

August 11, 2020

The Honorable Jay Clayton Chairman U.S. Securities and Exchange Commission 100 F Street, NE Washington, DC 20549

Re: Cboe's rule filing for post-migration fees; File No. SR-CBOE-2020-064

Dear Chairman Clayton:

I write to request your attention concerning a regulatory impasse with Commission staff that threatens to inflict significant and unnecessary costs and disruption on Cboe Exchange, Inc. (the "Exchange"), on the many firms that utilize Exchange's services, and ultimately on the trading public.

Summary

As more fully discussed below:

- The Exchange needed to reconfigure its fee structure to address new and different types of connectivity that the Exchange provides under a new trading platform implemented in October 2019, and the Exchange submitted a fee filing in October 2019 (the "Fee Filing") to establish that new fee structure, which was explicitly designed *not* to increase Exchange revenues;
- Although the Fee Filing, like fee filings generally, was effective on filing and although
 Congress intended to streamline the implementation of fee filings, the Exchange has had to
 respond to repeated rounds of comments from the Division of Trading and Markets (the
 "Division") over a ten-month period that necessitated five amendments to the Fee Filing in an
 attempt to avoid invalidation of the new fee structure;
- The Exchange has demonstrated that the fee structure is reasonable, whether judged in reference to the Exchange's original fee structure, the fees of other exchanges offering similar or even *identical* services, or the fact that the Exchange's fees are constrained and kept reasonable by strong competitive market forces; and
- If the Division suspended the fee structure and subjected it to disapproval proceedings, the Exchange would be left with no fee structure to which it could readily revert and market participants who have been operating under the new structure for ten months would be subject to significant and unnecessary costs.

Discussion

The Exchange has worked diligently to address comments from the Division about a new fee structure the Exchange put into effect in October 2019 through the Fee Filing, which was effective on filing. The Exchange's migration to a new trading platform at that time necessitated a new fee structure to address new and different types of connectivity to that trading platform. Over the last ten months, the Exchange repeatedly addressed sequential sets of comments from the Division, by amending the Fee Filing on five occasions and by submitting extensive data and other evidence in response to the Division's requests, including the data listed on the attached Appendix A. Recently, the Division suggested that it nonetheless might suspend this fee structure and might commence disapproval proceedings unless the Exchange more fully proved that the new fee structure was "reasonable." The Division appears unsatisfied, even though it has offered little guidance about the type of information the Division contends that the Exchange needs to provide to prove that the new fee structure is reasonable.

As the Exchange has demonstrated, several facts provide compelling proof that the new fee structure is reasonable. First, the current Fee Filing discusses at length the significant benefits and advantages the Exchange's new connectivity structure provides market participants and that the Exchange does so at a cost that is similar to, or only modestly higher than, the fees assessed under the Exchange's previous connectivity fee structure. The Fee Filing also contains extensive data demonstrating the costimpact to various market participants, including the cost-savings many participants would enjoy under the new fee structure.

Second, as shown in the attached Appendix B, the current Fee Filing demonstrates that the fees are reasonable when measured against the fees other exchanges already are allowed to charge for similar services, and especially when measured against fees charged for these *same* services. In particular, before the Exchange migrated to the new trading platform, the Exchange's affiliated exchanges were operating on the same trading platform to which the Exchange now has migrated. The Exchange's new fees are comparable to the fees those affiliated exchanges already have been allowed to charge for the exact same connectivity under that same trading platform. It therefore is difficult to understand how it could be unreasonable for the Exchange to charge substantially similar fees that its affiliated exchanges already are allowed to charge for the exact same services.

