

November 17, 2023

Ms. Vanessa Countryman
Secretary
U.S. Securities and Exchange Commission
Washington, D.C. 20549-1090

RE: Release No. 34-98768; File No. SR-NASDAQ-2023-041; Proposed Rule Change to Establish Purge Ports for Equities Trading

Dear Ms. Countryman:

Themis Trading appreciates the opportunity to comment on Nasdaq's proposal to establish purge ports for equities trading. Similar to "Dark Pools", our industry has a way of naming things that just sound nefarious and Purge Port is another one of those terms.

According to the [Nasdaq proposal](#):

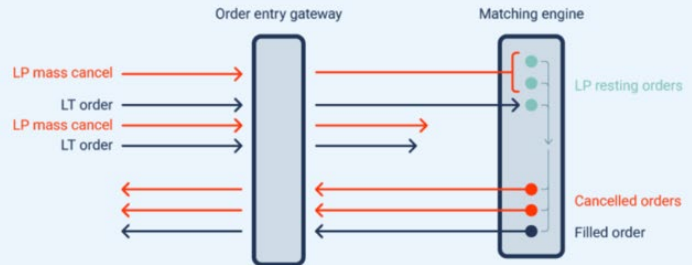
"A purge port "is a function enabling Exchange Participants to **cancel all open orders or a subset of open orders** (per MPID, buy or sell side of the order, or ticker symbol) across multiple protocols through a single cancel message."

We read this as a purge port being a mass cancel feature provided by an exchange that can instantaneously remove all orders or a subset of orders from a market participant. Unlike a kill switch, which would cancel everything, a purge port can be configured with different filters to cancel only a subset of orders.

Purge ports have been popular with options exchanges since market makers often place orders in numerous options contracts with different strike prices. A purge port gives them the ability to cancel a chunk of these orders if their risk management system detects an issue. Here is a [graphic from Optiver](#) which explains how a mass cancel with a purge port is faster than just a mass cancel request:

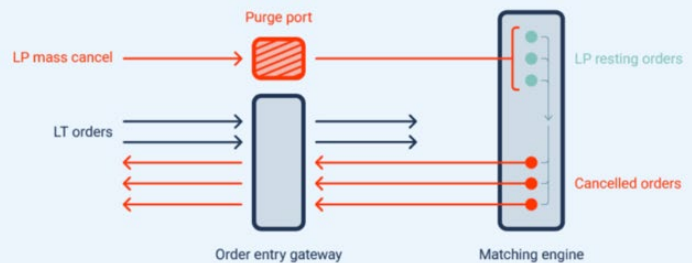
Mass cancel

Liquidity takers (LT) can send multiple, simultaneous aggressive orders capable of reaching the matching engine before the liquidity provider (LP) is able to pull its resting orders with a mass cancel. In this model, the mass cancel order uses the same path and queue as the LT and LP orders, which means it reaches two LP orders in time but is picked off by a third LT order before it can reach the matching engine.



Mass cancel with purge port

A purge port helps the liquidity provider (LP) cancel stale quotes more efficiently before they are picked off by liquidity taker (LT) orders. It does so by providing a dedicated route for LPs to send mass cancel messages. In this example, the LP is able to cancel all of its orders before the LT orders hit the matching engine.



We view a purge port as being another weapon in the high-speed trading wars. According to the Cboe, purge ports offer this unique speed advantage:

"Purge Ports feed into dedicated order handlers, and **therefore purge messages are not subject to order-queueing** as order entry is not supported via Purge Ports."

We would imagine that market makers might want to use this weapon when they feel that HFT liquidity takers are about to pick off some perceived stale quotes.

As far as we can tell, only two very small stock exchanges, Nasdaq PHLX and Cboe EDGA, currently offer a purge port function. However, Nasdaq is now proposing to offer this feature on their main stock exchange and believes it will help market makers manage their risk:

"The Exchange believes the new features may enhance participants' ability to manage orders, which would, in turn, improve their risk controls to the benefit of all market participants. The Exchange believes that the purging functionality and the Purge Ports would foster cooperation and coordination with persons engaged in facilitating

transactions in securities because designating Purge Ports for purge messages may encourage better use of such ports."

We wonder how frequently market makers will use these purge ports and how this function might contribute to intraday volatility. Liquidity suppliers are supposed to act as a buffer in times of market stress. While it's prudent risk management for market makers to adjust their quotes and manage their orders during times of stress, we think the risk of mass cancellations by multiple market makers at the same time increases the risk of another Flash Crash type event.

In return for providing continuous two-sided quotes, market makers receive benefits such as short sale locate exemptions. How many uses of a purge port will disqualify a market maker? In their proposal, Nasdaq claims they will monitor this behavior:

"Market Makers that purge their orders will not be relieved of the obligation to provide continuous two- sided quotes on a daily basis, nor will it prohibit the Exchange from taking disciplinary action against a Market Maker for failing to meet their continuous quoting obligation each trading day."

We'll take Nasdaq for their word but maybe the SEC should require some more formal monitoring by Nasdaq.

Finally, Nasdaq is not supplying these purge ports for free. They are proposing to charge \$500 per port/per month which could add up to some significant revenue for the exchange. While this may be good for the exchange, we wonder if purge ports are potentially an innovation that might put the entire market at risk of a liquidity vacuum? We hope we don't hear about them one day like we heard about stub quotes after the Flash Crash of 2010.

Respectfully,

Joseph Saluzzi

Partner, Themis Trading LLC