

Frequently Asked Questions Limit Up-Limit Down Closing Process

*Note: These proposed changes outlined below are pending SEC approvals and therefore may be subject to changes. See http://www.sec.gov/rules/sro/nasdag/2014/34-71254.pdf

Q. How does NASDAQ plan to handle the close in the event of an LULD pause between 15:50 and 16:00?

A: If a security is paused due to LULD between 15:50 and 16:00, trading will not resume prior to the close and the system will conduct a LULD Closing Cross at 16:00.

Q. If a security goes into a LULD pause after 15:55 when will the LULD Closing Cross occur?

A: If a security goes into a LULD pause after 15:55 the security will close with a LULD Closing Cross. The LULD Closing Cross will occur at 16:00, unless extended due to volatility which is discussed below. The same is true if a security goes into a LULD pause between 15:50 and 15:55.

Q. What are the reasons the LULD Closing Cross can be extended due to volatility?

A: The LULD Closing Cross will occur at 16:00 unless it is extended due to volatility. The LULD Closing Cross will automatically extend in 1 minute increments if:

- A market order imbalance exists at the scheduled time of the LULD Closing cross, or
- The price of the cross moves by more than 5% or \$0.50 cents (whichever is greater) at any time during the last 15 seconds of the pause.

Please note that if a LULD Closing Cross extends past 16:00, all new market orders (market pegs) will be rejected.

Note: If the above condition persists until 17:00 p.m., NASDAQ will not conduct a Closing Cross in that security and shall instead use the last-sale on NASDAQ as the NASDAQ Official Closing Price in that security for that trading day. In such cases, non GTC orders in the security will be cancelled and extended hours will begin. In lieu of cancellation, orders with at TIF of GTC DAY or GTC Extended will be suspended. Each customer can then choose to either cancel those orders or allow them to be re-entered for trading the following day.

Example 1:

LULD pause occurs in symbol WXYZ at 15:54
The LULD Closing Cross will be used to close the market
at 16:00 there is a market order imbalance so the LULD Closing Cross is extended for 1 minute
The imbalance persists for several additional 1 minute extensions
At 16:35 the market order imbalance is offset and the LULD Closing Cross occurs
The LULD Closing Cross sets the NASDAQ Official Closing Price
Extended hours trading commences

Example 2:

LULD pause occurs in symbol WXYZ at 15:57
The LULD Closing Cross will be used to close the market
at 16:00 there is a market order imbalance so the LULD Closing Cross is extended for 1 minute
The imbalance persists for several additional 1 minute extensions



At 17:00 there is still an imbalance All non GTC orders are cancelled – both closing cross orders and GTC Orders will be suspended and can be cancelled at the customer's discretion Extended hours trading commences

Q. What happens if a security enters an LULD pause prior to the last 10 minutes of regular trading (eg., 15:49:00) and due to a market order imbalance or volatility move extends the LULD pause past the regular scheduled close time of 16:00:00?

A: When a LULD pause occurs prior to 15:50 and the NASDAQ system is unable to execute a halt cross prior to 16:00 due to a market order imbalance or a volatility trigger, NASDAQ will not conduct a Closing Cross in that security and shall instead use the last sale on NASDAQ as the NASDAQ Official Closing Price in that security for that trading day. All orders intended for the close (LOC, MOC, IO and DAY) will be cancelled back to customers similarly to when a security is halted for news through the close. In these cases the security will remain halted under LULD until either the market imbalance is offset or a cross price volatility collar is not triggered. The LULD pause cross execution price will have no bearing on the official NOCP.

Example 1:

A LULD pause in symbol ABCD occurs at 15:49 (or any time before 15:50) At the normal resumption time (approximately 15:54) a market order imbalance (or volatility) exists The LULD pause is extended for 1 minute The market order imbalance persists for several 1 minute extensions At 16:00 the imbalance still exists All closing cross orders (LOC, MOC, IOs) are cancelled The last sale that occurred prior to the LULD pause sets the NOCP At 16:15 the imbalance in the LULD Pause Halt Cross is offset The LULD Pause Halt Cross occurs but does not set the NOCP Extended hours trading commences

Example 2: A LULD pause in symbol ABCD occurs at 15:49 (or any time before 15:50) At the normal resumption time (approximately 15:54) a market order imbalance (or volatility) exists The LULD pause is extended for 1 minute The market order imbalance persists for several 1 minute extensions At 16:00 the imbalance still exists All closing cross orders (LOC, MOC, IOs) are cancelled The last sale that occurred prior to the LULD pause sets the NOCP At 17:00 there is still a market order imbalance All non GTC orders are cancelled GTC Orders will be suspended and can be cancelled at the customer's discretion Extended hours trading commences

Q. How will the closing price be determined when an LULD pause occurs in the last 10 minutes of regular trading?

A: If a LULD pause occurs during the last 10 minutes of regular market hours, a LULD Closing Cross will be used to determine the closing price. The closing price will be determined by taking the closing book, the remaining eligible orders on the book prior to the LULD halt, and any new interest entered after the LULD halt. For the purposes of determining the closing price, Imbalance Only (IO) orders priced equal to or greater than the limit up/down band will be priced one penny greater (sells) or less (buys) than that band. All other imbalance only orders will be priced at



their entered price. The execution algorithm for the LULD Closing Cross shall be similar to the algorithm currently used for the Cross. Specifically,