Third, notwithstanding the ample opportunity market participants have had over the past ten months to submit a comment letter on any of the six versions of the Fee Filing, only two comment letters were received, both from the same industry group and both filled with factual inaccuracies and a mischaracterization of the Exchange's new fee structure. Moreover, no adverse comments have been submitted on either of the two most recent versions of the Fee Filing. Although the existence of adverse comment letters does not prove that proposed fee are unreasonable, the absence of such comment letters speaks volumes. One need look only to the recent market data litigation and other recent SRO connectivity fee filings to realize that market participants, the industry groups that represent them, and even other exchanges are more than willing and able to complain about fees they believe to be unreasonable or fee filings they believe to be deficient. In such an environment, it is notable that no industry group or exchange, and particularly no market participants who connect to the Exchange, have claimed in comment letters to the Commission that the Exchange's new fee structure is unreasonable - even though market participants have been operating under this fee structure for ten months. In fact, while market participants have submitted no adverse comment letters advocating such a position, market participants have provided broad positive feedback about the improved connectivity available under the new structure.

One reason the fee structure has earned such acceptance may be that the proposed fees were explicitly designed *not* to increase Exchange revenues. Instead, the proposal was prompted by the Exchange's adoption of a new (and improved) connectivity infrastructure that rendered the previous connectivity structure obsolete. The Exchange intentionally designed the fee structure to approximate its premigration connectivity revenue. In fact, the Exchange estimated that its connectivity revenue would *decline* by 1.75% under this fee structure. In any event, market participants have paid connectivity fees under this fee structure for ten months, and their lack of complaint about the fee structure is compelling evidence that it is reasonable.

The fee structure also is reasonable in light of the competitive market forces that constrain the Exchange's fees. Courts have recognized that the existence of such competitive forces support a finding that fees are reasonable, a position the Division recognized in its non-binding Guidance on SRO Rule Filings Relating to Fees" ("Fee Guidance") that it issued last year. The courts and the Fee Guidance, which created no new or additional obligations for SROs, expressly contemplate that fees may be considered reasonable if there are competitive forces and available substitute products that would constrain an exchange from charging *un*reasonable fees. In its current Fee Filing, the Exchange has provided detailed and compelling evidence of such competitive forces. For example, the Fee Filing demonstrates that other options exchanges provide significant competition to the Exchange because, among other things:

- there are fifteen other registered options exchanges that trade options,
- none of the registered options exchanges currently has a market share exceeding 17%,
- many of the other options exchanges have connectivity fees that are similar or lower than the Exchange's,
- there is no requirement legal or operational for a market participant to connect to each options exchange,
- only nine of approximately 250 broker dealers that are members of one or more options exchange are members of all of the options exchanges, and
- at least 37 of those 250 broker dealers in fact are not members of the Exchange.

In addition, the Exchange's market share has declined from 22.75% as of July 31, 2019 to 16.7% as of July 31, 2020, a decline that dramatically demonstrates that the Exchange's fees are subject to robust competitive constraints.

Accordingly, if market participants viewed the Exchange's connectivity and access fees to be less attractive than the competition, they could choose not to connect to the Exchange and to connect instead to one or more of the other fifteen registered options exchanges. These exchanges offer listed markets in the same or similar options products as those the Exchange offers, including offering market exposure to products that compete with the Exchange's proprietary products. In addition, market participants can choose to connect indirectly to the Exchange through one of approximately fifteen service bureaus or extranets that resell the Exchange's connectivity. Because market participants have ready and effective alternatives among registered options exchanges and the ability to connect indirectly to the Exchange, this competition would constrain any ability to charge unreasonable fees.

Moreover, the over-the-counter ("OTC") markets also provide significant competition, because market participants may trade options products on OTC venues that use the same underlying value as any exchange-listed option, including exchanges' proprietary options products. Because market participants dissatisfied with the Exchange's fees are free to move their trading to OTC markets, this competitive possibility is a powerful additional constraint on the Exchange's ability to charge supracompetitive fees.

