Limit Up / Limit Down ("LULD")

OPPENHEIMER

The SEC has approved a joint industry plan to address extraordinary market volatility referred to as Limit Up/Limit Down ("LULD"). The LULD mechanism is designed to prevent trades in NMS stocks from occurring outside of specified price bands, coupled with trading pauses in the event of more significant and prolonged price moves. Basically, the implementation of LULD will prohibit trades from the tape that exceed a percentage (up or down) of the "reference price". The Reference Price is generally an average price of the security over the immediately preceding five minute period. This plan is replacing the single stock circuit breakers currently in place. . The information in this document is being provided to educate our clients of the implementation/workings of LULD.

<u>Overview of the plan</u>

The plan prohibits the display of offers at prices below the lower price band and bids above the upper price band along with the execution of trades outside of the price bands. The price bands are a certain percentage away from the "reference price" which is the mean price of regular way, last sale eligible trades for the security over the immediately preceding five-minute period. The percentage would be determined by the type of stock, price of stock, and time of day. Those stocks in the S & P 500, Russell Index, and certain ETF (Tier 1 stocks) will have a 5% band, and there will be a 10% band for other listed securities (Tier 2 stocks). Securities with prices less than \$3.00 will have wider bands. The percentages are doubled during the opening and closing periods. The opening and closing periods are defined as first 15 minutes and last 25 minutes of normal trading hours. See Table A below.

Table A

Securities	Time Period	Price Band
Tier 1 Stocks > \$3.00	09:45-15:35	5%
Tier 2 stocks > \$3.00	09:30-16:00	10%
Tier 1 & 2 stocks >/= \$0.75 </= \$3.00	09:45-15:35	20%
Tier 1& 2 stocks < \$0.75	09:45-15:35	the lesser of \$0.15 or 75%
Tier 1 Stocks > \$3.00	09:30-09:45; 15:35-16:00	10%
Tier 1 & 2 stocks >/= \$0.75 </= \$3.00	09:30-09:45; 15:35-16:00	40%
Tier 1& 2 stocks < \$0.75	09:30-09:45; 15:35-16:00	the lesser of \$0.30 or 150%

The rule covers all National Market Systems ("NMS") stocks, ***including non convertible and convertible Preferred Stock***, and requires broker dealers that execute orders and report trades to the tape to have systems and policies & procedures to ensure compliance with the plan. Essentially, all stocks listed on an exchange are included as NMS stocks.

1) The reference price is calculated by the appropriate Securities Information Processor ("SIP") against which the percentages are applied to derive the up and down price bands.

2) If the NBB is "resting" on the Lower Price Band, or the NBO is resting on the Upper Price Band, and is not crossed, a **Limit State** is triggered. During a Limit State the SIP will not disseminate a new reference price or new price bands. A Limit Sate is ended if within 15 seconds, the NBBO is no longer resting at a Price Band. If the Limit State continues for longer, then the Primary Exchange will call a 5 minute trading pause. Table B below displays examples of a security in a Limit State.

3) If the NBB falls below the Lower Price Band or the NBO rises above the Upper Price Band, without triggering a Trading Pause, then a **Straddle State** will exist. In other words, the NBBO straddles one of the Price Bands. The Primary Exchange ***may*** declare a Trading Pause when a stock is in a Straddle State. Table B below displays examples of a security in a Straddle State.

4) Quotes outside of the band will not be executable and will be identified as non executable by the appropriate SIP. It is possible that market and marketable limit orders may not be executed if there is no liquidity within the Price Bands and the NBBO is outside the Price Bands.

5) The NBBO can be accessed if it is resting on the Price Bands. However, if the stock is in a **Straddle State**, the bid or offer outside the price band is deemed non-executable. Therefore market orders or aggressively priced limit orders may be rejected back to the sender or re-priced by exchanges once the price bands are reached. There is currently no uniform practice by the stock exchanges on how market orders will be handled in a Straddle State. It is possible that bids and offers can fade faster then the reference price is adjusted. However, the exchanges are still discussing how often this may actually occur in practice. NASDAQ conducted two studies last summer; in a 9 day trading period NASDAQ examined 6100 Tier 2 stocks and noted that there were 3800 instances of a Straddle State that averaged 12.5 minutes. Tier 1 stocks, in theory, should not see too many Straddle States.

6) Trading Pauses will operate as current pauses under the Single Stock Circuit Breaker, which will be replaced by the LULD bands and pauses. Basically the trading pause will be 5 minutes. It can be extended for an additional 5 minutes if the listing exchange cannot open trading and has not declared a regulatory halt, then other market centers are free to commence trading. During trading pauses, no trades in the paused stock will be executed, but all bids and offers may be displayed.

7) Options exchanges will halt trading in contracts if the underlying symbol is subject to a LULD pause.

8) Any transaction that does not update the last sale price and is exempt from Rule 611 (Order Protection Rule of Reg NMS aka Trade thru rule) would be exempt from the LULD restrictions.

Table B: Examples of Limit and Straddle States

Ref Price	Lower Price Band	NBB	NBO	Upper Price Band	State	Explanation
$100.00	$95.00	$94.00	$105.00	$105.00	Limit	NBOffer equals Upper Band
$100.00	$95.00	$95.00	$104.00	$105.00	Limit	NBBid equals Lower Band
$100.00	$95.00	$94.00	$96.00	$105.00	Straddle	NBBid is lower than Lower Band
$100.00	$95.00	$104.00	$106.00	$105.00	Straddle	NBOffer is higher than Upper Band

<u>Exemptions</u>

1. Non convertible preferred stock, which are listed on an exchange are subject to the rule, and are not exempt. At this point only Warrants and Rights are exempt.
2. Specifically, the only exempt trades are:
   - Non Regular Way Settlement
   - Benchmark and Derivatively priced
   - Stopped Stock Orders that meet the criteria of Rule 611(b)(9) – stop price must be "underwater" form the broker dealer's perspective. This does not apply to regular stop and stop limit orders
   - Qualified Contingent Trade
   - Error Correction
   - Print Protection