

Cboe Titanium U.S. Equities Opening Process

Version 2.0.1

January 24, 2025

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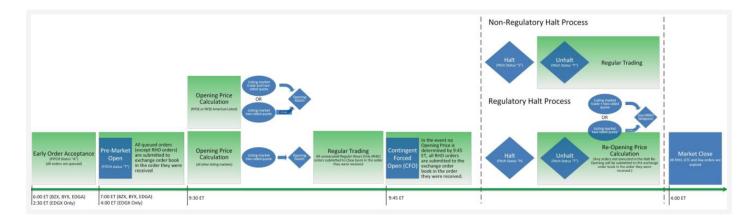
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Overview

Cboe Equities Exchanges allow Members the ability to queue orders for the pre-market open, regular market open, and during halt periods.

This document pertains to non-BZX-listed securities on BZX and to all securities on BYX, EDGA, and EDGX. For details regarding Opening and Re-Opening procedures for BZX-listed securities on BZX, please see the Auction Process Specification.



Market Opening Process

Early Order Acceptance Period and Pre-Market Open

The Cboe Equities Market Opening Process will begin with an Early Order Acceptance period where orders will be accepted and queued beginning at 6:00 a.m. ET on the BZX, BYX, and EDGA exchanges. Orders will be accepted and queued beginning at 2:30 a.m. ET on the EDGX exchange.

A PITCH *Trading Status* of A will be disseminated on all symbols to indicate that the Early Acceptance Period has begun. At 7:00 a.m. ET on the BZX, BYX, and EDGA exchanges, a PITCH *Trading Status* of T is sent for each symbol to indicate that the Exchange has started trading the symbol in the Pre-Market. A PITCH *Trading Status* of T is sent on EDGX at 4:00 a.m. At the same time, all orders eligible for trading at 7 a.m. ET that are not marked as Regular Hours Only (RHO) will be automatically submitted to the exchange order book for processing in time priority. Orders that are routable may be routed away if they are marketable and liquidity is not available on the local exchange book.



Opening Price Calculation

Regular Hours Only (RHO) orders previously only accepted for Cboe Listed securities will be accepted for all securities and queued for participation in an Opening Match that will occur between 9:30 and 9:45 a.m. ET. The Opening Price will be the midpoint of the NBBO at the time the Opening Price Calculation is completed. RHO orders priced at or more aggressively than the Opening Price will be matched in time priority (i.e. the oldest buy RHO order received is matched against the oldest sell RHO order). Any remaining RHO orders that are not executed in the Opening Match at the NBBO midpoint will be submitted to the exchange order book in time priority. The calculation of the Opening Price differs based on the Listing Market of the security.

NYSE or NYSE American Listed Securities

For NYSE and NYSE American listed securities, the Opening Price will be calculated as:

1. The midpoint of the prevailing NBBO following the first trade and first two-sided quote on the Primary Listing Market after 9:30 a.m. ET.

Or

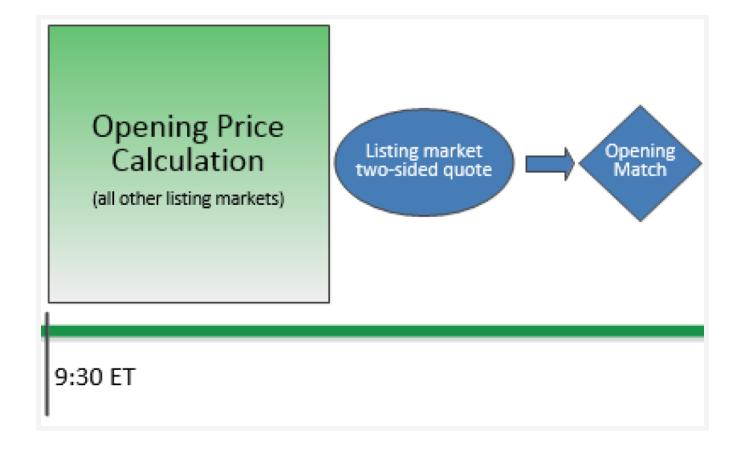
2. The midpoint of the prevailing NBBO one second after the first two-sided quote by the Primary Listing Market. If a trade on the Primary Listing Market is received before one second elapses, then the Opening Match will occur after the next NBBO update.



