



January 3, 2018

Mr. Brent J. Fields  
Secretary  
U.S. Securities and Exchange Commission  
100 F. Street N.E.  
Washington, D.C. 20549-1090

RE: Securities Exchange Act Release No. 80683 (May 16, 2017), 82 FR 23320 (May 22, 2017) (SR-BatsBZX-2017-34)

Dear Mr. Fields:

Cboe BZX Exchange, Inc. (“BZX” or the “Exchange”) appreciates the opportunity to submit this third letter on the above-referenced proposed rule change in which the Exchange proposes to adopt Cboe Market Close, a closing match process for non-BZX Listed Securities<sup>1</sup> under new Exchange Rule 11.28 (the “Proposal”). The Exchange submitted its initial letter responding to comments on August 2, 2017 (“First BZX Letter”).<sup>2</sup> On August 18, 2017, the Securities and Exchange Commission (the “SEC” or “Commission”) issued an order instituting proceedings to determine whether to approve or disapprove the Proposal (the “Order”).<sup>3</sup> On October 11, 2017, the Exchange submitted a second letter in response to comments and questions asked in the Commission’s Order (“Second BZX Letter”).<sup>4</sup> On November 3, 2017, the NYSE Group (“NYSE”) submitted a third comment letter on the Proposal.<sup>5</sup> On November 17, 2017, the Commission extended their time to review the Proposal until January 17, 2018.<sup>6</sup> On December 8, 2017, the Securities Industry and Financial Markets Association (“SIFMA”) submitted its third supportive comment letter on the Proposal.<sup>7</sup>

The Exchange reiterates the points made in its previous letters including that the Proposal: (i) was carefully designed to avoid disrupting the price discovery process; (ii) will not introduce market fragmentation at the close because fragmentation already exists today; (iii) will

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<sup>1</sup> A BZX Listed Security is a security listed on the Exchange pursuant to Chapter 14 of the Exchange’s Rules and includes both corporate listed securities and Exchange Traded Products (“ETPs”).

<sup>2</sup> See letter from Joanne Moffic-Silver, Executive Vice President, General Counsel, and Corporate Secretary, Bats Global Markets, Inc. to Mr. Brent J. Fields, Secretary, Commission, dated August 2, 2017.

<sup>3</sup> See Securities Exchange Act Release No. 81437 (August 18, 2017), 82 FR 40202 (August 24, 2017).

<sup>4</sup> See letter from Joanne Moffic-Silver, Executive Vice President, General Counsel, and Corporate Secretary, Bats Global Markets, Inc. to Mr. Brent J. Fields, Secretary, Commission, dated October 11, 2017.

<sup>5</sup> See letter from Elizabeth K. King, General Counsel and Corporate Secretary, New York Stock Exchange, to Mr. Brent J. Fields, Secretary, Commission, dated November 3, 2017.

<sup>6</sup> See Securities Exchange Act Release No. 82108, 82 FR 55894 (November 24, 2017).

<sup>7</sup> See letter from Theodore R. Lazo, Managing Director and Associate General Counsel, SIFMA, to Mr. Brent J. Fields, Secretary, Commission, dated December 8, 2017.

enhance competition; (iv) will further the Commission's presumed desire for liquidity at the close to be conducted on SCI systems; (v) will provide a much needed, seamless, and easy way for the industry to address the single point of failure risk that exists for closing auctions today; and (vi) will not increase operational and regulatory risk, nor will it present new opportunities to manipulate the closing price.

The Exchange now submits this letter to primarily address two issues raised by the latest NYSE letter:

- (i) The NYSE's letter includes selective data that is meticulously chosen to support their inaccurate assumption that fragmentation at the close leads to increased volatility; and
- (ii) The NYSE's assertion that its competing auctions are not intended to compete with the primary listing exchange's closing auction is misleading. Their statement that they actively discourage participation by certain market participants raises questions under Rule 610 of Regulation NMS (the "Fair Access Rule").<sup>8</sup>

The Exchange also submits this letter in response to the third letter submitted by SIFMA.

