasks. Employees from these departments perform numerous functions to support logical connectivity, such as the installation, re-location, configuration, and maintenance of connections and the hardware they access. This hardware includes servers, routers, switches, firewalls, and monitoring devices. These employees also perform software upgrades, vulnerability assessments, remediation and patch installs, equipment configuration and hardening, and performance and capacity management. Further, these employees engage in research and development analysis for equipment and software supporting logical connectivity and design, provide regulatory oversight, and support the development and on-going maintenance of internally developed applications as well as data capture and analysis, and Member and internal Exchange reports related to network and system performance. The above list of employee functions is not exhaustive of all the functions performed by Exchange

employees to support logical connectivity, but it illustrates the breath of functions those employees perform in support of the above cost and time allocations.

Last, the Exchange notes that its Human Resources costs associated with logical connectivity have increased in recent years as the Exchange engaged in a several-years-long initiative to upgrade its system infrastructure and trading platform, as discussed in the Purpose section. Thus, employees are allocated to work on various business initiatives and enhancements to support the Exchange's business, add new functionality, and expand its product offerings. These technology changes directly impact the Exchange's interface specifications and matching engine which, in turn, impacts logical connectivity by requiring additional coding, testing, and other updates necessary to accommodate the above initiatives.

# Connectivity (external fees, cabling, switches, etc.)

The Connectivity cost driver includes external fees paid to connect to other exchanges, cabling, and switches. The Connectivity cost driver includes external fees paid to connect to other exchanges and third parties, along with other cable and switch infrastructure required to operate the Exchange. The Connectivity cost driver is narrowly focused on technology used to complete connections on the Exchange and to connect to external markets. The Exchange requires connectivity to external markets to enable it to receive market data to run the Exchange's matching engine (and make routing decisions for its affiliated routing broker, IEX Services, LLC, pursuant to IEX Rule 2.220) and basic operations compliant with existing regulations, primarily Regulation NMS. The Exchange allocated 5% of such costs (as well as market data fees paid to external markets) to logical access as such market data is necessary for IEX to offer certain services related to such connectivity, such as certain risk checks that are performed prior to execution, and checking for other conditions (e.g., limit order price

protection, trading collars, and aggregate and net notional risk checks, LULD bands).

#### External Market Data

External Market Data includes fees paid to third parties, including other exchanges, to receive and consume market data from other markets. The Exchange includes a portion of External Market Data fees to the provision of Order Entry Ports as such market data is also necessary to offer certain services related to such connectivity, such as certain risk checks that are performed before an order enters the matching engine (e.g., validating orders against the national best bid and national best offer, trading collars, whether a symbol is halted or subject to a short sale circuit breaker). Thus, as market data from other exchanges is consumed at the port level to validate orders before additional processing occurs with respect to such orders, the Exchange believes it is reasonable to allocate a limited proportion of such costs to Order Entry Ports (8% of Exchange External Market Data expenses).

#### Data Center

Data Center costs include the costs the Exchange incurs to provide logical connectivity in the third-party data centers where it maintains its equipment (such as rent for dedicated space, security services, cooling and power). The Exchange does not own the Primary Data Center or the Disaster Recovery Data Center, but instead, leases space in data centers operated by third parties. The Exchange has allocated a portion of the Data Center cost to logical access ports based on its reasonable assessment (3% of Data Center expenses).

# <u>Hardware and Software Maintenance and Licenses and Internet</u> Services

Hardware and Software Licenses include hardware and software licenses used to monitor the health of the order entry services provided by the Exchange, as described above. The Exchange uses a third-party vendor to provide the initial logical order entry port configurations,

which have been extensively customized by Exchange employees. Internet Services relate to the Internet Service Provider vendor that is used to monitor and administer the order entry port sessions. The Exchange allocated 10% of Hardware and Software Maintenance and Licenses and Internet Services expenses to the provision of Order Entry Ports based upon its reasonable assessment.

## **Depreciation**

As noted above, the software the Exchange uses to provide Order Entry Ports is licensed from a third-party service provider, although it has been significantly customized by in-house employees. Related costs include both development work, as well as quality assurance and testing to ensure the software works as intended. These costs are depreciated over time once the software is activated in the production environment. Hardware used to provide Order Entry Ports includes equipment used for testing and monitoring of order entry infrastructure and other physical equipment the Exchange purchased and is also depreciated over time.

All hardware and software, which also includes assets used for testing and monitoring of order entry infrastructure, were valued at cost and depreciated or leased over a three-year period. Thus, the depreciation cost primarily relates to servers necessary to operate the Exchange, some of which is owned by the Exchange and some of which is leased by the Exchange in order to allow efficient periodic technology refreshes. The Exchange allocated 18% of Exchange Depreciation expenses to the provision of Order Entry Ports based upon its reasonable assessment.

