



Updates to Cboe-listed Regulatory Halt Re-Opening and Volatility Close Auction Collar Calculations

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Overview

Effective **January 23, 2019**, Cboe Global Markets will update the processes for Regulatory Halt re-openings as well as Volatility Close Auction collar calculations for Cboe-listed securities on the BZX Equities Exchange ("BZX"), *subject to regulatory review*. These changes will more closely harmonize all halt re-opening auction processes on BZX.

Technical Details

These changes pertain exclusively to Cboe-listed securities on BZX and will be applied in two circumstances.

- Re-openings following a regulatory halt (including a Material News halt or Market-Wide Circuit Breaker ("MWCB") halt)
- Volatility Close Auctions collars

Re-Opening After a Regulatory Halt

The initial **upper and lower collar-setting** for regulatory halts will be 5% (or \$0.15 for prices \$3.00 or less) from the Final Last Sale Eligible Trade ("FLSET"). The FLSET will be used as the Reference Price. After an additional 5 minutes, the Quote Only period will be extended if the Indicative Price remains outside of the collar or if there are unmatched market order shares.

- If the Indicative Price is outside of the collars, the collar will be widened by the original 5% (or \$0.15) amount in the direction of the Indicative Price.
- If the Indicative Price is inside the collars but there are unmatched market order shares, the collar will be widened in the direction of the imbalance. If there are more unmatched sell market order shares, the lower collar is widened, and if there are more unmatched buy market order shares, the upper collar is widened.

Subsequent collar widening will follow the processes used for a Halt Auction following a Trading Pause initiated pursuant to the LULD Plan, expanding the collars either in the direction of the Indicative Price or in the direction of the imbalance.

Upon the start of the second extension, the security will be examined at 5-second intervals and the re-opening will occur whenever there is neither an Indicative Price outside the collars nor unmatched market order shares. This same process will recur if subsequent 5-minute intervals are needed. If a re-opening does not occur by 3:50 p.m. ET due to the Indicative Price or due to unmatched market order shares, the re-opening will be deferred to the 4:00 p.m. ET Volatility Closing Auction.

Volatility Close Auction Collars

When a security is halted between 3:50 p.m. ET and 4:00 p.m. ET, or a security that was scheduled to re-open prior to 3:50 ET has not re-opened by this time due to an extension, the re-opening will be deferred until the 4:00 p.m. ET Volatility Closing Auction (“Volatility Close”). A Volatility Close Auction serves the dual-purpose of re-opening the security for trading and performing the Closing Auction. Under the new Volatility Close Auction process, the last calculated halt re-opening collar in effect at 3:50 p.m. ET, as described above, will be retained and applied for the Volatility Close Auction.

Testing Opportunities

The new Halt and Volatility Close Auction collar functionality is currently available for testing in the BZX certification environment.

Additional Information

Note that Auction Status messages are exclusive to LULD Trading Pauses, and will not be generated for any other Regulatory Halts.

For additional information regarding trading halt behavior, refer to the following technical specification.

- [US Equities Auction Process](#)

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