1. The NYSE's Letter Includes Selective Data Designed to Support the False Assumption that Fragmentation at the Close Leads to Increased Volatility

In the Second Cboe letter, the Exchange included data showing that a significant amount of trading volume at the close occurs on venues other than the primary listing exchanges. These venues include competing auctions run by the primary listing markets themselves as well as off-exchange venues that match market orders at the official closing price. While the NYSE does not dispute this trend, it provides selective data that is meticulously chosen to support their inaccurate assumption that this existing fragmentation at the close already has a negative impact on the price discovery conducted by the primary listing market's closing auctions. The data the NYSE provided is limited to auctions with less than 1,000 shares, imbalances of 50% or more of the paired shares as of 3:50 p.m. Eastern Time, and closing auctions for which more than 75% of the volume was reported to the TRF occurring between January 2, 2017 and September 29, 2017. The NYSE failed to mention how many closing auctions were included in its data set. Was it 1,000 auctions or only 5? If a low number of auctions were analyzed, then the NYSE's data is of no statistical significance. As set forth in Appendix I and described in more detail below, the Exchange found that only 19 out of 368,374 total auctions occurring between January 2, 2017 and September 29, 2017 that the Exchange reviewed included less than 1,000 shares, imbalances of 50% or more of paired volume at 3:55 p.m., and more than 75% of the closing volume was reported to the TRF. Based on that data, the Exchange estimates that the number of auctions

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<sup>8</sup> 17 CFR 242.610.

included in the NYSE's data set for auctions with 1,000 shares or less to be less than 100<sup>th</sup> of 1% of all auctions. Therefore, the Exchange believes that their findings are of no statistical significance. It is fair to conclude that low volume securities with such severe imbalances would see such variations in price between the last sale and the official closing price, regardless of the amount of TRF closing volume. The NYSE also included the same data for auctions with more than 10,000 shares, which actually shows the impact on closing prices is dampened in more actively traded securities and those auctions do not experience the same degree of price degradation as less liquid securities. This data negates the NYSE's overall assumption and further highlights the selective and limited nature of the NYSE's data set.

To further examine the presumed negative effect of TRF closing volume, the Exchange reviewed a broader data set, which included all primary auctions in NYSE-listed securities for which there was a closing auction and last sale regular way trade,<sup>9</sup> regardless of size, from January 2, 2017 through September 29, 2017. We reviewed auctions with imbalances of 50% or more of the paired volume at 3:55 p.m. in order to include NYSE "d-Quote" orders in the auction imbalance total, since the dissemination of d-Quote imbalances is suppressed prior to that time. Additionally, our data compared auctions where less than 25%, 25% to 50%, 50% to 75%, and more than 75% of the closing volume was reported to the TRF. We also bucketed the data amongst auctions with 1,000,000 shares or more, 100,000 to 1,000,000 shares, 10,000 to 100,000 shares, 1,000 to 10,000 shares, and less than 1,000 shares. A summary of this data is set forth in Appendix I. In sum, we reviewed over 166,000 auction observations<sup>10</sup> during this time period and found the average price gap<sup>11</sup> between the last sale and the official closing price was 9.09 basis points across all groups. We further found, as illustrated in the second table in Appendix I, that the price gaps are greater amongst auctions with less than 25% of the closing volume reported to the TRF than all other groups, including the group with auctions of more than 75% of the closing volume reported to the TRF. This contradicts the conclusion drawn from the NYSE's selective data set that an increased percentage of TRF closing volume has an adverse impact on the primary market's closing auction. As evidenced in Appendix II, the Exchange also found that the price gaps showed a similar pattern across TRF closing volume buckets when it analyzed securities based on their ADV instead of auction size. Our analysis has shown that the amount of TRF closing volume has little to no relationship to the primary listing market's closing auction

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<sup>9</sup> Data points were excluded if there was no closing auction or no last sale regular way trade that occurred between 3:55 p.m. and 4:05 p.m.

<sup>10</sup> Of the 368,374 total auctions occurring between January 2, 2017 and September 29, 2017 that the Exchange reviewed, 166,374 of those auctions included imbalances of 50% or more of the paired volume at 3:55 p.m.