#### Allocated Shared Expenses

Finally, as with other exchange products and services, a portion of general shared expenses was allocated to overall logical connectivity costs (4% of Exchange Allocated Shared

Expenses). These general shared costs are integral to exchange operations, including its ability to provide logical connectivity. Costs included in general shared expenses include office space and office expenses (e.g., occupancy and overhead expenses), utilities, recruiting and training, marketing and advertising costs, professional fees for legal, tax and accounting services (including external and internal audit expenses), and telecommunications. These general shared expenses are incurred by the Exchange's parent company, IEXG, as a direct result of operating the Exchange. The Exchange allocated shared services costs in line with the average allocation rate for employees in the direct and ancillary categories (7%), consistent with the methodology used to allocate the cost of shared services employees as described above. 62 The Exchange believes it is reasonable to assign an allocation of shared expenses to logical Order Entry Ports, consistent with allocations for shared services employees, while continuing to ensure that such allocated expenses are not double counted when allocated to other products and services for which the Exchange charges fees. Separately, for other shared expenses related to the Exchange's regulatory obligations, such as fees paid to FINRA pursuant to a regulatory services agreement between the Exchange and FINRA, fees paid to the Depository Trust and Clearing Corporation, audit fees, and fees paid to Securities Information Processors, were allocated differently, less than 1% was allocated to the provision of logical connectivity. Thus, the Allocated Shared Expenses applied to offering physical connectivity totaled 4%.

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## **Approximate Monthly Cost**

The total monthly cost allocated to logical ports of \$493,667 was divided by the number of chargeable Order Entry Ports the Exchange maintained at the time that proposed pricing was

The 7% average allocation applied to applicable allocated shared expenses is based on the average of the time that the direct and ancillary employees spent on logical connectivity.

determined<sup>63</sup> (1,161), to arrive at a cost of approximately \$425 per month, per chargeable Order Entry Port (rounded to the nearest dollar when dividing the approximate monthly cost by the number of Order Entry Ports).

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# <u>Cost Analysis – Additional Discussion</u>

In conducting its 2024 Cost Analysis, the Exchange did not generally allocate any overall expense category in full to any core services (including physical connectivity or logical Order Entry Ports) and did not double-count any expenses. Instead, as described above, the Exchange allocated applicable cost drivers across its core services. For instance, in calculating the Human Resources expenses to be allocated to physical connections based upon the methodology described above, the Exchange allocated network infrastructure employees with a high percentage of the cost of such employees (75%) to physical connectivity given their focus on functions necessary to provide physical connections. The compensation of those same employees was allocated 20% to Order Entry Ports, and the remaining 5% was allocated to trading and routing, market data, and other Exchange functions. For ancillary employees, who work closely with and support network infrastructure employees, the Exchange allocated a smaller percentage of 8% for physical connectivity and 4% for Order Entry Ports, with the remaining 88% allocated to trading and routing, market data, and other core services provided by the Exchange. For shared services employees, the Exchange allocated costs across a wider range of employee groups pursuant to the allocation methodology described above resulting in an allocation of 14% to physical connectivity, 8% to Order Entry Ports, and 78% to trading and routing, market data,

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The Exchanges' costs for providing logical connectivity include the costs of providing logical connectivity for which the Exchange charges no fees (i.e., free logical connectivity to its Disaster Recovery Data Center or its ITF, as well as up to five free Order Entry Ports to its Primary Data Center to Port Subscribers). See supra note 60. Thus the total number of assigned Order Entry Ports figure includes more ports than the total number of ports for which the Exchange charges any fees.

and other core services provided by the Exchange.

In total, the Exchange allocated 14% of its Human Resources costs to providing physical connectivity and 8% of its Human Resources costs to providing Order Entry Ports, for a total allocation of 22% of its Human Resources expense to provide these specific connectivity services. In turn, the Exchange allocated the remaining 78% of its Human Resources expense toward the cost of providing trading and routing, market data and other core services provided by the Exchange.

The Exchange allocated depreciation expense to all core services, including physical connections and Order Entry Ports, but in different amounts. The Exchange believes it is reasonable to allocate the identified portion of such expense because such expense includes the actual cost of the computer equipment, such as dedicated servers, computers, laptops, monitors, information security appliances and storage, and network switching infrastructure equipment, including switches and taps that were purchased to operate and support the network. Without this equipment, IEX would not be able to operate the Exchange and provide connectivity services to its Members and Sponsored Participants. The Exchange allocated 25% of overall depreciation and amortization expense to connectivity services (7% attributed to physical connectivity and 18% to Order Entry Ports). The Exchange allocated the remaining depreciation and amortization expense (75%) toward the cost of providing trading and routing, market data, and other Exchange functions.

The Exchange's revenue estimates described herein are based on projections for physical connectivity and Order Entry Ports and will only be realized to the extent such revenue streams actually produce the revenue estimated. The Exchange does not yet know whether such expectations will be realized. For instance, in order to generate the revenue expected from

connectivity, the Exchange will have to be successful in retaining existing clients that wish to maintain physical connectivity and/or Order Entry Ports or in obtaining new clients that will purchase such services.

The 2024 Cost Analysis is based on the Exchange's 2024 fiscal year of operations and projections. It is possible, however, that actual costs may be higher or lower. To the extent the Exchange sees growth in use of connectivity services, it will receive additional revenue to offset current costs and future cost increases.

However, if use of connectivity services is static or decreases, the Exchange might not realize the revenue that it anticipates or needs in order to offset applicable costs as projected and described herein. In the event revenues fail to cover future costs and a reasonable mark-up of such costs (potential future markup of such costs), the Exchange may later propose to increase related fees. Similarly, the Exchange may propose to decrease fees in the event that revenue materially exceeds our current projected costs. In addition, the Exchange 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-current fees are becoming dislocated from the prior cost-based analysis) and would propose to increase fees in the event that revenues fail to cover its costs, or decrease fees in the event that revenue or the mark-up materially exceeds our current projected costs so that it would constitute excessive pricing or a supra-competitive profit. In the event that the Exchange determines to propose a fee change, the results of a timely review, including an updated cost estimate, will be included in the rule filing proposing the fee change. More generally, the Exchange believes that 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 the Exchange commits

to do so.

