The securities and futures exchanges have procedures for coordinated cross-market trading halts if a severe market price decline reaches levels that may exhaust market liquidity. These procedures, known as market-wide circuit breakers ("MWCB"), may halt trading temporarily or, under extreme circumstances, close the markets before the normal close of the trading session. MWCBs provide for cross-market trading halts during a severe market decline as measured by a single-day decrease in the S&P 500 Index. A cross-market trading halt can be triggered at three circuit breaker thresholds—7% (Level 1), 13% (Level 2), and 20% (Level 3). These triggers are set by the markets at point levels that are calculated daily based on the prior day's closing price of the S&P 500 Index.

A market decline that triggers a Level 1 or Level 2 circuit breaker before 3:25pm ET will halt market-wide trading for 15 minutes, while a similar market decline "at or after" 3:25 pm ET will not halt market-wide trading. A market decline that triggers a Level 3 circuit breaker, at any time during the trading day, will halt market-wide trading for the remainder of the trading day. Re-opening procedures after a Level 1, 2, or 3 MWCB vary by listing exchange and FINRA.

In event of a level 3 MWCB, please note that between 3:35am ET and 4:00am ET all listing exchanges will distribute resumption messages for securities halted as a result of a level 3 MWCB on the prior day that do not remain in a security-specific regulatory halt state. This will in effect allow the markets to open in the same manner as they do any other day.

The following is information provided by each listing exchange and FINRA summarizing how their platforms will re-open after each event.

Cboe BYX, BZX, EDGA, and EDGX Exchange

Cboe-listed securities on the BZX Exchange will be halted immediately upon receipt of a MWCB from either of the SIPs. Cboe will next cease trading on all other securities. Open orders may be cancelled or maintained based on the listing market and the member's port settings. Cboe will re-open its listed securities after a Level 1 or Level 2 MWCB using its <u>Halt Auction</u> <u>Process</u>. The quoting period for an auction in Cboe-listed securities on the BZX Exchange will begin 5 minutes prior to the end of the 15 minute circuit breaker window. All other securities will resume trading using the <u>Halt Re-Opening Process</u> once the primary market has reopened the subject security for trading and LULD Bands have been received (if applicable). Note that should Cboe receive a resume message from the primary listing venue before the end of a MWCB window, the resume will be held until the 15 minute MWCB timer has elapsed.

In the event of a Level 3 MWCB, Cboe platforms will re-open for queueing and trading during their normal time in the pre-market trading session on the next trading day and the normal <u>Opening Process</u> will be used.

On the day of a Level 3 MWCB, the *Final Last Sale Eligible Trade* as defined within the <u>Cboe US</u> <u>Equities Auction Process</u> document will represent the Official Closing Price for Cboe-listed securities.

IEX

Upon receipt of a Level 1, 2, or 3 circuit breaker message from the CTA SIP, IEX will immediately halt trading in all securities in conjunction with other exchanges. Open orders will not be automatically cancelled, but members will have the option to cancel open orders during a halt.

After a MWCB Level 1 and Level 2 breach, symbols will resume trading once the primary market has reopened and LULD bands have been received, if applicable.

After a MWCB Level 3 breach, the IEX Trading System will re-open at its normal time (8:00am ET) the following trading day. Order acceptance and trading will begin in all symbols at this time.

Nasdaq, Nasdaq BX, and Nasdaq PSX

The Nasdaq Stock Market (Nasdaq) will halt trading in all securities upon receipt of a MWCB from either of the SIPs. Open orders remain on the Nasdaq, Nasdaq BX (BX) or Nasdaq PSX (PSX) books unless cancelled by the customer.

Following a Level 1 or Level 2 MWCB, Nasdaq will re-open its listed securities using the <u>Nasdaq</u> <u>Halt Cross</u> process. The quoting period for an auction in Nasdaq-listed securities on Nasdaq will begin disseminating imbalance information for the full 15 minute duration of a MWCB Level 1 or 2 halt. Non-Nasdaq listed securities on Nasdaq, and all securities on BX and PSX, will resume trading once the primary market has re-opened the security for trading and LULD Bands have been received, if applicable.