<sup>11</sup> The Exchange, like the NYSE, utilized the price gaps between the last sale and the official closing price to determine the impact on the closing auction because it believes this measure is reflective of reasonable price differential between the continuous market and the closing auction. See NYSE Rule 123C(9)(a)(1)(iv) (stating that the "the DMM will close the security the earlier of the order acceptance cut-off time or if the imbalance is paired off at or reasonably contiguous to the last sale price. For purposes of this Rule, a price reasonably contiguous to the last sale price is within cents of the last sale price and would be a price point that during a regular closing auction would not be considered a dislocating closing price as compared to the last sale price").

process. Further, while securities with an ADV of less than 10,000 shares appear the most volatile, they account for a very small percentage of the overall auction volume, and such single stock volatility is more likely indicative of the applicable security's trading characteristics than the perceived impact of TRF closing volume.

2. The NYSE's Assertion that its Competing Auctions are not Intended to Compete with the Primary Listing Exchange's Closing Auction is False

The NYSE states that they "actively" discourage order flow sent to their competing auction and, in fact, have reached out to certain of their ETP Holders to advise them to cancel large size orders and redirect them to the primary listing exchange. In sum, the Fair Access Rule requires that a national securities exchange, like the NYSE, not "prevent or *inhibit* any person from obtaining efficient access" to quotations in an NMS stock displayed by that exchange.<sup>12</sup> Therefore, the Exchange questions whether the NYSE "actively" discouraging participation in their competing auction by certain market participants violates the Fair Access Rule?

In addition, data shows that the NYSE has not "actively" discouraged order flow sent to their competing auction following the transfer of a security from NYSE Arca to another exchange. NYSE's assertion that they do so is inaccurate. For example, iShares MSCI Eurozone ETF (EZU) and the iShares 20+ Year Treasury Bond ETF (TLT) transferred from NYSE Arca to BZX and Nasdaq, respectively, on February 2, 2016. Since that date, NYSE Arca's competing auction continues to maintain not insignificant monthly volume in both securities, as evidenced by the data provided in Appendix III, suggesting that their discouragement of competing auction order flow is selective at best. In each of these securities, NYSE Arca elected to run its competing auction on a daily basis, attracting significant order flow away from the primary listing market's closing process.

Despite NYSE's false claim, the Exchange has never compared Cboe Market Close to competing auctions to support the notion that they are functionally equivalent and competing auctions serve as precedent to support approval of the Proposal. Rather, we argue that their competing auctions are positioned to siphon order flow, including price-setting limit orders, from the primary listing market's closing auction, thereby harming price discovery. The Exchange has stated numerous times that Cboe Market Close is specifically designed to not harm price discovery, as it simply seeks to match naturally paired market orders at the official closing price. We, therefore, assert that their competing auctions have, under their own logic, the potential to inflict significant harm on the price discovery process in ways that Cboe Market Close would not. Yet, these competing auctions were approved and deemed consistent with the Securities Exchange Act of 1934 (the "Exchange Act"), and Cboe Market Close should similarly be approved.

Lastly, notwithstanding statements included in the latest NYSE letter, the Exchange continues to struggle to understand the basis on which the NYSE and Nasdaq continue to run

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<sup>12</sup> 17 CFR 242.610.

their competing auctions daily while they seek to prevent a price competitive process that does not siphon price forming orders from the primary listing market. NYSE again argues they must run their competing auction daily to ensure they operate properly in the case of a market impairment. The Exchange has previously disputed this claim in its earlier letters. However, if this is truly the reason, why not utilize test symbols and test data to run competing auctions, rather than real orders that instead could participate in the primary's closing auction? Isn't it these real orders that have the potential to harm the price discovery process performed by the primary's closing auction? Instead, NYSE conveniently suggests that price discovery would only be harmed if real orders were entered in Cboe Market Close, and not in their own competing auctions. Test symbols have no potential to harm price discovery. Further, test symbols could adequately confirm the operational integrity of auction processes. Why have a process or product like a competing, price-forming auction, when you do not want your members to use it?