#### Projected Revenue

The proposed fees will allow the Exchange to cover certain costs incurred by the Exchange associated with providing and maintaining necessary hardware and other network infrastructure as well as network monitoring and support services. Without such hardware, infrastructure, monitoring and support, the Exchange would be unable to provide the physical connectivity and Order Entry Port services required by Connectivity Subscribers and Port Subscribers.

The Exchange routinely works to improve the performance of the network's hardware and software. The costs associated with maintaining and enhancing a state-of-the-art exchange network is a significant expense for the Exchange, and thus the Exchange believes that it is reasonable and appropriate to offset a portion of those costs, with a limited potential return in excess of such costs if actuals differ from projections, by adopting and increasing fees for connectivity services. Costs in this category enable the Exchange, for example, to measure network performance with nanosecond granularity and allow the Exchange to continuously improve network performance, based on Connectivity Subscribers' needs and expectations.

As detailed above, the Exchange has five primary sources of revenue that it can potentially use to fund its operations: transaction fees, fees for connectivity services, membership and regulatory fees (which the Exchange does not charge), and market data fees. Accordingly, the Exchange must cover its expenses from these five primary sources of revenue.

The Exchange's 2024 Cost Analysis estimates the 2024 annual cost to provide physical connectivity will be \$12,904,100. These costs include costs to provide physical connectivity at IEX's Primary Data Denter, Disaster Recovery Data Center, and ITF. Based on current usage

(i.e., that all current Connectivity Subscribers pay fees as proposed to maintain existing physical connectivity), the Exchange estimates that it would generate annual revenue of approximately \$8,640,000, that would cover 67% of such costs. The cost recovery would vary from this estimate if actual usage were more or less than current usage.

The Exchange's 2024 Cost Analysis estimates the 2024 annual cost to provide Order Entry Ports services will be \$5,924,000. Based on current usage, the Exchange estimates that would generate annual revenue of approximately \$3,483,000, that would cover 59% of such costs. <sup>64</sup> The cost recovery would vary from this estimate if actual usage were more or less than current usage.

Based on the above discussion, IEX believes that the proposed fees are fair and reasonable because they are reasonably related to the associated costs of providing products and services and will not result in excessive pricing, or supra-competitive profit. To the contrary, the proposed fees are expected to only provide a partial recovery of its costs to provide physical and logical connectivity. Further, the proposed fees are comparable to, or lower than, similar fees for similar products charged by competing exchanges. For example, for physical connectivity to the Primary Data Center which would include physical connectivity at the Disaster Recovery Data Center and the ITF, the Exchange proposes a lower monthly fee (\$4,000) than the monthly fees charged by MIAX Pearl (\$8,000), MEMX (\$6,000), and Cboe EDGA (\$8,500) for just their 10G connections to their primary data centers. 65 Moreover, IEX is not proposing to charge additional

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For comparison, <u>see MEMX</u> Connectivity Fees Filing, Securities Exchange Act Release No. No. 95936 (September 27, 2022), 87 FR 59845, 59851 (October 3, 2022) (SR-MEMX-2022-26) (proposing to adopt fees for connectivity and stating that MEMX would earn approximately 8% markup).

See MIAX Pearl Equities Exchange Fee Schedule as of May 1, 2024, available at <a href="https://www.miaxglobal.com/sites/default/files/fee\_schedule-files/MIAX\_Pearl\_Equities\_Fee\_Schedule\_05012024.pdf">https://www.miaxglobal.com/sites/default/files/fee\_schedule-files/MIAX\_Pearl\_Equities\_Fee\_Schedule\_05012024.pdf</a>; MEMX Connectivity Fee Schedule, available at <a href="https://info.memxtrading.com/connectivity-fees/">https://info.memxtrading.com/connectivity-fees/</a>; Cboe U.S. Equities Fee Schedule, EDGA Equities, available at <a href="https://www.cboe.com/us/equities/membership/fee\_schedule/edga/">https://www.cboe.com/us/equities/membership/fee\_schedule/edga/</a>.

fees for physical connectivity to its Disaster Recovery Data Center, while competing exchanges charge separately for such connectivity. Specifically, MIAX Pearl charges a monthly fee of \$3,000, MEMX charges a monthly fee of \$3,000, and Cboe EDGA charges a monthly fee of \$6,000 for their comparable 10G connections to their secondary data centers. 66 Similarly, the proposed increases to the logical port fees would continue to result in lower fees than those of IEX's competitors. Accordingly, the Exchange believes that this comparative analysis provides an additional layer of support for how its proposed fees meet the requirements of the Act in that they are lower than the fees charged by competing exchanges. 67

The Exchange believes it is appropriate and consistent with the Act to raise its fees, as proposed, to facilitate enhancements and upgrades to its technology, which are essential for it to continue to compete with other equities exchanges. The Exchange believes the proposed fees are reasonable because they are based on the extent to which each product drives the Exchange's overall costs, which recognizes that certain market participants ascribe certain market value to each such product, and the Exchange's objective to make access to its trading system broadly available to market participants.