Under judicial precedent, and even the Commission's own Fee Guidance, these ready sources of competition are a compelling reason to find that the Exchange's fees are reasonable under the Exchange Act's requirements. The Exchange has worked to address the Division's comments since October 2019 and has amended the Fee Filing on five occasions to do so. Throughout this process, when the Division identified data that it needed, the Exchange provided it; and the total amount of data provided has been enormous and comprehensive, as reflected in the attached Appendix A. At the Division's recent suggestion, the Exchange also considered the Commission's recent request for additional information in connection with market data fees proposed by NYSE National, Inc. The Exchange's current Fee Filing addresses the applicable bullet points made by the Commission in connection with that fee filing. The Exchange is at a loss as to what further information it could provide to prove that there are sufficient competitive forces to constrain fees. The Division has not identified any additional information that it needs, but rather has told the Exchange only that it needs to provide "more" proof.

This situation is not only frustrating to the Exchange, but it also is potentially harmful — to the Exchange, market participants and ultimately the investing public. This is not a situation where an exchange seeks to increase a fee and where, if the fee increase is suspended, the exchange can easily revert to its prior fee. Here, the Exchange has changed its trading platform, which rendered obsolete the Exchange's pre-migration connectivity structure and its associated fee structure. The new fee structure is needed in order to correspond to that enhanced trading platform. If this fee structure were suspended and subjected to disapproval proceedings, the Exchange would have no fee structure to which it could readily revert. The Exchange would need to reconfigure its billing system and participant interconnection so that they could work under the old fee structure. This would take at least one to two months and would involve significant expense. The reconfiguration of the Exchange's billing system to support the pre-migration fee structure would be, in its own right, a "migration" — undoing months of development work performed last year and consuming valuable resources and time that could otherwise be dedicated to other operational improvements.

Market participants also would be significantly impacted by any such retrenchment. A number of firms would see a significant increase in their monthly fees in a retrenchment to the old fee regime. Floor brokers (and potentially the investors they serve) would suffer the greatest adverse impact from fee retrenchment, and market makers would benefit the most – a particularly unfortunate result given that floor brokers utilize the least, and market makers utilize the most, connectivity resources.

Perhaps even more importantly, this reversion would undermine market participants operationally. Their business models and systems are based on the current fee structure, under which they have been operating for ten months. If the Exchange were forced to revert to its old fee structure and connectivity methods, firms might need to reassess and redesign how they should connect to the Exchange. This change would impose significant and unnecessary costs on market participants. Moreover, firms would lose popular and beneficial types of connectivity that are available under the new trading system, because the Exchange no longer would have a way to charge for those types of connectivity.

None of this is necessary. The Exchange recognizes the Commission is tasked with the responsibility to ensure all exchange fees meet the relevant statutory standards and that the Commission does not place "unquestioning reliance" on representations of an SRO in making its findings. The Exchange is not asking the Commission to do so. Rather, the Exchange believes that the tremendous amount of data and analysis it has included in each iteration of the Fee Filing has provided sufficient detail and information to meaningfully support its representations and to provide a compelling basis for the Commission to determine that the proposed fees are consistent with the requirements of the Exchange Act. If additional data is needed to prove that fact, the Exchange is willing to provide it. However, the Division has provided no further guidance on what more it seeks in addition to the comprehensive submissions and Fee Filing amendments that the Exchange already has made.

We respectfully request you help in resolving this regulatory logjam – to the benefit not only of the Exchange, but of the market participants and the investing public that use the Exchange. Thank you for your consideration.

Sincerely,

Edward T. Tilly

Ed Tilly

Attachments

cc: The Hon. Allison Herren Lee, Commissioner

The Hon. Hester M. Peirce, Commissioner The Hon. Elad L. Roisman, Commissioner

Mr. Brett Redfearn, Director, Division of Trading and Markets

Appendix A

Data Points Provided in SR-CBOE-2020-064, filed July 2, 2020

General Overview:

- 1. Pre vs post migration connectivity revenue
- 2. Pre vs post migration purchases
- 3. Pre vs post migration benefits such as increased latency, increased capacity
- 4. Pre vs post migration examples of costs for Market Makers and Floor Brokers
- 5. Comparison to competitor and affiliate fees
- 6. Data demonstrating alternative trading venues and connectivity options (including other exchanges and resellers of connectivity)
- 7. Examples of alternatives to proprietary products
- 8. Membership data including: number of members of Cboe (connecting directly and indirectly), volume attributed to direct/indirect connections, number of firms that belong to all 16 options exchanges, number of firms that do not connect to Cboe, and number of firms that changed connectivity post-fee changes
- 9. Data on fee impact to TPHs