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The Exchange also notes that SIFMA's third letter, which is again supportive of the Cboe Market Close,<sup>13</sup> raises broad concerns about the judicial doctrine of regulatory immunity and Commission approved limitations on liability included in the rules of all national securities exchanges. These concerns are not germane to whether the Proposal is consistent with the Act. Indeed, they are aimed at elements of U.S. market structure that have been approved by the Commission or are based on long held legal doctrine upheld by the U.S. Courts. There certainly has been no evidence presented by SIFMA to support a claim that SIFMA's members, banks and broker-dealers, are somehow disadvantaged when comparing the legal validity of an exchange's limitation of liability by rule versus a broker-dealer's limitation of liability by individually negotiated client contracts, which often completely disclaim all liability. It would be inappropriate to attempt to redefine Commission approved limitations on liability by setting a new standard in one rule filing on an issue that has such broad application across all exchange services, including National Market System plans operated pursuant to Rule 608 of Regulation NMS.<sup>14</sup>

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<sup>13</sup> See letters from Theodore R. Lazo, Managing Director and Associate General Counsel, SIFMA, to Mr. Brent J. Fields, Secretary, Commission, dated June 3, 2017 and August 18, 2017 (urging the Commission to approve the Proposal).

<sup>14</sup> 17 CFR 242.608.

Conclusion

The Exchange strongly believes that Cboe Market Close is consistent with Section 6(b) of the Act,<sup>15</sup> in general, and furthers the objectives of Section 6(b)(5) of the Act,<sup>16</sup> in particular, because it would execute MOC orders at the official closing price without disrupting the price discovery process of the primary listing markets' respective closing processes or adversely impacting the market for listed securities. The Proposal would also enhance competition, further the Commission's presumed desire for liquidity at the close to be conducted on SCI systems, and provide a seamless way for the industry to address the single point of failure risk that exists for closing auctions today. We, therefore, strongly urge the Commission to approve the Proposal in a timely manner. Please feel free to contact Bryan Harkins at (212) 378-8543 or me at (312) 786-7462 if you have any questions related to this matter.

Sincerely,



Joanne Moffic-Silver  
Executive Vice President, General  
Counsel, and Corporate Secretary

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<sup>15</sup> 15 U.S.C. 78f.

<sup>16</sup> 15 U.S.C. 78f(b)(5).

## Appendix I

### NYSE Listed Auctions Price Variances

	Close Volume Bucket	% of Closing Volume Printed at the TRF									
		Less than 25%		25% - 50%		50% - 75%		Over 75%		Grand Total	
		Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count
<b>Imbalance 50% of Paired Shares or more as of 3:55 p.m.</b>	Greater than or equal to 1,000,000	9.39	927	4.76	406	5.61	106	7.67	3	7.80	1,442
	100,000 - 1,000,000	6.30	24,046	3.94	5,324	3.94	1,109	4.78	66	5.80	30,545
	10,000 - 100,000	7.92	78,268	6.12	6,467	5.13	1,090	6.62	275	7.75	86,100
	1,000 - 10,000	13.04	39,013	10.54	2,637	11.50	356	7.66	130	12.85	42,136
	Less than 1,000	19.38	5,662	17.08	134	28.51	36	14.32	19	19.37	5,851
	<b>Total</b>	9.45	147,916	6.19	14,968	5.81	2,697	6.95	493	9.09	166,074
<b>Total of All Closing Auctions</b>		9.02	326,848	5.44	34,438	5.56	5,978	7.28	1,110	8.62	368,374

### Aggregation of Data in Above Table

	Close Volume Bucket	% of Closing Volume Printed at the TRF									
		Less Than 25%		25% - 50%		50% - 75%		Over 75%		Grand Total	
		Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count
<b>Imbalance 50% of Paired Shares or more as of 3:55 p.m.</b>	Greater than or equal to 10,000	7.56	103,241	5.12	12,197	4.58	2,305	6.27	344	7.24	118,087
	Less than 10,000	13.84	44,675	10.86	2,771	13.06	392	8.51	149	13.65	47,987
	<b>Total</b>	9.45	147,916	6.19	14,968	5.81	2,697	6.95	493	9.09	166,074
<b>Total of All Closing Auctions</b>		9.02	326,848	5.44	34,438	5.56	5,978	7.28	1,110	8.62	368,374



- Date range: January 1, 2017 – September 29, 2017.
- Data sources: NYSE imbalance data and the CTA consolidated tape.
- Data points were excluded if there was no closing auction or no last sale regular way trade that occurred between 3:55 p.m. and 4:05 p.m.
- Term definitions:
  - Close volume is divided into 5 Close Volume Buckets based on the size of the close at each auction observation.
  - “% of Closing Volume Printed at the TRF” is the sum of volume printed to the TRF at the official closing price (“OCP”) following the listing market close and up to 4:20 p.m. divided by total closing volume, which includes the listing market closing volume and the TRF volume printed at the OCP.
  - “Imbalances as of 3:55PM” is calculated by dividing the number of imbalance shares at 3:55 p.m. by the number of paired shares.
  - “Avg Price Gap” is the absolute difference between the listing market closing price and the last sale divided by the last sale, expressed in basis point.
  - “Auction Count” is the number of auction observations in each category.