The Exchange notes that its revenue estimates are based on projections and will only be realized to the extent customer activity produces the revenue estimated. The Exchange does not yet know whether such projections will be realized. For instance, in order to generate the revenue expected from physical connectivity as well as Order Entry Ports, the Exchange will need to be successful in retaining existing clients that wish to utilize its physical connectivity and Order

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See supra note 65.

However, even if the Exchange earns incrementally more revenue, the proposed fees are fair and reasonable because they would not result in excessive pricing or supra-competitive profit compared to other equities exchanges, based on the total expenses of the Exchange associated with providing physical connectivity and Order Entry Ports versus the total projected revenue of the Exchange associated with those services.

Entry Ports and/or obtaining new clients that will purchase such access. To the extent the Exchange experiences a net loss in Connectivity or Port Subscribers, the Exchange could experience a net reduction in revenue. In assessing an exchange's rule filing to adopt non-transaction fees based on a cost analysis, IEX believes that it is also relevant for the Commission to consider the extent to which the proposed fees are comparable to and competitive with similar fees charged by other exchanges in order to ensure that the regulatory oversight of comparable fees across exchanges is applied in a way that promotes fair and non-discriminatory intermarket competition.

The Proposed Pricing is not Unfairly Discriminatory and Provides for the Equitable Allocation of Fees, Dues, and other Charges

## **Physical Connectivity Fees**

IEX believes that its proposed physical connectivity fee of \$4,000 to connect to the Primary Data Center, which includes physical connectivity to the Disaster Recovery Data Center and ITF for no additional charge, is reasonable, fair and equitable, and not unfairly discriminatory because it is designed to align fees with the costs of services provided and will apply equally to all Members and other Connectivity Subscribers<sup>68</sup> with direct physical connectivity to the Exchange, and will minimize barriers to entry by providing high speed 10G connectivity at prices well below those offered by any other exchange. IEX believes that the cost-based fee of \$4,000 per month is low enough that it will not operate to restrain any subscriber's ability to maintain physical connectivity to the Exchange. These lower fees for 10G physical connectivity mean that even those firms which might maintain two or more physical connections to the Exchange will still pay considerably less than competing exchanges charge for equivalent physical connectivity. Further, the number of physical connections to the

As discussed above, the types of firms that might pay for physical connectivity to the Exchange are: Members, Service Bureaus, Data Recipients, and Extranet Providers.

Exchange will continue to be based on decisions by each firm, including the ability to reduce fees by reducing the number of physical connections to the Exchange.

The Exchange believes that charging \$4,000 for physical connectivity to the Exchange is fair and equitable, and not unfairly discriminatory because it will enable all Members (and other firms with physical connectivity) to obtain a 10G connection to IEX at prices well-below those of any other equity exchange, thereby encouraging order flow and liquidity from a diverse set of market participants, facilitating price discovery and the interaction of orders. IEX also notes that Connectivity Providers that determine they need two or more physical connections to the Exchange (generally because they generate relatively higher inbound message volume or need faster message throughput) thereby account for a disproportionate share of IEX's aggregate costs for providing physical connectivity. Therefore, IEX believes it is not unfairly discriminatory for such Members to pay a higher proportionate share of the physical connectivity fees by paying for each additional connection.

Accordingly, the Exchange believes that the fee will be applied consistently with its specific purpose – to offset a portion of its costs with a limited potential return in excess of such costs if actuals differ from projections.

The Exchange further believes that the proposed fees are reasonable, fair and equitable, and non-discriminatory because they will apply to all Connectivity Subscribers in the same manner and are not targeted at a specific type or category of market participant engaged in any particular trading strategy. All Members, Service Bureaus, Data Recipients, and Extranet Providers will pay the same "per unit" rate for physical connectivity to the Exchange. Further, the physical connectivity fee is not connected to volume-based tiers or dependent on executing a minimum volume of orders on IEX. All Connectivity Subscribers will be subject to the same fee

schedule, regardless of the volume sent to or executed on IEX. The fee also does not depend on any distinctions between Members, Service Bureaus, Data Recipients, and Extranet Providers. The fee will be assessed solely based on the number of physical connections a firm selects and not on any other distinction applied by IEX. While firms that send relatively more inbound messages to IEX may select two or more physical connections to the Exchange, thereby resulting in higher fees, that distinction is based on decisions made by each firm and the extent and nature of the firm's business on IEX rather than application of the fee by IEX. Members, Service Bureaus, Data Recipients, and Extranet Providers can determine how many physical connections they need to implement their trading or business strategies effectively.

IEX also believes that it is reasonable, equitable, and not unfairly discriminatory to base its billing for physical connectivity on the number of physical connections assigned to Members, Service Bureaus, Data Recipients, and Extranet Providers as of the first day of each month. IEX believes that this approach is fair because Members, Service Bureaus, Data Recipients, and Extranet Providers will have a reasonable understanding and expectation of the cutoff date for determining whether the firm requires one or more physical connections to the Exchange.

Furthermore, 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 will enable a broad range of Members, Service Bureaus, Data Recipients, and Extranet Providers to continue to physically connect to IEX, thereby facilitating the economically efficient execution of securities transactions on IEX, fair competition between and among such Members, Service Bureaus, Data

Recipients, and Extranet Providers, and the practicability of Members that are brokers executing investors' orders on IEX when it is the best market.

