



April 15, 2016

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

Re: NYSE Arca, Inc. Rule Proposal (Release No. 34-77441; File No. SR-2016-44)

Dear Mr. Fields:

IEX Group, Inc. (“IEX”) is submitting comments on the proposal (“Proposal”) by NYSE Arca, Inc. (“NYSE”) to amend NYSE Arca Equities Rule 7.31P(h) (Orders and Modifiers) to add a new Discretionary Pegged Order type<sup>1</sup>. In the Proposal, NYSE concedes that this new order type is a copy of an order type (“D-Peg”) which IEX has created, offered since November 2014 by the IEX Alternative Trading System, and proposed as part of its exchange application<sup>2</sup>: “The proposed new order is based on the Discretionary Peg Order as proposed by Investors’ Exchange LLC in its Form 1 Application seeking registration as a national securities exchange under Section 6 of the Act.”

IEX’s D-Peg order, which NYSE intends to replicate, is a variation of a pegged order type which rests at the near quote and can execute up to the midpoint of the NBBO based on available interest. The innovative feature of the D-Peg order is that it remains pegged to the near quote when IEX’s systems detect a “crumbling quote” (*i.e.*, the NBBO is in the process of changing but has not yet changed). Consistent with the Commission’s current policy of requiring full transparency of all aspects of exchange order types<sup>3</sup>, IEX was strongly encouraged to disclose all details of D-Peg, including the specific mathematical formula and coefficients used to calculate the crumbling quote indicator, in our proposed Form 1 application.

Overall, we think D-Peg is a useful order type that can protect investors, if implemented properly. However, the Commission should require that NYSE submit additional disclosures and

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<sup>1</sup> Exchange Act Release No. 34-77441 (March 24, 2016).

<sup>2</sup> Patent-Pending “DYNAMIC PEG ORDERS IN AN ELECTRONIC TRADING SYSTEM” in the U.S. patent application number 14/799,975, priority to August 22, 2014. This letter speaks to deficiencies in NYSE’s application in light of current market structure and is not intended to address, comment on or waive our property rights in the D-peg invention or related subject matter.

<sup>3</sup> See “In the Matter of the Applications of EDGEX Exchange, Inc., and EDGA Exchange Inc. for Registration as National Securities Exchanges,” Exchange Act Release No. 34-61698; File Nos. 10-194 and 10-196 (March 12, 2010).



modifications prior to taking action on NYSE's Proposal in order to make sure that the order type works in the way purported.

***D-Peg is not a broker-dealer function.***

NYSE has suggested that D-Peg is an order type typically offered by broker-dealers, which reflects a basic misunderstanding of the order.<sup>4</sup> D-Peg could not be effectively offered by a broker or an exchange unless the broker or exchange could analyze market-wide price changes faster than the participants seeking to pick off pegged orders with the same information. Because of various regulatory obligations brokers have when placing customer orders (*e.g.*, risk checks under Rule 15c3-5<sup>5</sup>), they are unlikely to successfully perform the same function. Similarly, NYSE would not be in a position to deliver the protective benefits of D-Peg as claimed if it continues to offer co-location and microwave services to fast market participants because NYSE would not be able to effectively update the D-Peg order during a "crumbling quote" faster than the market participant trying to pick off a customer order.

***The Proposal should not be approved unless amended with further justification.***

The use of D-Peg is closely related to other features of IEX's market design, namely that IEX, unlike NYSE, has chosen not to sell co-location and high-speed technology, which enable speed-based trading strategies. The effectiveness of D-Peg depends in large part on IEX's ability to process market data and changes on its order book before the fastest speed traders can engage in latency arbitrage by executing at prices disadvantageous to orders resting on IEX based on better and faster information. Because NYSE's business model enables these same traders to react faster than the exchange itself, its market is designed to lose this race. Thus, it is not clear how D-Peg could be used to effectively protect orders on NYSE in a "crumbling quote" situation. NYSE should provide additional information to support its claim that its use of D-Peg would help customers receive best execution. Otherwise, it should consider eliminating its practices of selling co-location and high-speed market data in order to properly effectuate this order type.

The failure to understand the use of the order type is also demonstrated by NYSE's verbatim copying the specific mathematical formula and coefficients which makes D-Peg unique to and effective for IEX. In fact, the D-Peg formula was calculated based on the location of IEX's systems (Weehawken, NJ) and unique latency profile. Therefore, NYSE's applying the formula to orders on NYSE, based in Mahwah, NJ, makes little sense. NYSE clearly did not invest the time and analysis necessary to generate a reasonable formula to achieve its purported goal of best execution. It also runs the risk of introducing a coding change based on incorrect assumptions.

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<sup>4</sup> NYSE cites to a Nasdaq filing that was rejected, but that filing involved Nasdaq's proposal to use a third party application to perform benchmark calculations and generate "child orders" for the exchange, and the denial was based on the failure of Nasdaq to explain how it would maintain risk controls over the orders that would be generated by the application. And unlike the Nasdaq proposal, D-Peg orders are managed exclusively within IEX's systems and do not generate other orders. See Exchange Act Release No. 34-68629 (January 11, 2013).

<sup>5</sup> 17 C.F.R. 240.15c3-5.



The implementation of order types that are not well thought-through can increase systemic risk and may have adverse impacts on investor protection. Accordingly, NYSE should be required to update its proposal to include a reasonable mathematical formula, along with a detailed explanation that demonstrates a basic understanding of how the order type would work on its own market. Further, NYSE should be required to adopt a different name for its order type to avoid confusion and the misrepresentation that it will provide the same protections created by D-Peg.

NYSE's copycat proposal of the IEX D-Peg order type is a symptom of a broader problem – the unchecked proliferation in order types because of the failure of exchanges to fully understand or explain their impacts. Accordingly, the Proposal should not be approved unless NYSE amends it and provides additional justification as suggested above.

Regards,

Sophia Lee

General Counsel

cc: The Honorable Mary Jo White, Chair  
The Honorable Michael S. Piwowar, Commissioner  
The Honorable Kara M. Stein, Commissioner  
Stephen Luparello, Director, Division of Trading and Markets  
Gary Goldsholle, Deputy Director, Division of Trading and Markets  
David S. Shillman, Associate Director, Division of Trading and Markets  
Richard Holley III, Assistant Director, Division of Trading and Markets