Detailed overview:

Overall Revenue

1. Anticipated and actual % change in post-migration connectivity revenue as compared to pre-migration

Competitive Market

- 2. Number of registered U.S. options exchanges that trade options
- 3. Number of exchanges that have been added to U.S. options market since 2015
- 4. Largest % market share held by a single options exchange
- 5. % market share held by affiliate exchanges with substantively similar fees
- 6. Number of Exchange members (TPH organizations) pre and post-migration
- 7. Number of Exchange members that connected indirectly or directly (or both) to the Exchange
- 8. % of Exchange's volume accounted for by members that connected indirectly or directly (or both) respectively
- 9. Number ranges of broker-dealers that belong to each of the 16 options exchanges
- 10. Number of broker-dealers and types of broker-dealers that belong to all 16 options exchanges
- 11. Number of broker-dealers that belong to only a single options exchange
- 12. Number of broker-dealers that do not belong to the Exchange, but belong to other options exchanges
- 13. Number of broker-dealers that belong to affiliated exchanges, but not the Exchange
- 14. Number of firms that became a member of the Exchange or expanded its footprint on the exchange since migration
- 15. Number of members that terminated membership with the Exchange since migration

- 16. Example of firm that terminated its relationship with another options exchange due to an increase in connectivity fees
- 17. Anticipated and actual number of firms that resell Cboe Options connectivity
- 18. Examples of products that compete with Exchange's exclusively listed products

Physical Connectivity

- 19. Physical Port fees of competitors and affiliates
- 20. Comparison of latency between 1 and 10 Gb Physical Ports in microseconds
- 21. Comparison of size and capability between 1 and 10 Gb Physical Ports
- 22. Number of physical connections required for unicast and multicast connectivity pre and post-migration
- 23. Examples of cost-savings using new physical ports in light of allowing unicast and multicast connectivity over a single connection
- 24. Total Number of ports (1 and 10 Gb ports) purchased by TPHs that connected directly to the Exchange post-migration
- 25. Number ranges of ports (1 and 10 Gb) purchased by TPHs that connect directly to the Exchange pre and post-migration
- 26. Total Number of ports (1 Gb and 10 Gb) used for indirect connectivity post-migration
- 27. Types of market participants that connect indirectly to the Exchange
- 28. Anticipated and actual % of TPHs maintaining or reducing number of Physical Ports pre and post-migration
- 29. % of TPHs no longer maintaining a 1 Gb Physical Port post-migration

Data Port Fees

- 30. Comparison to Data Port Fee of affiliate exchange
- 31. Number of market participants paying the proposed data port fees
- 32. Anticipated and actual % of market participants paying the same or lower data port fees
- 33. Monthly savings for firms
- 34. % of TPHs paying increased fees
- 35. Amount of increased fees per month

Logical Connectivity

- 36. Logical port fees of competitors and affiliates
- 37. Total bandwidth available quotes and orders/second pre and post-migration connectivity (Login Ids vs Logical Ports and BOE Bulk Ports)
- 38. Total cost per message pre and post-migration
- 39. Maximum number of orders per trading day (measured on average in a single month) per logical port fee
- 40. Examples of minimum number of Market-Maker (MM) Trading Permits or Bandwidth Packets needed pre-migration vs post-migration to obtain same bandwidth capacity
- 41. Number of messages/per second that will cause possible performance degradation on BOE Bulk Port
- 42. Increase in amount of quoting capacity from proposed BOE/FIX Logical Ports versus pre-migration Login Ids

- 43. Increase in amount of order entry capacity from proposed BOE/FIX Logical Ports versus pre-migration Login Ids
- 44. Increase in quoting bandwidth provided by BOE Bulk Ports compared to BOX/FIX Logical ports and pre-migration Login Ids
- 45. Anticipated and actual % of TPHs purchasing 0-2 logical ports
- 46. Comparison of fees of Purge, Spin and GRP to fees of competitors and affiliates for similar connectivity