As discussed above, IEX believes the proposed fees are reasonable because they are equitable and not unfairly discriminatory, based on a thorough and transparent cost-based analysis as well as a comparison to similar fees charged by other exchanges, as detailed below. Moreover, the proposed fees would support IEX's ability to cover its costs (in whole or in part) to provide physical connectivity, with a limited potential return in excess of such costs if actuals differ from projections, and thereby invest in infrastructure, new products and other innovations, and competitively price transaction fees. These investments in the IEX's future growth are designed to enable IEX to attract additional business and build market share, with the benefit, inter alia, of attracting more displayed liquidity to the Exchange to the benefit of all market participants.

Finally, IEX does not believe that physical connectivity fees are properly constrained by competitive market pressures. Nevertheless, the Exchange believes that a competitive analysis of its proposed fees, as discussed below, also demonstrates that they are equitable and not unfairly discriminatory.

#### Logical Connectivity Fees

With respect to Order Entry Ports, IEX believes that its proposed fee is reasonable, fair and equitable, and not unfairly discriminatory because it is designed to align fees with the costs of services provided, will apply equally to all Members that are assigned Order Entry Ports (either directly or through a Service Bureau), and will minimize barriers to entry by continuing to provide all Port Subscribers with five free Order Entry Ports. Because the first five Order Entry Ports are free, a significant majority of Port Subscribers will not be subject to any fee. Even for

Port Subscribers that choose to maintain more than five Order Entry Ports, IEX believes that the cost-based fee of \$250 is low enough that it will not operate to restrain any Port Subscriber's ability to maintain the number of Order Entry Ports that it determines are consistent with its business objectives. The small number of Members projected to be subject to the highest fees will still pay considerably less than competing exchanges charge. For example, the monthly cost per order entry port on Nasdaq, NYSE, and Cboe EDGA is \$575, \$550, and \$550, respectively. <sup>69</sup> IEX further notes that NYSE and Nasdaq both charge for other logical ports that IEX will continue to offer for free, such as those used for testing and disaster recovery purposes. <sup>70</sup> Further, the number of assigned Order Entry Ports will continue to be based on decisions by each Port Subscriber, including the ability to reduce fees by discontinuing unused Order Entry Ports.

The Exchange believes that providing five free Order Entry Ports is fair and equitable, and not unfairly discriminatory because it will enable all Members and Service Bureaus to access IEX on those ports free of charge, thereby encouraging order flow and liquidity from a diverse set of market participants, facilitating price discovery and the interaction of orders. IEX continues to believe that five Order Entry Ports is an appropriate number to provide for free because it aligns with the number of such ports currently maintained by a meaningful majority of Port Subscribers. Port Subscribers with relatively higher inbound message volume also request (and are assigned) more Order Entry Ports than other Port Subscribers, which in turn means they account for a disproportionate share of IEX's aggregate costs for providing Order Entry Ports.

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<sup>69</sup> See Nasdaq Price List – Trading Connectivity, Logical Connectivity, https://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2#logicalconnectivity; NYSE Price List as of February 12, 20204, available at https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE\_Price\_List.pdf; and Cboe U.S. Equities Fee Schedule, EDGA Equities, available at https://www.cboe.com/us/equities/membership/fee schedule/edga/.

Nasdaq Price List – Trading Connectivity, Logical Connectivity, <a href="https://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2#logicalconnectivity">https://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2#logicalconnectivity</a>; NYSE Price List as of February 12, 20204, available at <a href="https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE">https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE</a> Price List.pdf;

Therefore, IEX believes it is not unfairly discriminatory for the Port Subscribers with higher inbound message volume to pay a higher proportionate share of the Order Entry Port fees.

Accordingly, the Exchange believes that the fee will be applied consistently with its specific purpose – to offset a portion its costs, with a limited potential return in excess of such costs if actuals differ from projections, encourage the efficient use of Order Entry Ports, and align fees with Port Subscribers' Order Entry Port and system usage.

The Exchange further believes that the proposed fees are reasonable, fair and equitable, and non-discriminatory because they will apply to all Members in the same manner and are not targeted at a specific type or category of market participant engaged in any particular trading strategy. All Members (or Service Bureaus) will receive five free Order Entry Ports and pay the same \$250 per Order Entry Port for each additional Order Entry Port. Each Order Entry Port is identical, providing logical connectivity to IEX on identical terms. While the proposed fee will result in a different effective "per unit" rate for different Members (or Service Bureaus) after factoring in the five free Order Entry Ports, the Exchange does not believe that this difference is material given the overall low fee of \$250 per Order Entry Port. Because the first five Order Entry Ports are free of charge, each entity will have a "per unit" rate of less than \$250. Further, the fee is not connected to volume-based tiers. All Members will be subject to the same fee schedule, regardless of the volume sent to or executed on IEX. The fee also does not depend on any distinctions between Members, customers, broker-dealers, or any other entity. The fee will be assessed solely based on the number of Order Entry Ports an entity selects and not on any other distinction applied by IEX. While entities that send relatively more inbound messages to IEX may select more Order Entry Ports, thereby resulting in higher fees, that distinction is based on decisions made by each Port Subscriber and the extent and nature of the Port Subscribers'

business on IEX rather than application of the fee by IEX. Members (and their Service Bureaus) can determine how many Order Entry Ports they need to implement their trading strategies effectively. As proposed, IEX will continue to offer multiple Order Entry Ports at a low fee to enable all Port Subscribers to purchase as many Order Entry Ports as their business needs dictate in order to optimize throughput and manage latency across the Exchange.