All Other Listed Securities

For securities listed on all other markets, the Opening Price will be calculated as:

1. The midpoint of the prevailing NBBO following the first two-sided quote on the Primary Listing Market after 9:30 a.m. ET.



Contingent Forced Opening (CFO)

If an Opening Price is unable to be established by 9:45 a.m. ET, Cboe will initiate a Contingent Forced Open (CFO) for the security. All queued RHO orders will be submitted to the exchange book in time priority. RHO orders that are routable may be routed away if they are marketable and liquidity is not available on the local exchange book.

What if there are no crossing RHO orders at the Opening Price?

In the event that a symbol has no crossing RHO orders, the exchange will conclude the Opening Match with no trades and immediately submit all RHO orders to the exchange order book in time priority.

What order modifiers are disallowed on RHO orders for the Market Opening?

Cboe will reject RHO orders received prior to the Opening Match if marked as Post Only or if a non-zero minimum quantity is specified. Cboe will also reject RHO orders that are marked as ISO if received prior to 9:30 a.m. ET. If an RHO ISO is received after 9:30 a.m. ET but before the Opening Match is completed, then the RHO ISO will be allowed to execute against continuous book liquidity up to the order's limit price, and any remaining quantity will be queued for participation in the Opening Match.

Table 1. Disallowed Modifiers on RHO orders

RHO ORDER MODIFIER	6:00 TO 9:30 A.M.	9:30 A.M. TO OPENING MATCH OR CFO	AFTER OPENING MATCH OR CFO
Post Only	Rejected	Rejected	Accepted
MinQty	Rejected	Rejected	Accepted (must also be hidden)
ISO	Rejected	Accepted (remaining quantity queued for Opening Process)	Accepted

Is Match Trade Prevention (MTP) honored on the Opening Match?

No, MTP is not honored on the Opening Match. However, MTP instructions on RHO orders will be honored if an RHO order is not executed in the Opening Match and is subsequently submitted to the exchange order book.

Halt Re-Opening Process

Regulatory Halt

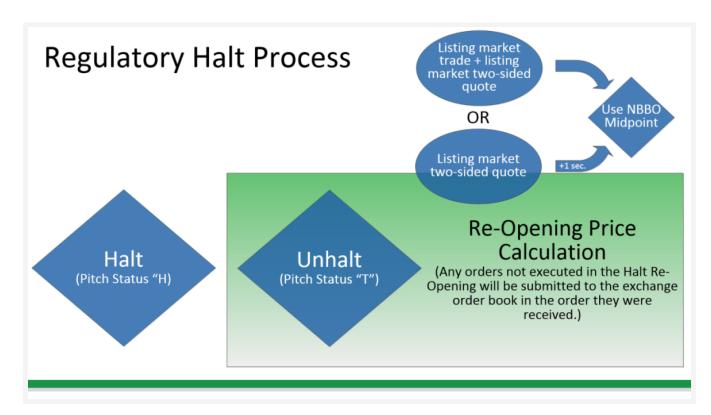
Upon receipt of a Regulatory Halt from the primary listing market, the Cboe Equities Exchanges will halt trading on the security (PITCH *Trading Status* = H). By default, open orders (except those marked as Post Only or those with a non-zero MinQty) will be queued and rolled into the Re-Opening Process. However, Members may opt-in to instead have all orders (or just continuous book orders) cancelled on receipt of a Regulatory Halt. Once a security is halted, the Cboe Equities Exchanges will begin accepting orders that will be queued for the Halt Re-Opening Process. This will continue until the Regulatory Halt has been lifted. When trading is resumed, Cboe will re-open the security by calculating a Re-Opening Price and disseminating a PITCH *Trading Status* of T. All queued orders priced at or more aggressively than the Re-Opening Price will be matched in time priority. Any remaining queued orders will be submitted to the exchange order book in time priority.