Following a Level 3 MWCB, Nasdaq will re-open for trading the same as a regular trading day. However, certain messaging processes will be published to ensure that the MWCB halts will be cleared out and are ready to trade in the pre-market trading session. The pre-market session on Nasdaq begins at 4:00am ET. After 3:58am ET, Nasdaq will send the UTP SIP the trading action "H" and reason code "MWCO" in all Nasdaq-listed securities. This reason code will only occur T+1 after a Level 3 MWCB. The "MWCO" code indicates that the stocks are still halted, but clarifies that is I not due to another Level 3 event that day and instead is a carryover from the previous day. This will be immediately followed by trading action message with action code of "Q" (Quote Only) followed by a "T" (Trade Resumption). At 4:00am ET, the pre-market trading session will be permitted on Nasdaq. Non-Nasdaq listed securities on Nasdaq, and all securities on BX and PSX, will resume trading once the primary market has re-opened the security for trading. In the event of a level 3 halt, the last NASDAQ sale price in each security will represent the Nasdaq Official Closing Price ("NOCP"). In the event that there were no trades in a given security, the NOCP will not be disseminated.

NYSE, NYSE American, NYSE Arca, NYSE Chicago, NYSE National

Upon receipt of a MWCB message from the SIPs, NYSE Group exchanges will cease trading all securities. After a 15 minute halt following a Level 1 or Level 2 breach, the listing exchanges, NYSE, NYSE American, and NYSE Arca, will reopen trading in their listed symbols pursuant to their respective rules (NYSE Rule 7.35A, NYSE American Rule 7.35E, NYSE Arca Rule 7.35-E). NYSE Group will resume trading in non-listed symbols (Unlisted Trading Privileges) once the primary listing exchanges for those symbols have reopened and LULD Bands have been received.

After a Level 3 breach, trading on NYSE Group exchanges will remain halted for the rest of the trading day. On the next trading day, order entry and trading will commence at the customary times for each exchange. As with Level 1 and 2 breaches, NYSE Group trading will resume trading in non-listed symbols (Unlisted Trading Privileges) following a Level 3 breach once the primary listing exchanges for those symbols have opened and LULD Bands have been received.

On the day of a Level 3 MWCB, the Official Closing Price in securities listed on NYSE, NYSE American and NYSE Arca would be the price of the most recent consolidated last-sale eligible trade in each such security.

FINRA Facilities (ADF, Trade Reporting Facilities (TRFs))

Pursuant to FINRA Rule 6121.02, in the event of a Level 1, Level 2 or Level 3 Market Decline, as determined by a primary listing market and publicly disseminated, FINRA shall halt trading otherwise than on an exchange in all NMS stocks and shall not permit the resumption of trading for the time periods specified by the primary listing market, except as otherwise provided below.

If trading is halted in all NMS stocks for a Level 1 or a Level 2 Market Decline, FINRA will halt trading otherwise than on an exchange in all NMS stocks until trading has resumed on the primary listing market. If, however, the primary listing market does not reopen a security within 15 minutes following the end of the 15-minute halt period, FINRA may permit the resumption of trading otherwise than on an exchange in that security if trading in the security has commenced on at least one other national securities exchange.

If a Level 3 Market Decline occurs at any time during the trading day, FINRA shall halt trading otherwise than on an exchange in all NMS stocks for the remainder of the trading day. Members may resume trading otherwise than on an exchange the next day in any NMS stock when the halt has been lifted by the applicable SIP (so long as a separate regulatory halt is not also in effect).

During the FINRA Facilities' hours of operation, the facilities will accept reports of trades executed prior to the trading halt; however, any trade report with an execution time during the period that the trading halt is in effect will be rejected.