Notwithstanding that Port Subscribers with the highest number of Order Entry Ports will pay a greater percentage of the total projected fees than is represented by their Order Entry Port usage, IEX does not believe that the proposed fee is unfairly discriminatory. It is not possible to fully synchronize IEX's objective to provide five free Order Entry Ports to all Port Subscribers, thereby minimizing barriers to entry and incentivizing liquidity on the Exchange, with an approach that exactly aligns the projected per Port Subscriber fee with each Port Subscriber's number of requested Order Entry Ports. As proposed, IEX is providing a reasonable number of Order Entry Ports to each Member (or Service Bureau) without charge. Any variance between projected fees and Order Entry Port usage is attributable to objective differences among Members in terms of the number of Order Entry Ports they determine are appropriate based on their trading on IEX. Any difference in impact would be allocated to Port Subscribers with substantially higher trading volume.

IEX also believes that it is reasonable, equitable, and not unfairly discriminatory to base its billing for Order Entry Ports on the number of Order Entry Ports assigned to each User as of the first day of each month. IEX believes that this approach is fair because Members (and Service Bureaus) will have a reasonable understanding and expectation of the cutoff date for determining whether a User has more than five assigned Order Entry Ports.

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 will enable a broad range of IEX Members to continue to connect to IEX, 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.

As discussed above, IEX believes the proposed fees are reasonable because they are equitable and not unfairly discriminatory, based on a thorough and transparent cost-based analysis, as well as a comparison to similar fees charged by other exchanges, as detailed below. Moreover, the proposed fees would support IEX's ability to offset its costs (in whole or in part) to provide logical connectivity, with a limited potential return in excess of such costs if actuals differ from projections, and thereby invest in infrastructure, new products and other innovations, and competitively price transaction fees. These investments in the IEX's future growth are designed to enable IEX to attract additional business and build market share, with the benefit, inter alia, of attracting more displayed liquidity to the Exchange to the benefit of all market participants.

As discussed above, IEX does not believe that logical connectivity fees are properly constrained by competitive market pressures. Nevertheless, the Exchange believes that an analysis of similar fees charged by competitor exchanges, as discussed below, also demonstrates that the proposed fees are equitable and not unfairly discriminatory.

# The Proposed Fees Promote Competition by Offering a Lower Cost Solution

The Exchange believes the competing exchanges' physical connectivity and port fees are useful examples of alternative approaches to providing and charging for physical and logical connectivity. To that end, the Exchange believes the proposed fees are reasonable, in addition to being cost-based, because the proposed fees are less than fees charged for similar physical connectivity and logical order entry port access provided by other exchanges with comparable market shares. These fees are designed to recoup a portion of its costs for providing physical and logical connectivity, with a limited potential return in excess of such costs if actuals differ from projections, thereby enabling it to invest in competitive infrastructure and other offerings and compete with other equities exchanges. The following table demonstrates that the Exchange's proposed fees would be significantly less than fees charged for similar physical and logical connectivity provided by other exchanges with similar market share. Each of the physical or logical connectivity fees in place at competing exchanges listed below were filed with the Commission for immediate effectiveness and remain in place today.

Exchange	Type of	<b>Monthly Fee</b>
	Connection or	
	Port	
IEX	10G connection	\$4,000 per
(market share of 1.94% for the month of March 2024) <sup>e</sup>	to Primary Data	connection (as
	Center	proposed)
	10G connection	Included with
	to Disaster	10G
	Recovery Data	connection to
	Center	Primary Data
		Center (as
		proposed)
	Primary Data	1-5 ports:
	Center Logical	FREE
	Order Entry Ports	6 ports or
		more: \$250
		per port (as
		proposed)

Exchange	Type of	<b>Monthly Fee</b>
8	Connection or	·
	Port	
	All other logical	FREE
	ports (including	
	Drop Copy ports)	
MIAX Pearl Equities	1G connection to	\$2,500 per
(market share of 1.87% for the month of March 2024) <sup>e</sup>	primary/secondary	connectionfg
	data center	
	10G connection to	\$8,000 per
	primary/secondary	connectionf
	data center	
	1G connection to	\$1,000 per
	disaster recovery	connection <sup>th</sup>
	data center	
	1G [sic]	\$3,000 per
	connection to	connectionf
	disaster recovery	
	data center	
	FIX and MEO	1-5 ports:
	Ports	FREE
		6 ports or
		more: \$450
		per port <sup>f</sup>
	FXD Ports ( <u>i.e.</u> ,	FREE <sup>f</sup>
	Drop Copy Ports)	
MEMX	1G connection to	Not availablei
(market share of 2.53% for the month of March 2024) <sup>e</sup>	primary data	
	center	
	10G connection to	\$6,000 per
	primary data	connectioni
	center	
	10G connection to	\$3,000 per
	disaster recovery	connectioni
	data center	
	Order Entry Ports	\$450 per porti
	Drop Copy Ports	\$450 per port <sup>i</sup>
Cboe EDGA	10 1	\$2,500 per
(market share of 1.78% for the month of March 2024) <sup>e</sup>	1G connection to	φ=,500 per
(market share of 1.78%) for the month of March 2024)	primary data	connectiongi
(market share of 1.78%) for the month of March 2024)		
(market share of 1.78%) for the month of March 2024)	primary data	connectiong
(market share of 1.78% for the month of March 2024)	primary data center	
(market share of 1.78%) for the month of March 2024)	primary data center  10G connection to	connection <sup>gj</sup> \$8,500 per
(market share of 1.78% for the month of March 2024)	primary data center  10G connection to primary data	connection <sup>g</sup> \$8,500 per
(market share of 1.78% for the month of March 2024)	primary data center  10G connection to primary data center	\$8,500 per connection <sup>j</sup>