The Re-Opening Price for all Regulatory Halt Re-Openings during regular trading hours is calculated as:

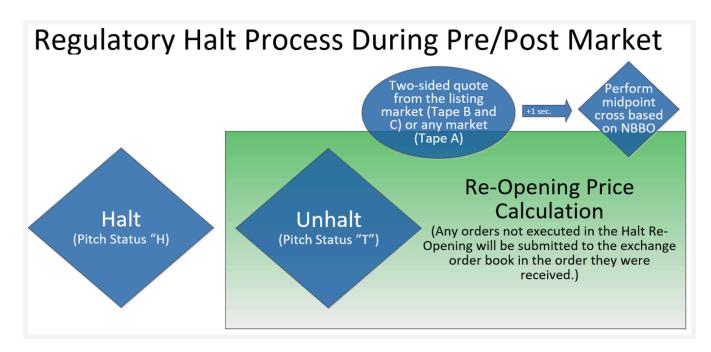
1. The midpoint of the prevailing NBBO following the first trade and first two-sided quote on the Primary Listing Market.

Or

2. The midpoint of the prevailing NBBO one second after the first two-sided quote by the Primary Listing Market. If a trade on the Primary Listing Market is received before one second elapses, then the Opening Match will occur after the next NBBO update.



- 3. Wait for two-sided quote from the listing market (Tape B and C); or from any market(s) (Tape A).
- 4. Wait one second.
- 5. Perform a midpoint cross based on the NBBO.
- 6. If the NBBO is invalid, the system will remain halted after the initial one-second delay until it receives a valid NBBO.
- 7. If Cboe staff manually re-open a symbol, all queued orders will roll into the book in time priority.



What order modifiers are disallowed on for Halt Re-Openings?

Cboe will always cancel back all Post Only or MinQty orders upon receipt of a Regulatory Halt. Any new Post-Only, IOC, FOK, or MinQty orders will be rejected during the Re-Opening Process.

Non-Regulatory Halt

In the event a non-regulatory (Supervisory) halt is issued by a Cboe Equities market, all open orders will immediately be cancelled. Open orders will not be eligible to be rolled over or queued during a non-regulatory halt. All orders received during a non-regulatory halt will be rejected. The actions following the non-regulatory halt will be determined by the following scenarios:

- 1. If the non-regulatory halt is issued **after** the Market Opening (i.e. after the Opening Match or CFO), then the non-regulatory halt phase will transition directly into the Regular Trading phase following the non-regulatory halt being lifted.
- 2. If the non-regulatory halt is issued and lifted **before** the completion of the Market Opening, then the non-regulatory halt phase will return to the Market Opening Process following the non-regulatory halt being lifted.
- 3. If the non-regulatory halt is issued **before** the Market Opening, but the Market Opening is completed prior to the non-regulatory halt being lifted, then the non-regulatory halt phase will transition directly into Regular Trading following the non-regulatory halt being lifted.
- 4. If the non-regulatory halt is issued before the Market Opening is completed and a Regulatory Halt is received prior to the non-regulatory halt being lifted, then the security will return to the Market Re-Opening Process following the non-regulatory being lifted.
- 5. If the non-regulatory halt is issued where the Market Opening is completed prior to the non-regulatory halt being lifted AND a Regulatory Halt is received and lifted subsequent to the non-regulatory halt being lifted, then upon the non-regulatory halt lift Cboe will transition directly into the Regular Trading phase.



Revision History

VERSION	DATE	DESCRIPTION
2.0.0	11/01/21	Migrated document into updated template.
2.0.1	01/24/25	Updated with Cboe Titanium branding.