- (A) The Nasdaq Closing Cross will occur at the price that maximizes the number of shares of Eligible Interest in the Nasdaq Market Center to be executed;
- (B) If more than one price exists under subparagraph (A), the Nasdaq Closing Cross shall occur at the price that minimizes any Imbalance;
- (C) If more than one price exists under subparagraph (B), the Nasdaq Closing Cross shall occur at the entered price at which shares will remain unexecuted in the cross.
- (D) If more than one price exists under subparagraph (C), the Nasdag Closing Cross shall occur at:
 - i. In the case where a security has already traded during normal market hours on that trading day, the price that is closest to the last Nasdag execution prior to the LULD pause:
 - ii. In the case where a security has not already traded during normal market hours on that trading day, the price that is closest to the previous NASDAQ Official Closing Price.

Once the algorithm determines the proper closing price, the LULD Closing Cross will execute all orders at the determined price in strict price/time priority, rather than the complex priority currently set forth in NASDAQ Rule 4754(b)(3). For the purposes of determining execution priority in the LULD Cross, eligible IO orders priced more aggressively than the closing price will be re-priced to the closing price and sorted in time priority. Therefore, aggressive IO orders that were entered prior to other orders at exactly the crossing price will have priority over those orders. The LULD Closing Cross price will be the Nasdaq Official Closing Price for stocks that participate in the LULD Closing Cross.

Q. What happens to previously booked orders that were intended for the closing cross?

A: If a LULD pause occurs at or after 15:50 and a LULD Closing Cross will occur, all MOC, LOC, Imbalance Only (IO) orders, and resting continuous book orders will remain on the book and be eligible to participate in the Closing Cross. Continuous book orders (including those entered prior to and during the LULD pause) will be able to be cancelled or modified at any time prior to the LULD Closing Cross, however any previously entered MOC, LOC, and IO orders may not be cancelled or modified.

Q. What happens to orders that were priced aggressively through the band that results in an LULD Closing Cross being triggered?

In the event of an LULD pause aggressively priced orders entered through the RASH engine (FIX, Rashport, QIX) will be re-priced for the purposes of the LULD Cross at their entered price. For example, if the lower band is \$9 and a customer using FIX enters an order to sell at \$8 the order will be re-priced to \$9. If this results in an LULD pause after 15:50, the order will be re-submitted to the book at the entered price of \$8 for the purposes of calculating the LULD Closing Cross.

For aggressive orders entered using OUCH or FLITE, the treatment of the orders will depend on the configuration of the session the order has been entered on. The order will never be re-priced to the entered price and based on port configuration will either be cancelled back to the customer or will remain at the booked price.

Q. What types of orders may be entered if there is an LULD pause in the last 10 minutes prior to the close?

A: New market and limit orders may be entered, modified, and cancelled during the pause for participating in the LULD Closing Cross. New imbalance only (IO) orders may also be entered and modified (to increase shares only), but not cancelled during the LULD pause/closing cross.



Please note that if a LULD Closing Cross extends past 16:00, all new market orders (market pegs) will be rejected.

All time in force are eligible to participate in the LULD Closing Cross.

Q. What happens if there is insufficient interest in the book to execute a LULD Closing Cross?

A: If at 16:00, there is insufficient interest to execute a cross, NASDAQ will not conduct a LULD Closing Cross in the security. As is the case today, NASDAQ will use the last sale on NASDAQ as the NOCP if no cross occurs.

Q. What information will be provided in the NOII information?

A: The NOII message during the pause preceding an LULD Closing Cross will be similar to those disseminated during a standard Closing Cross and other Halt crosses. Specifically, the Near Price, Far Price, and Reference Price contained in the NOII will all represent the price at which the LULD Closing Cross would execute should the cross conclude at that time. Similar to the Halt cross, the NOII associated with the LULD Closing Cross shall only publish an imbalance in the event that all market orders can not be satisfied.

Q. How often will order imbalance information be broadcast leading up to a LULD Closing Cross?

A: As with the regular Closing Cross, order imbalance information will be disseminated every 5 seconds throughout the pause (including during volatility extensions), with a cross type of C.

Q. What happens to orders not executed in the LULD Closing Cross?

A: All resting orders or newly entered orders not executed in the LULD Closing Cross will be either cancelled or available for execution in the after-hours based on the entering firm's instructions on the order. If a LULD Closing Cross is unable to be executed by 17:00, all orders will be either cancelled or suspended based on the TIF.

Q. How will NASDAQ handle other Exchange's pauses due to LULD in the last 10 minutes of regular trading?

A: As today, NASDAQ will not conduct a closing cross in a non-NASDAQ Listed security if it is in a LULD pause or halted (for any reason) at 16:00. NASDAQ will cancel all Market On Close, Limit On Close, and Imbalance Only orders as well as any DAY orders at 16:00 if the security is still halted or in a LULD pause on the primary market. When trading resumes in the security, extended hours trading will commence on NASDAQ.

Q. When will these changes be effective?

A: As detailed in the LULD NMS Plan Amendment #6, the last 15 minutes of regular trading will be added to the LULD Plan on **Monday**, **May 12**, **2014**. NASDAQ's changes described will go into effect on this day.

Q. Will NASDAQ being offering weekend testing for these changes?

A: Yes. Customer's will be able to test the new functionality on Saturday May 10, 2014.