Exchange	Type of	<b>Monthly Fee</b>
	Connection or	
	Port	
	10G connection to	\$6,000 per
	disaster recovery	connection <sup>j</sup>
	data center	
	Order Entry Ports	\$550 per port <sup>j</sup>
	Purge Ports	\$650 per port <sup>j</sup>

<sup>&</sup>lt;sup>e</sup> See "U.S. Equities Market Volume Summary", available at <a href="https://www.cboe.com/us/equities/market\_share/">https://www.cboe.com/us/equities/market\_share/</a>.

https://www.miaxglobal.com/sites/default/files/fee\_schedule-

files/MIAX Pearl Equities Fee Schedule 05012024.pdf.

https://www.miaxglobal.com/sites/default/files/fee\_schedule-

files/MIAX Pearl Equities Fee Schedule 05012024.pdf.

https://www.cboe.com/us/equities/membership/fee schedule/edga/.

Moreover, IEX's proposed fees are substantially lower than the fees other exchanges that operate listing markets charge for the equivalent physical and logical connectivity. For example, NYSE charges \$22,000 per month for a 10G physical connection, plus an initial charge of \$15,000; and charges \$550 per order entry and drop copy ports. Nasdaq charges \$10,550 per month for a 10G physical connection, plus an initial charge of \$1,055 (and \$15,825 per month for a 10G "Ultra" connection, plus an initial charge of \$1,583); and charges \$575 per order entry port, \$550 per drop copy port, \$100 per test ports, and \$25 per disaster recovery ports. By contrast, IEX, as proposed, will charge \$4,000 for a 10G physical connection, offers up to five Order Entry Ports for

f See MIAX Pearl Equities Exchange Fee Schedule as of May 1, 2024, available at

g IEX notes that some equities exchanges also offer a 1G connection to their primary data center, but understands that only a small minority of market participants find a 1G connection to be adequate for trading and market data purposes.

<sup>&</sup>lt;sup>h</sup>MIAX Pearl waives the fee for a single 1G connection to the disaster recovery center for members required by MIAX Pearl to conduct disaster recovery data center testing. <u>See</u>

<sup>&</sup>lt;sup>i</sup> See MEMX Connectivity Fee Schedule, available at <a href="https://info.memxtrading.com/connectivity-fees/">https://info.memxtrading.com/connectivity-fees/</a>.

<sup>&</sup>lt;sup>j</sup> <u>See</u> Cboe U.S. Equities Fee Schedule, EDGA Equities, available at

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See NYSE Connectivity Fee Schedule as of April 3, 2024, available at <a href="https://www.nyse.com/publicdocs/Wireless\_Connectivity\_Fees\_and\_Charges.pdf">https://www.nyse.com/publicdocs/Wireless\_Connectivity\_Fees\_and\_Charges.pdf</a>. and NYSE Price List as of February 12, 20204, available at <a href="https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE">https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE</a> Price List.pdf.

Nasdaq Price List – Trading Connectivity, Logical Connectivity, <a href="https://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2#logicalconnectivity">https://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2#logicalconnectivity</a>.

free, and charges \$250 per port for 6 or more ports.

There is no regulatory requirement that any broker-dealer connect to and access any (or all of) the available equity exchanges. Market participants may choose to become a member of one or more (or no) equities exchanges based on the market participant's assessment of the business opportunity relative to the costs of the Exchange. In lieu of becoming a member at each exchange, a market participant may join one exchange and elect to have its orders routed in the event that a better price is available on an away market. Nothing in the Order Protection Rule<sup>73</sup> requires a broker-dealer to become a Member of – or establish connectivity to – the Exchange. All equities exchanges have rules in place to avoid trading through a better priced quotation on another exchange in violation of Order Protection Rule.<sup>74</sup>

As noted earlier, IEX believes that as a general matter, physical and logical connectivity fees cannot be sufficiently justified based solely on unproven assumptions about competition, notwithstanding that a newer and/or smaller securities exchange, such as IEX, may be less able to set prices for its physical and logical connectivity free of constraint by significant competitive forces than may be the case for more established securities exchanges.<sup>75</sup>

In summary, for all of the foregoing reasons, the Exchange believes that the proposed fees are reasonable, equitably allocated, and not unfairly discriminatory.

# 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

<sup>74</sup> See e.g., IEX Rule 11.230.

<sup>&</sup>lt;sup>73</sup> See 17 CFR 242.611.

And as noted earlier, IEX's proposed fees are significantly less than fees charged by its competitors.

purposes of the Act.