Access Fees

- 47. Trading Permit fees of competitors and affiliates
- 48. Number of Trading Permits required for total appointment costs pre and post-migration
- 49. % of TPHs paying lower Trading Permit fees under proposed structure
- 50. % of TPHs paying higher Trading Permit fees under proposed structure
- 51. % increase in fees for those TPHs that were expected to pay higher fees under proposed structure
- 52. % of electronic MMs paying lower fees for trading permit and appointment costs under the proposed MM Electronic Access Permit (EAP) Appointment fee structure
- 53. % decrease in cost for a TPH to quote entire universe of available classes
- 54. Comparison of current Market-Maker connectivity and access fees to projected connectivity and access fees for different scenarios
 - a. MM Permit / MM EAP
 - b. Appointment Unit Cost
 - c. CMI Login/Logical Port
 - d. Bandwidth Packets
 - e. Total Bandwidth Available
 - f. Total Cost
 - g. Total Cost per message allowed

Access Credits and Permit Rebates

- 55. Anticipated and actual number of TPHs receiving access credits under Tiers 4 and 5
- 56. Anticipated and actual number of Market-Makers reaching Tiers 4 and 5
- 57. Anticipated and actual number of Floor Brokers receiving a rebate under the ADV Discount program

 $\label{eq:Appendix B} Appendix \ B$ Comparisons of Cboe Fees to Other Exchanges, as discussed in SR-CBOE-2020-064, filed July 2, 2020

Page #	Type of Fee	Proposed Cboe Fee	Other Exchange Fees (per
1 age π	Type of Fee	(per month)	month)
11, 47,	1 Gb Physical Port	\$1,500/port	\$2,500/port (C2, BYX, BZX,
49, 55			EDGA, EDGX, ISE, PHLX,
			Nasdaq)
			\$5,000/port (NYSE American,
11, 47,	10 Gb Physical Port	\$7,000/port	NYSE Arca) \$7,500/port (C2, BYX, BZX,
49, 55	10 do i flysical i oft	φ7,000/port	EDGA, EDGX, Nasdaq)
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,,,,,
			\$10,000-\$15,000/port (PHLX,
			ISE)
			\$14,000-\$22,000/port (NYSE
			American, NYSE Arca)
13, 57	Direct Data Access Fee	\$1,000/data source	\$1,000/data source (C2)
13,37	(previously "Port Fee")	φ1,000/data source	\$1,000/data source (C2)
17	Logical Port	\$750/port	\$750/port (BZX)
18	BOE Bulk Logical Port	\$1,500/\$2,500/\$3,000	\$1,500/\$2,500/port (BZX)
		/port	
60	Implied Port Fees –	\$800	\$650 (C2)
60	Logical Port Implied Port Fees –	\$3,000	\$2,500 (C2)
00	BOE Bulk Logical Port	ψ3,000	\$2,500 (C2)
9, 61	Purge Ports	\$850/port	\$750/port (C2, BZX, EDGX)
			\$1,100/port (ISE)
20	Spin and GRP Ports	\$750/port	\$750/port (BZX)
68	Electronic Access	\$3,000/permit	\$4,000/permit (PHLX)
	Permit		
47, 67,	Market-Maker EAP	\$5,000/permit	\$4,000/permit (PHLX)
68	Permit		\$5,000/permit (C2)
			\$5,500/permit (BOX)
47, 69	Market-Maker Floor	\$2,000-\$6,000/permit	\$6,000/permit (PHLX)
	Permit	***	
47	Floor Broker Permit	\$3,200-\$7,500/permit	\$4,000/permit (PHLX)
71	MM EAP Appointment	\$0 - \$6,000	\$0 - \$7,200 (PHLX – SQT)
	Unit Fees		\$5,000 - \$11,000 (PHLX- RMO)