## Appendix II

### NYSE Listed Auctions Price Variances by Stock's Average Daily Volume

		% of Closing Volume Printed at the TRF									
		Less Than 25%		25% - 50%		50% - 75%		Over 75%		Grand Total	
		Stock's Average Daily Volume	Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)	Auction Count	Avg Price Gap (bp)
<b>Imbalance 50% of Paired Shares or more as of 3:55 p.m.</b>	10 Million or Greater	9.32	3,143	5.65	497	5.50	111	5.22	23	8.70	3,774
	1 Million to 10 Million	6.44	46,026	4.03	6,100	3.66	1,316	6.79	194	6.09	53,636
	100,000 to 1 Million	9.91	83,676	6.86	7,134	6.59	1,114	7.22	251	9.63	92,175
	10,000 to 100,000	15.99	14,929	12.90	1,220	18.82	154	7.06	25	15.77	16,328
	Less than 10,000	37.07	142	31.74	17	4.72	2			36.11	161
<b>Total of All Closing Auctions</b>		9.02	326,848	5.44	34,438	5.56	5,978	7.28	1,110	8.62	368,374

Source. Cboe internal data.

### Appendix III

#### Competing Auction Data for Transferred Listings

<b>iShares MSCI Eurozone ETF (EZU)</b>				<b>iShares 20+ Year Treasury Bond ETF (TLT)</b>			
EZU was transferred from NYSE Arca to Cboe BZX on 2/2/2016				TLT was transferred from NYSE Arca to Nasdaq on 2/2/2016			
Month	BZX	NYSE ARCA	ARCA % of Listing Market Close	Month	NASDAQ	NYSE ARCA	ARCA % of Listing Market Close
Jan-16	-	309,933		Jan-16	-	13,574,446	
Feb-16	329,146	164,781	50%	Feb-16	9,893,873	1,196,023	12%
Mar-16	432,576	160,594	37%	Mar-16	12,576,539	753,845	6%
Apr-16	491,501	55,441	11%	Apr-16	12,572,054	504,443	4%
May-16	272,162	68,202	25%	May-16	11,049,130	427,335	4%
Jun-16	265,289	103,200	39%	Jun-16	13,036,774	768,569	6%
Jul-16	151,660	33,850	22%	Jul-16	10,921,151	395,792	4%
Aug-16	112,409	28,222	25%	Aug-16	10,904,912	230,873	2%
Sep-16	365,214	49,172	13%	Sep-16	14,716,185	263,381	2%
Oct-16	488,700	244,255	50%	Oct-16	12,370,622	235,098	2%
Nov-16	624,770	26,062	4%	Nov-16	16,246,165	493,443	3%
Dec-16	333,049	66,043	20%	Dec-16	16,240,372	281,724	2%
Jan-17	378,258	4,854	1%	Jan-17	19,160,659	638,050	3%
Feb-17	312,209	26,644	9%	Feb-17	14,991,715	544,312	4%
Mar-17	248,433	14,884	6%	Mar-17	14,290,496	704,863	5%
Apr-17	309,247	60,662	20%	Apr-17	8,030,104	622,300	8%
May-17	969,862	81,486	8%	May-17	12,397,523	559,122	5%
Jun-17	421,053	155,476	37%	Jun-17	15,223,270	1,203,074	8%
Jul-17	283,005	64,358	23%	Jul-17	16,299,156	502,988	3%
Aug-17	437,386	94,472	22%	Aug-17	15,134,287	519,743	3%
Sep-17	1,027,126	50,042	5%	Sep-17	16,095,969	1,296,386	8%
Oct-17	533,513	54,229	10%	Oct-17	12,448,281	1,282,292	10%
Nov-17	468,956	91,278	19%	Nov-17	13,879,934	1,311,231	9%

Source. Cboe internal data.