#### Physical Connectivity Fees

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 cost-based fees, which are designed to enable the Exchange to recoup applicable costs, with a limited potential return on its investment in excess of such costs if actuals differ from projections, as described in the Purpose and Statutory Basis sections. Competing equities exchanges are free to propose comparable fee structures subject to the SEC rule filing process. And as discussed above, market participants are not required to connect to all exchanges. There is no reason to believe that IEX's proposed price increase will adversely impact any other exchange's ability to compete. Further, as detailed above, the proposed fees are lower than similar fees charged by other exchanges. IEX believes that a comparison to comparable fees charged by competitor markets helps to ensure that regulatory oversight of comparable fees across exchanges is applied in a way that promotes fair and non-discriminatory intermarket competition. Accordingly, the Exchange does not believe its proposed fee changes impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

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. All Connectivity Subscribers will be charged the same amount for each physical connection to the Primary Data Center, with free physical connectivity to the Disaster Recovery Data Center and ITF. The proposed fees do not favor certain categories of Connectivity Subscribers in a manner that would impose an undue burden on competition. The Exchange does not believe that

the proposed rule change would place certain Connectivity Subscribers at the Exchange at a relative advantage or disadvantage compared to other Connectivity Subscribers or affect the ability of such firms to compete. Connectivity Subscribers that utilize more physical connectivity services typically utilize the most bandwidth, and those are the firms that consume the most resources from the Exchange. Accordingly, the proposed fees for physical connectivity services do not favor certain categories of Connectivity Subscribers in a manner that would impose a burden on competition; rather, the allocation of the proposed physical connectivity fees reflects the Exchange resources consumed by the various Connectivity Subscribers and the costs to the Exchange of providing such physical connectivity services.

Finally, as described in the Purpose section, the proposed fee change is designed to assist the Exchange in complying with its Regulation SCI compliance obligations to have levels of capacity adequate to maintain IEX's operational capability and promote the maintenance of fair and orderly markets, thereby promoting both intermarket and intramarket competition by enabling IEX to support a robust trading environment for its Members and compete with other equities venues.

### <u>Logical Connectivity Fees</u>

The Exchange does not believe that the proposed rule change with respect to Order Entry Port Fees 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 cost-based fees, which are designed to enable the Exchange to recoup applicable costs, with a limited potential return on its investment in excess of such costs if actuals differ from projections, as described in the Purpose and Statutory Basis sections. Competing equities exchanges are free to propose comparable fee structures subject to the SEC rule filing process. And as discussed above, market participants are

not regulatorily required to connect to all exchanges. There is no reason to believe that IEX's proposed price increase will adversely impact any other exchange's ability to compete. Further, as detailed above, the proposed fees are lower than similar fees charged by other exchanges. IEX believes that a comparison to comparable fees charged by competitor markets helps to ensure that regulatory oversight of comparable fees across exchanges is applied in a way that promotes fair and non-discriminatory intermarket competition. Accordingly, the Exchange does not believe its proposed fee changes impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

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. IEX does not believe that the proposed increased Port Fees will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purpose of the Act because all Members (and/or their Service Bureaus) will continue to be entitled to five free ports and subject to the same low, cost-based fee for additional ports. While different total fees would be assessed depending on the number of Order Entry Ports a Member (or Service Bureau) requests, these different fees are not based on the type of Member requesting the Order Entry Port(s) but on the number of such ports it requests, and each Port Subscriber can determine the number of such ports to request. Further, providing five free Order Entry Ports is designed to avoid creating barriers to entry for smaller Members, thereby promoting intramarket competition. In addition, IEX believes that even Members subject to relatively higher fees for more Order Entry Ports will still be subject to a relatively low aggregate fee (and significantly less than competing exchanges, as described above) and thus 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.

The proposed fees do not favor certain categories of Connectivity Subscribers in a manner that would impose an undue burden on competition. The Exchange does not believe that the proposed rule change would place certain Connectivity Subscribers at the Exchange at a relative advantage or disadvantage compared to other Connectivity Subscribers or affect the ability of such firms to compete.

Finally, as described in the Purpose section, the proposed fee change is designed to assist the Exchange in complying with its Regulation SCI compliance obligations to have levels of capacity adequate to maintain IEX's operational capability and promote the maintenance of fair and orderly markets, thereby promoting both intermarket and intramarket competition by enabling IEX to support a robust trading environment for its Members and compete with other equities venues.

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. <u>Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action</u>

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii)<sup>76</sup> 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

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<sup>&</sup>lt;sup>76</sup> 15 U.S.C. 78s(b)(3)(A)(ii).

Commission shall institute proceedings under Section 19(b)(2)(B)<sup>77</sup> of the Act to determine whether the proposed rule change should be approved or disapproved.

## IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

## **Electronic Comments:**

- Use the Commission's internet comment form
   (https://www.sec.gov/rules/sro.shtml); or
- Send an email to <a href="mailto:rule-comments@sec.gov">rule-comments@sec.gov</a>. Please include file number SR-IEX-2024-08 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-IEX-2024-08. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<a href="https://www.sec.gov/rules/sro.shtml">https://www.sec.gov/rules/sro.shtml</a>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be

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<sup>&</sup>lt;sup>77</sup> 15 U.S.C. 78s(b)(2)(B).

available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-IEX-2024-08 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.<sup>78</sup>

Sherry R. Haywood,

Assistant Secretary.

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